AMENDATORY SECTION (Amending WSR 00-11-040, filed 5/10/00, effective 6/10/00)

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
(l) Excluded scrap metal
(m) Processed scrap metal
(n) Home scrap metal
(o) Prompt scrap metal

(3) Definition of solid waste.

(a) A solid waste is any discarded material that is not excluded by WAC 173-303-017(2) or that is not excluded by variance granted under WAC 173-303-017(5).

(b) A discarded material is any material that is:

(i) Abandoned, as explained in subsection (4) of this section; or

(ii) Recycled, as explained in subsection (5) of this section; or

(iii) Considered inherently waste-like, as explained in subsection (6) of this section. Persons registering micronutrient or waste-derived fertilizers under chapter 15.54 RCW must submit information required by the department to indicate compliance with this chapter. The required minimum information is described in WAC 173-303-505; or

(iv) A military munition identified as a solid waste at WAC 173-303-578(2).

(4) Materials are solid waste if they are abandoned by being:

(a) Disposed of; or

(b) Burned or incinerated; or

(c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(5) Materials are solid wastes if they are recycled—or accumulated, stored, or treated before recycling—as specified in (a) through (d) of this subsection.

(a) Used in a manner constituting disposal. Materials noted with a "*" in column 1 of Table 1 are solid wastes when they are:

(i)(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

(ii) However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(b) Burning for energy recovery. Materials noted with a "*" in column 2 of Table 1 are solid wastes when they are:

(i) Burned to recover energy;

(ii) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

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

(c) Reclaimed. Materials noted with a "*" in column 3 of Table 1 are solid wastes when reclaimed.

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

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

TABLE 1

	Use 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 ((~~other than excluded scrap metal (see WAC 173-303-016 (2)(l))~~)) that is not excluded under WAC 173-303-071 (3)(ff)	(*)	(*)	(*)	(*)

Note: The terms "spent materials," "sludges," "by-products," "scrap metal" and "processed 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.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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 C.F.R. Part 261; and

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

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

"Acute hazardous waste" means dangerous waste sources (listed in WAC 173-303-9904) F020, F021, F022, F023, F026, or F027, and discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P", including those wastes mixed with source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954. The abbreviation "AHW" will be used in this chapter to refer to those dangerous and mixed wastes which are acute hazardous wastes. Note - the terms acute and acutely are used interchangeably.

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

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

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

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

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

"Berm" means the shoulder of a dike.

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

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

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

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

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

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

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

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

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

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

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

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

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

"Closure" means:

• The requirements placed upon all recycling, used oil, and TSD facilities, plus some generators, and some transporters to ensure that all such facilities are closed in an acceptable manner (see also "post-closure"); and

• Once taken out of service, the proper cleaning up and/or decontaminating of a dangerous waste management unit or a recycling unit and any areas affected by releases from the unit.

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

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

"Compliance procedure" means any proceedings instituted pursuant to the Hazardous Waste Management Act, chapter 70.105 RCW, and Hazardous waste fees, chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173-303-830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department no-

tifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued.

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

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

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

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

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

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

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

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

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

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

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

"Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents that have caused a waste to be a dangerous waste under this chapter.

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

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

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in 40 C.F.R. 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 C.F.R. 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"Department" means the department of ecology.

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

"Designated facility" means:

• A dangerous waste treatment, storage, disposal, or recycling facility that:

– Has received a permit (or interim status) in accordance with the requirements of this chapter,

– Has received a permit (or interim status) from another state authorized in accordance with 40 C.F.R. Part 271,

– Has received a permit (or interim status) from EPA in accordance with 40 C.F.R. Part 270,

– Has a permit by rule under WAC 173-303-802(5), or is regulated under WAC 173-303-120 (4)(c) or 173-303-525 when the dangerous waste is to be recycled, and

– That has been designated on the manifest pursuant to WAC 173-303-180(1).

• "Designated facility" also means a generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with WAC 173-303-370 (5)(f).

• If a waste is destined to a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as dangerous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

• The following are designated facilities only for receipt of state-only waste; they cannot receive federal hazardous waste from off-site: Facilities operating under WAC 173-303-500 (2)(c).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

eral, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

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

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

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

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

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

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

"Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

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

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

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

"Facility" means:

• All contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combination of them). Unless otherwise specified in this chapter, the terms "facility," "treatment, storage, disposal facility," "TSD facility," "dangerous waste facility" or "waste management facility" are used interchangeably.

• For purposes of implementing corrective action under WAC 173-303-64620 or 173-303-64630, "facility" also means all contiguous property under the control of an owner or operator seeking a permit under chapter 70.105 RCW or chapter 173-303 WAC and includes the definition of facility at RCW 70.105D.020((~~(4)~~)) (8).

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

"Final closure" means the closure of all dangerous waste management units at the facility in accordance with all applicable closure requirements so that dangerous waste management activities under WAC 173-303-400 and 173-303-600 through 173-303-670 are no longer conducted at the facility. Areas only subject to generator standards WAC 173-303-170 through 173-303-230 need not be included in final closure.

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

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

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

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

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

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

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

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

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

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

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

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

"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 C.F.R. Part 261; and

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

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

"Incinerator" means any enclosed device that:

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

Meets the definition of infrared incinerator or plasma arc incinerator.

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

• Placement in a particular device or facility because it may cause corrosion or decay of containment materials (for example, container inner liners or tank walls); or

• Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

(See appendix V of 40 C.F.R. Parts 264 and 265 for examples.)

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

quired. A qualified professional engineer is an engineer with expertise in the specific area for which a certification is given.

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

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

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

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

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

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

Other factors, as appropriate.

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

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

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

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

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

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

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

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

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

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

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

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

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

"Leachable inorganic waste" means solid dangerous waste (that is, passes the Paint Filter Test Method 9095B as described in "*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*" EPA Publication SW-846 as incorporated by reference in WAC 173-303-110 (3)(a)) that is not an organic/carbonaceous waste and exhibits the toxicity characteristic (dangerous waste numbers D004 to D011, only) under WAC 173-303-090(8).

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

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

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

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

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

"Manifest" means the shipping document EPA Form 8700-22 (including, if necessary, EPA Form 8700-22A, originated and signed by the generator or offeror in accordance with the requirements of WAC 173-303-180 (Manifest), and the applicable requirements of WAC 173-303-170 through 173-303-692.

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

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

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

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

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

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

"Military munitions" means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar

rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

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

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

"Mixed waste" means a dangerous, extremely hazardous, or acutely hazardous waste that contains both a nonradioactive hazardous component and, as defined by 10 C.F.R. 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 C.F.R. 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 C.F.R. Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 C.F.R. Part 261.

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

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

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

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

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

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

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

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

"Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

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

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

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

The department, pursuant to this chapter;

United States EPA, pursuant to 40 C.F.R. Part 270; or

Another state authorized by EPA, pursuant to 40 C.F.R. Part 271.

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

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

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

"Personnel or facility personnel" means all persons who work at, or oversee the operations of, a dangerous waste facility, and whose

actions or failure to act may result in noncompliance with the requirements of WAC 173-303-400 or 173-303-280 through 173-303-395 and 173-303-600 through 173-303-695.

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

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

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

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

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

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

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

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

"Publicly owned treatment works" or "POTW" means any device or system, owned by the state or a municipality, which is used in the treatment, recycling, or reclamation of municipal sewage or liquid in-

dustrial wastes. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW.

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

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

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

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

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

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

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

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

July 26, 1982, for wastes regulated by 40 C.F.R. Part 261;

October 31, 1984 for wastes designated only by this chapter and not regulated by 40 C.F.R. Part 261; or

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

"Release" means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous wastes, or dangerous constituents as defined at WAC 173-303-64610(4), into the environment and includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous wastes or dangerous constituents and includes the definition of release at RCW 70.105D.020((~~(20)~~)) (32).

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

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and that is subsequently reused to treat, store, or dispose of dangerous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units

or corrective action areas at the facility, in accordance with an approved closure plan or EPA or state approved corrective action.

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

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

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

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

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

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

"Satellite accumulation area" means a location at or near any point of generation where hazardous waste is initially accumulated in containers (during routine operations) prior to consolidation at a designated ninety-day accumulation area or storage area. The area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes into the satellite containers.

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

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

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

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

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

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

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

released. Such units include regulated units as defined by chapter 173-303 WAC.

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

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

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

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

"Stabilization" and "solidification" means a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

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

"State-only dangerous waste" means a waste designated only by this chapter, chapter 173-303 WAC, and is not regulated as a hazardous waste under 40 C.F.R. 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 wastes or wastes containing free liquids. The term

includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

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

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

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

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

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

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

"TLm_{96}" means the same as "Aquatic LC_{50}."

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

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

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

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

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

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

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

"Treatability study" means a study in which a dangerous waste is subjected to a treatment process to determine: Whether the waste is amenable to the treatment process; what pretreatment (if any) is required; the optimal process conditions needed to achieve the desired treatment; the efficiency of a treatment process for a specific waste or wastes; or the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of the exemptions contained in WAC 173-303-071 (3)(r) and (s),

are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of dangerous waste.

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

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

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

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

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

• Which supplies any public water system or contains a sufficient quantity of groundwater to supply a public water system; and currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids; and

• Which is not an exempted aquifer.

"USDW" means underground source of drinking water.

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

"Unexploded ordnance (UXO)" means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

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

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

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

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

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

"Universal waste handler":

Means:

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

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

Does not mean:

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

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

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

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

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

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

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

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

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

"Wastewater treatment unit" means a device that:

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

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

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

Handles dangerous waste in the following manner:

Receives and treats or stores an influent wastewater; or

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

Meets the definition of tank or tank system in this section.

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

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

Any terms used in this chapter which have not been defined in this section have either the same meaning as set forth in Title 40 C.F.R. 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.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-045 References to EPA's hazardous waste and permit regulations. (1) Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 C.F.R. Parts 260 through 280 and Part 124, are in reference to those rules as they existed on ((~~July 1, 2007~~)) June 30, 2013. Copies of the appropriate referenced federal requirements are available upon request from the department.

(2) The following sections and any cross-reference to these sections are not incorporated or adopted by reference because they are provisions that EPA cannot delegate to states:

(a) 40 C.F.R. Parts 260.1 (b)(4)-(6).

(b) 40 C.F.R. Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(l); and 265.430.

(c) 40 C.F.R. Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g).

(d) 40 C.F.R. Parts 270.1 (c)(1)(i); 270.3; 270.60(b); and 270.64.

(e) 40 C.F.R. Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.

(3) The following sections and any cross-references to these citations are not incorporated or adopted by reference: 40 C.F.R. Parts 260.20-260.22.

(4) Where EPA's regulations are incorporated by reference:

(a) "Regional administrator" means "the department."

(b) "Administrator" means "director."

(c) "Director" means "department."

(d) "40 C.F.R. 260.11" means "WAC 173-303-110(3)."

(e) These substitutions should be made as appropriate. They should not be made where noted otherwise in this chapter. They should not be made where another EPA region is referred to, where a provision cannot be delegated to the state, or where the director referred to is the director of another agency.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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, as defined in WAC 173-303-016, (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~~)) generates a solid waste ((~~is designated must follow~~)) must determine if that waste is a dangerous waste by following the procedures set forth in subsection (3) of this section. Any person who determines by these procedures that their waste is designated DW or EHW is subject to all applicable requirements of this chapter.

(c) The requirements for the small quantity generator exemption are found in subsection (8) of this section.

(2)(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until:

(i) The generator has been able to accurately describe the variability or uniformity of the waste over time, and has been able to obtain demonstration samples which are representative of the waste's variability or uniformity; and

(ii)(A) It does not exhibit any of the characteristics of WAC 173-303-090; however, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of WAC 173-303-140 (2)(a), even if they no longer exhibit a characteristic at the point of land disposal; and

(B) If it was a listed waste under WAC 173-303-080 through 173-303-083, it also has been exempted pursuant to WAC 173-303-910(3); or

(iii) If originally designated only through WAC 173-303-100, it does not meet any of the criteria of WAC 173-303-100.

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

(b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(c)(i) A dangerous waste that is listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits one or more characteristics of ignitability as defined under WAC 173-303-090(5), corrosivity as defined under WAC 173-303-090(6), or reactivity as defined under WAC 173-303-090(7) is not a dangerous waste, if the waste no longer exhibits any characteristic of dangerous waste identified in WAC 173-303-090 or any criteria identified in WAC 173-303-100.

(ii) The exclusion described in (c)(i) of this subsection also pertains to:

(A) Any solid waste generated from treating, storing, or disposing of a dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.

(B) Wastes excluded under this section are subject to 40 C.F.R. Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(3) Designation procedures.

(a) To determine whether or not a solid waste is designated as a dangerous waste a person must:

(i) First, determine if the waste is a listed discarded chemical product, WAC 173-303-081;

(ii) Second, determine if the waste is a listed dangerous waste source, WAC 173-303-082;

(iii) Third, if the waste is not listed in WAC 173-303-081 or 173-303-082, or for the purposes of compliance with the federal land disposal restrictions as adopted by reference in WAC 173-303-140, determine if the waste exhibits any dangerous waste characteristics, WAC 173-303-090; and

(iv) Fourth, if the waste is not listed in WAC 173-303-081 or 173-303-082, and does not exhibit a characteristic in WAC 173-303-090, determine if the waste meets any dangerous waste criteria, WAC 173-303-100.

(b) A person must check each section, in the order set forth, until they determine whether the waste is designated as a dangerous waste. Once the waste is determined to be a dangerous waste, further designation is not required except as required by subsection (4) or (5) of this section. If a person has checked the waste against each section and the waste is not designated, then the waste is not subject to the requirements of chapter 173-303 WAC.

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

(c) For the purpose of determining if a solid waste is a dangerous waste as identified in WAC 173-303-080 through 173-303-100, a person must either:

(i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or

(ii) Apply knowledge of the waste in light of the materials or the process used, when:

(A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and

(B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained on-site.

(4) Testing required. Notwithstanding any other provisions of this chapter, the department may require any person to test a waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110 to determine whether or not the waste is designated under the dangerous waste lists, characteristics, or criteria, WAC 173-303-080 through 173-303-100. Such testing may be required if the department has reason to believe that the waste would be designated DW or EHW by the dangerous waste lists, characteristics, or criteria, or if the department has reason to believe that the waste is designated improperly (e.g., the waste has been designated DW but should actually be designated EHW). If a person, pursuant to the requirements of this subsection, determines that the waste is a dangerous waste or that its designation must be changed, then they are subject to the applicable requirements of this chapter 173-303 WAC. The department will base a requirement to test a waste on evidence that includes, but is not limited to:

(a) Test information indicating that the person's waste may be DW or EHW;

(b) Evidence that the person's waste is very similar to another persons' already designated DW or EHW;

(c) Evidence that the persons' waste has historically been a DW or EHW;

(d) Evidence or information about a person's manufacturing materials or processes which indicate that the wastes may be DW or EHW; or

(e) Evidence that the knowledge or test results a person has regarding a waste is not sufficient for determining whether or not it designated and/or designated properly.

(5) Additional designation required. A generator must manage dangerous waste under the most stringent management standards that apply. The following subsections describe how waste that has been designated as DW under the dangerous waste lists, WAC 173-303-080 through 173-303-082, or characteristics, WAC 173-303-090, or in the case of (c) of this subsection, under the lists, characteristics, or criteria, must be further designated under the dangerous waste criteria, WAC 173-303-100. This further designation under the criteria is necessary because it may change how the waste must be managed. Additional designation is required when:

(a) The waste is designated as DW with a QEL of 220 pounds and the generator otherwise qualifies as a small quantity generator. In this case, a generator must determine if their DW is also designated as a toxic EHW, WAC 173-303-100, with a QEL of 2.2 pounds; or

(b) The waste is designated as DW and the waste is to be discharged to a POTW operating under WAC 173-303-802(4) (Permits by rule). In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100; or

(c) The waste is designated as a state-only DW and the waste is to be:

(i) Burned for energy recovery, as used oil, under the provisions of WAC 173-303-515; or

(ii) Land disposed within the state. In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100.

(6) Dangerous waste numbers. When a person is reporting or keeping records on a dangerous waste, they must use all the dangerous waste numbers which they know are assignable to the waste from the dangerous waste lists, characteristics, or criteria. For example, if the waste is ignitable *and* contains more than 5 mg/l leachable lead when tested for the toxicity characteristic, they must use the dangerous waste numbers of D001 and D008. This will not be construed as requiring a person to designate their waste beyond those designation requirements set forth in subsections (2), (3), (4), and (5) of this section.

(7) Quantity exclusion limits; aggregated waste quantities.

(a) Quantity exclusion limits. In each of the designation sections describing the lists, characteristics, and criteria, quantity exclusion limits (QEL) are identified. The QEL are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a 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). (Note: In order to remain a small quantity generator, the total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, must not equal or exceed 220 pounds. Not more than 2.2 pounds of a waste with a 2.2 pound QEL may be part of that total.)

(c) When making the quantity determinations of this subsection and WAC 173-303-170 through 173-303-230, generators must include all dangerous wastes they generate, except dangerous waste that:

(i) Is exempt from regulation under WAC 173-303-071; or

(ii) Is recycled under WAC 173-303-120 (2)(a), (3)(c), (e), (h) or (5); or

(iii) Is managed in accordance with WAC 173-303-802(5) immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in WAC 173-303-040; or

(iv) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under WAC 173-303-120 (4)(a); or

(v) Is spent lead-acid batteries managed under the requirements of WAC 173-303-120 (3)(f) and 173-303-520; or

(vi) Is universal waste managed under WAC 173-303-077 and 173-303-573; or

(vii) Is a dangerous waste that is an unused commercial chemical product (listed in WAC 173-303-9903 or exhibiting one or more characteristics or criteria listed in WAC 173-303-090 or 173-303-100) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to WAC 173-303-235(14). For purposes of this provision, the term eligible academic entity shall have the meaning as defined in WAC 173-303-235(1).

(d) In determining the quantity of dangerous waste generated, a generator need not include:

(i) Dangerous waste when it is removed from on-site storage; or

(ii) Reserve; or

(iii) Spent materials that are generated, reclaimed, and subsequently reused on-site, as long as such spent materials have been counted once (Note: If after treatment or reclamation a residue is generated with a different waste code(s), that residue must be counted); or

(iv) The container holding/containing the dangerous waste as described under WAC 173-303-160(1).

(8) Small quantity generators.

(a) A person is a small quantity generator and subject to the requirements of this subsection if:

(i) Their waste is dangerous waste under subsection (3) of this section, and the quantity of waste generated per month (or the aggregated quantity if more than one kind of waste is generated) does not equal or exceed the quantity exclusion limit (QEL) for such waste (or wastes) as described in WAC 173-303-070(7); and

(ii) The quantity accumulated or stored does not exceed 2200 pounds for wastes with a 220 pound QEL and 2.2 pounds for waste with a 2.2 pound QEL. (Exception: The accumulation limit for the acute hazardous wastes described in WAC 173-303-081 (2)(iv) and 173-303-082 (2)(b) is 220 lbs); and

(iii) The total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, does not equal or exceed 220 pounds. If a person generates any dangerous wastes that exceed the QEL or accumulates or stores waste that exceeds the accumulation limits, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. A small quantity generator who generates in excess of the quantity exclusion limits or, accumulates, or stores waste in excess of the accumulation limits becomes subject to the full requirements of this chapter and cannot again be a small quantity generator until after all dangerous waste on-site at the time he or she became fully regulated have been removed, treated, or disposed.

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

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

(b) Small quantity generators will not be subject to the requirements of this chapter if they:

(i) Designate their waste in accordance with WAC 173-303-070; and

(ii) Manage their waste in a way that does not pose a potential threat to human health or the environment; and

(iii) Either treat or dispose of their dangerous waste in an on-site facility, or ensure delivery to an off-site facility, either of which, if located in the United States, is:

(A) Permitted (including permit-by-rule, interim status, or final status) under WAC 173-303-800 through 173-303-840;

(B) Authorized to manage dangerous waste by another state with a hazardous waste program approved under 40 C.F.R. Part 271, or by EPA under 40 C.F.R. Part 270;

(C) Permitted to manage moderate-risk waste under chapter 173-350 WAC (Solid waste handling standards), operated in accordance with state and local regulations, and consistent with the applicable local hazardous waste plan that has been approved by the department;

(D) A facility that beneficially uses or reuses, or legitimately recycles or reclaims the dangerous waste, or that treats the waste prior to such recycling activities;

(E) Permitted, licensed, or registered to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to 40 C.F.R. Part 258 or chapter 173-351 WAC;

(F) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 C.F.R. 257.5 through 257.30;

(G) A publicly owned treatment works (POTW): Provided, That small quantity generator(s) comply with the provisions of the domestic sewage exclusion found in WAC 173-303-071 (3)(a); or

(H) For universal waste managed under WAC 173-303-573, a universal waste handler or destination facility subject to the requirements of WAC 173-303-573; and

(iv) Submit an annual report in accordance with WAC 173-303-220 if they have obtained an EPA/state identification number pursuant to WAC 173-303-060.

(c) If a small quantity generator's wastes are mixed with used oil, the mixture is subject to WAC 173-303-510 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery.

(d) If a small quantity generator's used oil is to be recycled by being burned for energy recovery or re-refined, the used oil is subject to WAC 173-303-515.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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 C.F.R. 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 C.F.R. Part 403.5; and

(D) The waste prior to mixing with domestic sewage must not exhibit dangerous waste characteristics for ignitability, corrosivity, reactivity, or toxicity as defined in WAC 173-303-090, and must not meet the dangerous waste criteria for toxic dangerous waste or persistent dangerous waste under WAC 173-303-100, unless the waste is treatable in the publicly owned treatment works (POTW) where it will be received. This exclusion does not apply to the generation, treatment,

storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;

(b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section 402 of the Clean Water Act. This exclusion does not apply to the collection, storage, or treatment of industrial waste-waters prior to discharge, nor to sludges that are generated during industrial wastewater treatment. Owners or operators of certain wastewater treatment facilities managing dangerous wastes may qualify for a permit-by-rule pursuant to WAC 173-303-802(5);

(c) Household wastes, including household waste that has been collected, transported, stored, or disposed. Wastes that are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including, but not limited to, garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste will not be deemed to be treating, storing, disposing of, or otherwise managing dangerous wastes for the purposes of regulation under this chapter, if such facility:

(i) Receives and burns only:

(A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

(B) Solid waste from commercial or industrial sources that does not contain dangerous waste; and

(ii) Such facility does not accept dangerous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that dangerous wastes are not received at or burned in such facility;

(d) Agricultural crops and animal manures which are returned to the soil as fertilizers;

(e) Asphaltic materials designated only for the presence of PAHs by WAC 173-303-100(6). For the purposes of this exclusion, asphaltic materials means materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of oil and sand, gravel, ash or similar substances;

(f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;

(g) Treated wood waste and wood products including:

(i) Arsenical-treated wood that fails the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D004 through D017 only) or that fails any state criteria, if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use. Intended end use means the wood products must have been used in typical treated wood applications (for example, fence posts, decking, poles, and timbers).

(ii) Wood treated with other preservatives provided such treated wood and wood waste (for example, sawdust and shavings) are, within one hundred eighty days after becoming waste:

(A) Disposed of at a landfill that is permitted in accordance with chapter 173-350 WAC, Solid waste handling standards, or chapter 173-351 WAC, criteria for municipal solid waste landfills, and provi-

ded that such wood is neither a listed waste under WAC 173-303-9903 and 173-303-9904 nor a TCLP waste under WAC 173-303-090(8); or

(B) Sent to a facility that will legitimately treat or recycle the treated wood waste, and manage any residue in accordance with that state's dangerous waste regulations; or

(C) Sent off-site to a permitted TSD facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845. In addition, creosote-treated wood is excluded when burned for energy recovery in an industrial furnace or boiler that has an order of approval issued pursuant to RCW 70.94.152 by ecology or a local air pollution control authority to burn creosote treated wood.

(h) Irrigation return flows;

(i) Reserve;

(j) Mining overburden returned to the mining site;

(k) Polychlorinated biphenyl (PCB) wastes:

(i) PCB wastes whose disposal is regulated by EPA under 40 C.F.R. 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 C.F.R. 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 C.F.R. Part 266;

(ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as WPCB under WAC 173-303-9904 when such wastes are stored and disposed in a manner equivalent to the requirements of 40 C.F.R. 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) Reserve;

(n) Dangerous waste generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated. This exclusion does not apply to surface impoundments, nor does it apply if the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;

(o) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (NAICS codes 331111 and 332111), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100) or characteristics (WAC 173-303-090);

(p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(vii) and (viii). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria;

(q) As of January 1, 1987, secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed;

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal; and

(v) A generator complies with the requirements of chapter 173-303 WAC for any residues (e.g., sludges, filters, etc.) produced from the collection, reclamation, and reuse of the secondary materials.

(r) Treatability study samples.

(i) Except as provided in (r)(ii) of this subsection, persons who generate or collect samples for the purpose of conducting treatability studies as defined in WAC 173-303-040 are not subject to the requirements of WAC 173-303-180, 173-303-190, and 173-303-200 (1)(a), nor are such samples included in the quantity determinations of WAC 173-303-070 (7) and (8) and 173-303-201 when:

(A) The sample is being collected and prepared for transportation by the generator or sample collector; or

(B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study; or

(D) The sample or waste residue is being transported back to the original generator from the laboratory or testing facility.

(ii) The exemption in (r)(i) of this subsection is applicable to samples of dangerous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with nonacute dangerous waste, 1000 kg of nonacute dangerous waste other than contaminated media, 1 kg of acutely hazardous waste, 2500 kg of media contaminated with acutely hazardous waste for each process being evaluated for each generated waste stream; and

(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 C.F.R. 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 papers associated

with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

(ix) The laboratory or testing facility prepares and submits a report to the department by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

(A) The name, address, and EPA/state identification number of the laboratory or testing facility conducting the treatability studies;

(B) The types (by process) of treatability studies conducted;

(C) The names and addresses of persons for whom studies have been conducted (including their EPA/state identification numbers);

(D) The total quantity of waste in storage each day;

(E) The quantity and types of waste subjected to treatability studies;

(F) When each treatability study was conducted;

(G) The final disposition of residues and unused sample from each treatability study.

(x) The laboratory or testing facility determines whether any unused sample or residues generated by the treatability study are dangerous waste under WAC 173-303-070 and if so, are subject to the requirements of this chapter, unless the residues and unused samples are returned to the sample originator under the exemption in (r) of this subsection.

(xi) The laboratory or testing facility notifies the department by letter when it is no longer planning to conduct any treatability studies at the site.

(xii) The date the sample was received, or if the treatability study has been completed, the date of the treatability study, is marked and clearly visible for inspection on each container.

(xiii) While being held on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public.

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 C.F.R. 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.

(iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in (w)(i) and (ii) of this subsection, so long as they meet all of the following conditions:

(A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in Part 265, Subpart W which is incorporated by reference at WAC 173-303-400 (3)(a), regardless of whether the plant generates a total of less than 220 pounds/month of dangerous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.

(F) Additional reports.

(I) Upon determination by the department that the storage of wood preserving wastewaters and spent wood preserving solutions in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store wood preserving wastewaters and spent wood preserving solutions. This authority applies to tanks and secondary containment systems used to store wood preserving wastewaters and spent wood preserving solutions in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of wood preserving wastewaters and spent wood preserving solutions or the generation of hazardous by-products. Such observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(II) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(III) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (w)(iii)(F)(I) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the wood preserving wastewaters and spent wood preserving solutions until such repairs or improvements are completed and approved by the department.

(x) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

(y) Used oil filters that are recycled in accordance with WAC 173-303-120, as used oil and scrap metal.

(z) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

(aa)(i) Wastes that fail the test for the toxicity characteristic in WAC 173-303-090 because chromium is present or are listed in WAC 173-303-081 or 173-303-082 due to the presence of chromium. The waste must not designate for any other characteristic under WAC 173-303-090, for any of the criteria specified in WAC 173-303-100, and must not be listed in WAC 173-303-081 or 173-303-082 due to the presence of any constituent from WAC 173-303-9905 other than chromium. The waste generator must be able to demonstrate that:

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(B) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(C) The waste is typically and frequently managed in nonoxidizing environments.

(ii) Specific wastes which meet the standard in (aa)(i)(A), (B), and (C) of this subsection (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

(A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(F) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/

chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(H) Wastewater treatment sludges from the production of TiO2 pigment using chromium-bearing ores by the chloride process.

(bb)(i) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in WAC 173-303-040 - blast furnaces, smelting, melting and refining furnaces, and other devices the department may add to the list - of the definition for "industrial furnace"), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of dangerous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

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

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

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

(cc)(i) Oil-bearing hazardous secondary materials (that is, sludges, by-products, or spent materials) that are generated at a petroleum refinery (NAICS code 324110) and are inserted into the petroleum refining process (NAICS code 324110 - Including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (that is, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph: Provided((,)) that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in (cc)(ii) of this subsection, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (that is, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph, where such materials as generated would have otherwise met a listing under WAC 173-303-081 and 173-303-082, are designated as F037 listed wastes when disposed of or intended for disposal.

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in (cc)(i) of this subsection. Recov-

ered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (NAICS codes 211111, 211112, 213111, 213112, 541360, 237120, 238910, 324110, 486110, 486910, 486210, 221210, 488210, 488999, 424710, 454311, 454312, 424720, 425120). Recovered oil does not include oil-bearing hazardous wastes listed in WAC 173-303-081 and 173-303-082; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in WAC 173-303-040.

(dd) Dangerous waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are dangerous only because they exhibit the toxicity characteristic (TC) specified in WAC 173-303-090(8) when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(ee) Biological treatment sludge from the treatment of one of the following wastes listed in WAC 173-303-9904 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K157) unless it exhibits one or more of the characteristics or criteria of dangerous waste.

(ff) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(gg) Shredded circuit boards being recycled: Provided, That they are:

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.

(hh) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (NAICS code 324110) along with normal petroleum refinery process streams, provided:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in WAC 173-303-090(5) and/or toxicity for benzene (WAC 173-303-090(8), waste code D018); and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process.

An "associated organic chemical manufacturing facility" is a facility where the primary NAICS code is 325110, 325120, 325188, 325192, 325193, or 325199, but where operations may also include NAICS codes 325211, 325212, 325110, 325132, 325192; and is physically colocated with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (that is, sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(ii) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in WAC 173-303-016(5).

(jj) Catalyst inert support media separated from one of the following wastes listed in WAC 173-303-9904 Specific Sources - Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrorefining catalyst (EPA Hazardous Waste No. K172). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria.

(kk) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed: Provided, That:

(i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, K178, and K181 if these wastes had been generated after the effective date of the listing;

(ii) The solid wastes described in (kk)(i) of this subsection were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate do not exhibit any characteristic or criteria of dangerous waste nor are derived from any other listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169 - K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. As of November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: If the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system): Provided, That the impoundment has a double liner, and: Provided further, That the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends.

(ll) Dredged material. Dredged material as defined in 40 C.F.R. 232.2 that is subject to:

(i) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of a U.S. Army Corps of Engineers civil works project, the administrative equivalent of the permits referred to in (ll)(i) and (ii) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 C.F.R. 336.1, 336.2 and 337.3.

(mm) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 C.F.R. 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(nn)(i) Controlled substances, legend drugs, and over-the-counter drugs that are state-only dangerous wastes.

(A) Controlled substances as defined and regulated by chapter 69.50 RCW (Schedule I through V);

(B) Legend drugs as defined and regulated by chapter 69.41 RCW; and

(C) Over-the-counter drugs as defined and regulated by chapter 69.60 RCW.

(ii) Controlled substances, legend drugs, and over-the-counter drugs that are held in the custody of law enforcement agencies or possessed by any licensee as defined and regulated by chapter 69.50 RCW or Title 18 RCW and authorized to possess drugs within the state of Washington are excluded, provided the drugs are disposed of by incineration in a controlled combustion unit with a heat input rate greater than 250 million British thermal units/hour, a combustion zone temperature greater than 1500 degrees Fahrenheit, or a facility permitted to incinerate municipal solid waste.

(iii) For the purposes of this exclusion the term "drugs" means:

(A) Articles recognized in the official United States pharmacopoeia or the official homeopathic pharmacopoeia of the United States;

(B) Substances intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or

(C) Substances (other than food) intended to affect the structure or any function of the body of man or other animals, as defined in RCW 18.64.011(3). (Note: RCW 18.64.011 (3)(d) is intentionally not included in the definition of drugs for this exclusion.)

(iv) When possessed by any licensee the term drugs used in this exclusion means finished drug products.

(oo) Cathode ray tubes (CRTs) and glass removed from CRTs:

(i) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

(A) Storage. CRTs must be either:

(I) Stored in a building with a roof, floor, and walls; or

(II) Placed in a container (that is, a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

(B) Labeling. Each container in which the CRT is contained must be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s) - contains leaded glass" or "leaded glass from televisions or computers." It must also be labeled: "Do not mix with other glass materials."

(C) Transportation. CRTs must be transported in a container meeting the requirements of (oo)(i)(A)(II) and (B) of this subsection.

(D) Speculative accumulation and use constituting disposal. CRTs are subject to the limitations on speculative accumulation as defined in WAC 173-303-016 (5)(d). If they are used in a manner constituting disposal, they must comply with the applicable requirements of WAC 173-303-505 instead of the requirements of this section.

(E) Exports. In addition to the applicable conditions specified in (oo)(i)(A) through (D) of this subsection, exporters of CRTs must comply with the following requirements:

(I) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve-month or lesser period. The notification must be

in writing, signed by the exporter, and include the following information:

• Name, mailing address, telephone number and EPA/state ID number (if applicable) of the exporter of the CRTs.

• The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

• The estimated total quantity of CRTs specified in kilograms.

• All points of entry to and departure from each foreign country through which the CRTs will pass.

• A description of the means by which each shipment of the CRTs will be transported (for example, mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.)).

• The name and address of the recycler and any alternate recycler.

• A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

• The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.

(II) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., N.W., Washington, D.C. In both cases, the following must be prominently displayed on the front of the envelope: "Attention: Notification of intent to export CRTs."

(III) Upon request by EPA, the exporter must furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(IV) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of (oo)(i)(E)(I) of this subsection. Where a claim of confidentiality is asserted with respect to any notification information required by (oo)(i)(E)(I) of this subsection, EPA may find the notification not complete until any such claim is resolved in accordance with 40 C.F.R. 260.2.

(V) The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an "Acknowledgment of Consent" to export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.

(VI) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change, except for changes to the telephone number in (oo)(i)(E)(I)(first bullet) of this subsection and decreases in the quantity indicated pursuant to (oo)(i)(E)(I)(third bullet) of this subsection. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information

about points of entry and departure and transit countries pursuant to (oo)(i)(E)(I)(fourth bullet) and (i)(E)(I)(eighth bullet) of this section) and the exporter of CRTs receives from EPA a copy of the "Acknowledgment of Consent" to export CRTs reflecting the receiving country's consent to the changes.

(VII) A copy of the "Acknowledgment of Consent" to export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.

(VIII) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with (oo)(i)(E)(VI) of this subsection and obtain another "Acknowledgment of Consent" to export CRTs.

(IX) Exporters must keep copies of notifications and "Acknowledgments of Consent" to export CRTs for a period of five years following receipt of the "Acknowledgment."

(ii) Requirements for used CRT processing: CRTs undergoing CRT processing as defined in WAC 173-303-040 are not solid wastes if they meet the following requirements:

(A) Storage. CRTs undergoing processing are subject to the requirement of (oo)(i)(D) of this subsection.

(B) Processing.

(I) All activities specified in the second and third bullets of the definition of "CRT processing" in WAC 173-303-040 must be performed within a building with a roof, floor, and walls; and

(II) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(iii) Processed CRT glass sent to CRT glass making or lead smelting: Glass from CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in WAC 173-303-016(5)(d).

(iv) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal must comply with the requirements of WAC 173-303-505.

(v) Notification and recordkeeping for cathode ray tubes (CRTs) exported for reuse.

(A) Persons who export CRTs for reuse must send a one-time notification to the U.S. EPA Regional Administrator. The notification must include a statement that the notifier plans to export CRTs for reuse, the notifier's name, address, and EPA/state ID number (if applicable) and the name and phone number of a contact person.

(B) Persons who export CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least five years from the date the CRTs were exported.

(pp) Zinc fertilizers made from hazardous wastes provided that:

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

	Maximum Allowable Total Concentration Constituent in Fertilizer, per Unit (1%) of Zinc (ppm)
Arsenic	0.3

Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of (pp)(ii) of this subsection. Such records must at a minimum include:

(A) The dates and times product samples were taken, and the dates the samples were analyzed;

(B) The names and qualifications of the person(s) taking the samples;

(C) A description of the methods and equipment used to take the samples;

(D) The name and address of the laboratory facility at which analyses of the samples were performed;

(E) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (3)(pp).

(qq) Debris. Provided the debris does not exhibit a characteristic identified in WAC 173-303-090, the following materials are not subject to regulation under this chapter:

(i) Hazardous debris that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 40 C.F.R. section 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a); persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(ii) Debris that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

AMENDATORY SECTION (Amending WSR 95-22-008, filed 10/19/95, effective 11/19/95)

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)((~~,~~)) and (4)((~~, and (5)~~)) of this section.

(c) Any persons seeking to categorically exclude a class of wastes must submit a petition to the department according to the procedures of WAC 173-303-910(4). A petition for exclusion will be assessed against the applicable bases for exclusion described in subsection (6) of this section.

(2) Department procedures. When considering, granting, or denying a petition for exemption or exclusion, the department will follow the appropriate procedures described in WAC 173-303-910(1).

(3) Bases for exempting wastes. To successfully petition the department to exempt a waste, the petitioner must demonstrate to the satisfaction of the department that:

(a) He has been able to accurately describe the variability or uniformity of his waste over time, and has been able to obtain demonstration samples which are representative of his waste's variability or uniformity; and, either

(b) The representative demonstration samples of his waste are not designated DW or EHW by the dangerous waste criteria, WAC 173-303-100; or

(c) It can be shown, from information developed by the petitioner through consultation with the department, that his waste does not otherwise pose a threat to public health or the environment. However, this basis for exemption is not applicable to wastes that exhibit any of the characteristics specified in WAC 173-303-090, except 173-303-090 (6)(a)(iii).

(4) Additional bases for exempting listed wastes. In addition to the demonstrations required by subsections (3)(a) and (b) of this section, for wastes listed in WAC 173-303-081 or 173-303-082 the petitioner must also demonstrate to the satisfaction of the department that his waste is not capable of posing a substantial present or potential threat to public health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. The following factors will be considered by the department when assessing such a demonstration:

(a) Whether or not the listed waste contains the constituent or constituents which caused it to be listed. (For the purposes of this subsection, the constituents referred to will include any of the dangerous waste constituents listed in WAC 173-303-9905);

(b) The nature of the threat posed by the waste constituent(s);

(c) The concentration of the constituent(s) in the waste;

(d) The potential of the constituent(s) or any degradation product of the constituent(s) to migrate from the waste into the environment under the types of improper management considered in (h) of this subsection;

(e) The persistence of the constituent(s) or any degradation product of the constituent(s);

(f) The potential for the constituent(s) or any degradation product of the constituent(s) to degrade into nonharmful constituents and the rate of degradation;

(g) The degree to which the constituent(s) or degradation product of the constituent(s) bioaccumulates in ecosystems;

(h) The plausible types of improper management to which the waste could be subjected;

(i) The quantities of the waste generated at individual generation sites or on a statewide basis. Under this factor, the department will also consider whether or not the waste is listed under WAC 173-303-081 as a discarded chemical product and occurs in a relatively pure form. Any waste discarded chemical product which exceeds the quantity exclusion limit specified in WAC 173-303-081(2) for that waste will not be exempted;

(j) The nature and severity of the public health and environmental damage that has occurred as a result of the 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 C.F.R. 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 C.F.R. 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.

AMENDATORY SECTION (Amending WSR 00-11-040, filed 5/10/00, effective 6/10/00)

WAC 173-303-073 Conditional exclusion of special wastes. (1) Purpose and applicability. 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. The definition for special waste is found in WAC 173-303-040.

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

(a) Generators may not accumulate special waste on-site for more than one hundred eighty days from the date the quantity of waste exceeds two thousand two hundred pounds. The generator must keep a written record showing the dates when accumulation of the wastes began;

(b) During accumulation, special waste must be stored in a manner to prevent releases to the environment. This includes, but is not limited to, storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures, etc.;

(c) Facilities that receive special waste for recycling must meet the requirements of (b) of this subsection and store special wastes for no more than one hundred eighty days.

(d) All workers handling special wastes must be informed of the waste's potential hazard, either through worker training, health and safety plans, or notification of workers on a case-by-case basis;

(e) Special wastes must be transported directly from their site of generation to any offsite recycling, treatment, or disposal destination. The wastes must not pass through any intermediate solid waste processing facility, such as a transfer station, unless:

(i) The transfer station operator has made specific provisions for managing special waste by physical segregation, packing, or other means to ensure that workers and the public are not exposed to the waste stream at the transfer station;

(ii) The provisions are reflected in the facilities operating plans;

(iii) The plans have been approved by the transfer station's solid waste permitting authority; ((~~and~~))

(iv) The transfer station operator has informed workers of the wastes' potential hazard according to (d) of this subsection; and

(v) The waste is stored no more than thirty days at the transfer station, unless a longer storage time is approved by the solid waste permitting authority.

(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 direc-

ted. 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) If a special waste being offered for transportation meets the definition of hazardous materials under 49 C.F.R. Parts 171 through 180, then the generator must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with applicable Department of Transportation regulations in 49 C.F.R. Parts 172 through 180;

(h) 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 with leachate collection is used to meet the alternative design 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 C.F.R. Part 258 or Part 270; and

(ii) Are not currently undergoing corrective action under WAC 173-351-440((~~(6)~~)) (7), 40 C.F.R. 258.56, or a similar requirement in state regulations approved by the United States EPA pursuant to 42 U.S.C. 6945 (c)(1)(B).

(3) Reserve.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-090 Dangerous waste characteristics. (1) Purpose. The purpose of this section is to set forth characteristics which a solid waste might exhibit and which would cause that waste to be a dangerous waste.

(2) Representative samples. The department will consider a sample obtained using any of the applicable sampling methods described in WAC 173-303-110(2), sampling and testing methods, to be a representative sample.

(3) Equivalent test methods. The testing methods specified in this section are the only acceptable methods, unless the department approves an equivalent test method in accordance with WAC 173-303-910(2).

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it exhibits one or more of the dangerous waste characteristics described in subsections (5), (6), (7), and (8) of this section. If a person's solid waste exhibits one or more of these characteristics, then he or she is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of their waste exceeds 220 lbs. (100 kg) per month or per batch.

(5) Characteristic of ignitability.

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

(i) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60 degrees C (140 degrees F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D93-06, or a Setaflash Closed Cup Tester, using the test method speci-

fied in ASTM Standard D3278-96 (2004)e1 as incorporated by reference at WAC 173-303-110 (3)(h)(v) and (vi);

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

(iii) It is an ignitable compressed gas.

(A) The term "compressed gas" applies to any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70 degrees F or, regardless of the pressure at 70 degrees F, having an absolute pressure exceeding 104 p.s.i. at 130 degrees F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100 degrees F as determined by ASTM Test D-323.

(B) A compressed gas must be characterized as ignitable if any one of the following occurs:

(I) Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits must be determined at atmospheric temperature and pressure. The method of sampling and test procedure must be acceptable to the Bureau of Explosives and approved by the director, Pipeline and Hazardous Materials Technology, U.S. Department of Transportation (see Note 2).

(II) Using the Bureau of Explosives' Flame Projection Apparatus (see Note 1), the flame projects more than 18 inches beyond the ignition source with valve opened fully, or the flame flashes back and burns at the valve with any degree of valve opening.

(III) Using the Bureau of Explosives' Open Drum Apparatus (see Note 1), there is any significant propagation of flame away from the ignition source.

(IV) Using the Bureau of Explosives' Closed Drum Apparatus (see Note 1), there is any explosion of the vapor-air mixture in the drum; or,

(iv) It is an oxidizer. An oxidizer for the purpose of this subsection is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter (see Note 4).

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

(A) It is a forbidden explosive as defined in 49 C.F.R. 173.54, or a Class 1 explosive, Division 1.1, Division 1.2, Division 1.3, and Division 1.5, as defined in 49 C.F.R. 173.50, in which case it must be classed as an explosive;

(B) The material is forbidden to be offered for transportation according to 49 C.F.R. 172.101 and 49 C.F.R. 173.21;

(C) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide; or

(D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation (see Note 3), it has been determined that the material does not present a hazard in transportation.

Note 1: A description of the Bureau of Explosives' Flame Projection Apparatus, Open Drum Apparatus, Closed Drum Apparatus, and method of tests may be procured from the Bureau of Explosives.

Note 2: As part of a U.S. Department of Transportation (DOT) reorganization, the Office of Hazardous Materials Technology (OHMT), which was the office listed in the 1980 publication of 49 C.F.R. 173.300 for the purposes of approving sampling and test procedures for a flammable gas, ceased operations on February 20, 2005. OHMT programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.

Note 3: As part of a U.S. Department of Transportation (DOT) reorganization, the Research and Special Programs Administration (RSPA), which was the office listed in the 1980 publication of 49 C.F.R. 173.151a for the purposes of determining that a material does not present a hazard in transport, ceased operations on February 20, 2005. RSPA programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.

Note 4: The DOT regulatory definition of an oxidizer was contained in Sec. 173.151 of 49 C.F.R., and the definition of an organic peroxide was contained in paragraph 173.151a. An organic peroxide is a type of oxidizer.

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

(6) Characteristic of corrosivity.

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

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

(ii) It is liquid and corrodes steel (SAE 1020) at a rate greater than 0.250 inch (6.35 mm) per year at a test temperature of 55 degrees C (130 degrees F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM0169-2000 as standardized in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," (Method 1110A) EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a); or

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

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

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

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

(7) Characteristic of reactivity.

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

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

(ii) It reacts violently with water;

(iii) It forms potentially explosive mixtures with water;

(iv) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(v) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(vi) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;

(vii) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(viii) It is a forbidden explosive as defined in 49 C.F.R. 173.54, or a Class 1 explosive, Division 1.1, Division 1.2, Division 1.3, and Division 1.5, as defined in 49 C.F.R. 173.50 and 173.53.

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

(8) Toxicity characteristic.

(a) A solid waste exhibits the characteristic of toxicity if, using the *Toxicity Characteristic Leaching Procedure* (TCLP), test Method 1311 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a), the extract from a representative sample of the waste contains any of the contaminants listed in the toxicity characteristic list in (c) of this subsection, at concentrations equal to or greater than the respective value given in the list. When the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this subsection.

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

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

TOXICITY CHARACTERISTICS LIST:

Maximum Concentration of Contaminants
for the Toxicity Characteristic

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

Dangerous Waste Number	Contaminant	(Chemical Abstracts Services #)	DW (mg/L)
D032	Hexachlorobenzene	(118-74-1) /2/	0.13
D033	Hexachlorobutadiene	(87-68-3)	0.5
D034	Hexachloroethane	(67-72-1)	3.0
D008	Lead	(7439-92-1)	5.0
D013	Lindane	(58-89-9)	0.4
D009	Mercury	(7439-97-6)	0.2
D014	Methoxychlor	(72-43-5)	10.0
D035	Methyl ethyl ketone	(78-93-3)	200.0
D036	Nitrobenzene	(98-95-3)	2.0
D037	Pentachlorophenol	(87-86-5)	100.0
D038	Pyridine	(110-86-1) /2/	5.0
D010	Selenium	(7782-49-2)	1.0
D011	Silver	(7440-22-4)	5.0
D039	Tetrachloroethylene	(127-18-4)	0.7
D015	Toxaphene	(8001-35-2)	0.5
D040	Trichloroethylene	(79-01-6)	0.5
D041	2,4,5-Trichlorophenol	(95-95-4)	400.0
D042	2,4,6-Trichlorophenol	(88-06-2)	2.0
D017	2,4,5-TP (Silvex)	(93-72-1)	1.0
D043	Vinyl chloride	(75-01-4)	0.2

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

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

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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

(a) Toxic dangerous wastes; and

(b) Persistent dangerous wastes.

(2) References. The following toxicity data sources are adopted by reference:

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

(b) The United States Environmental Protection Agency, Ecotoxicology Database (ECOTOX), Mid-Continent Ecology Division, 6201 Congdon Boulevard, Duluth, MN 55804.

(c) The United States National Library of Medicine Toxicology Data Network, Hazardous Substance Database (HSDB), 8600 Rockville Pike, Bethesda, MD 20894.

(3) A person must use data that are available to him or her, and, when such data are inadequate for the purposes of this section, must refer to the references identified in WAC 173-303-100(2) to determine:

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

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

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it meets one or more of the dangerous waste criteria described in subsections (5) and (6) of this section. If a person's solid waste meets one or more of these criteria then he or she is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of the waste exceeds the following quantity exclusion limits:

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

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

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

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

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

(i) A person must determine the toxic category for each known constituent. The toxic category for each constituent may be determined from available data, for example, Registry for Toxic Effects of Chemical Substances (RTECS), Hazardous Substances Data Bank (HSDB), and Ecotoxicology database (ECOTOX). The toxic category should then be identified, using the table below. If data are available for more than one test endpoint (that is, fish, oral rat, inhalation rat, or dermal rabbit), the value with the highest toxicity must be used. Similarly, if toxicity data do not agree on the same toxic category within the same test endpoint, the value with the highest toxicity must be used.[a] Finally, if toxicity data for a constituent cannot be found in reasonably available sources (for example, RTECS, HSDB or ECOTOX), the toxic category for that constituent need not be determined.

TOXIC CATEGORY TABLE

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

[a] These four test endpoints are defined in WAC 173-303-040.

Toxic Category	Fish LC_{50}(mg/L)[b]	Oral Rat LD_{50}(mg/kg)	Inhalation Rat LC_{50}(mg/L)[c]	Dermal Rabbit LD_{50}(mg/kg)
[b]	Fish LC_{50} data must be derived from an exposure period greater than or equal to twenty-four hours. A hierarchy of species LC_{50} data should be used that includes (in decreasing order of preference) salmonids, fathead minnows, and other fish species.			
[c]	Inhalation Rat LC_{50} data must be derived from an exposure period greater than or equal to one hour.			

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

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

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

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

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

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

So the equivalent concentration equals 0.1534%.

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

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

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

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

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

Example 1. Continued. The equivalent concentration of 0.1534% (from Example 1. above) is greater than 0.001% and less than 1.0%. The waste is DW and the dangerous waste number WT02 must be assigned.

(iv) Reserve.

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

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

or in the case of state-only solid dangerous waste, if the person chooses to determine whether the waste is special waste; or

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

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

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

(6) Persistence criteria. For the purposes of this section, persistent constituents are chemical compounds which are either halogenated organic compounds (HOC), or polycyclic aromatic hydrocarbons (PAH), as defined under WAC 173-303-040. Except as provided in WAC 173-303-070 (4) or (5), a person may determine the identity and concentration of persistent constituents by either applying knowledge of the waste or by testing the waste according to WAC 173-303-110 (3)(c) *Chemical Testing Methods for Designating Dangerous Waste* Publication #97-407.

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

(b) When a waste contains one or more halogenated organic compounds (HOC) for which the concentrations are known, the total halogenated organic compound concentration must be determined by summing the concentration percentages for all of the halogenated organic compounds for which the concentration is known.

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

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

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

polycyclic aromatic hydrocarbons for which they know the concentration.

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

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

(d) A person whose waste contains halogenated organic compounds and/or polycyclic aromatic hydrocarbons must determine its designation from the persistent dangerous waste table.

PERSISTENT DANGEROUS WASTE TABLE

If your waste contains...	At a total concentration level of...	Then your waste's designation, and waste # are...
Halogenated Organic Compounds (HOC)	0.01% to 1.0% greater than 1.0%	DW, WP02 EHW, WP01
Polycyclic Aromatic Hydrocarbons (PAH)	greater than 1.0%	EHW*, WP03
*No DW concentration level for PAH.		

(7) Reserve.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-110 Sampling, testing methods, and analytes. (1) Purpose. This section sets forth the testing methods to be used to comply with the requirements of this chapter. Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation. All methods and publications listed in this section are incorporated by reference.

(2) Representative samples.

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

(i) Crushed or powdered material - ASTM Standard D346-04e1;

(ii) Extremely viscous liquid - ASTM Standard D140-01 (2007);

(iii) Fly ash-like material - ASTM Standard D2234/D2234M-03e1;

(iv) Soil-like material - ASTM Standard D1452-80 (2000);

(v) Soil or rock-like material - ASTM Standard D420-98 (2003);

(vi) Containerized liquid wastes - "COLIWASA" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a), or the equivalent representative sampling method described in ASTM D5743-97 (2003). Per this method, the selection of an appropriate device must be best suited for the characteristics of the waste being sampled; and

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

(b) Copies of these representative sampling methods are available from the department except for the ASTM standards which can be obtained by writing to:

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

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

For copies of Department of Ecology test methods:

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

For copies of SW-846, including updates, and 40 C.F.R. Part 261:

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

For copies of ASTM methods:

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

For copies of APTI methods:

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

The document titles and included test procedures are as follows:

(a) *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846* (Third Edition (November 1986) as amended by Updates I (dated July 1992), II (dated September 1994), IIA (dated August 1993), IIB (dated January 1995), III (dated December 1996), IIIA (dated April 1998), IIIB (dated July 2005), and ((~~Final~~)) Update ((~~IV~~)) IVA and IVB (dated February 2007)), which is incorporated by reference. The Third Edition of SW-846 ((~~and its Updates (document number 955-001-00000-1) are available from the Superintendent of Documents. Update IIIA is available through EPA's Methods Information Communication Exchange (MICE) Service. MICE can be contacted by phone at (703) 821-4690. Update IIIA can also be obtained by contacting the U.S. Environmental Protection Agency, Office of Solid Waste (5307W), OSW Methods Team, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Copies of the Third Edition and all of its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847~~)), as amended by Final Updates I, II, IIA, IIB, III, IIIA, IIIB, IVA, and IVB, is available in portable document format (PDF) on EPA's Office of Resource Conservation and Recovery web page at: http://www.epa.gov/SW-846. An official printed copy of SW-846 and most of its updates can be purchased from the National Technical Information Service, U.S. Department of Commerce, 5301 Shawnee Road, Alexandria, VA 22312, 800-553-6847 or 703-605-6000 (outside the continental U.S.);

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

(i) Static acute fish toxicity test; and

(ii) Acute oral rat toxicity test;

(c) *Chemical Testing Methods for Designating Dangerous Waste*, Department of Ecology Publication #97-407, ((~~June 2009~~)) revised December 2014 describing methods for testing:

(i) Ignitability;

(ii) Corrosivity;

(iii) Reactivity;

(iv) Toxicity characteristic leaching procedure;

(v) Halogenated organic compounds; and

(vi) Polycyclic aromatic hydrocarbons.

(d) Reserve;

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

(ii) Analysis of Polychlorinated Biphenyls in Mineral Insulating Oils by Gas Chromatography, ASTM Standard D4059-00 (2005)e1.

(f) Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure" found in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846*.

(g) The following publications for air emission standards (in addition to (a) of this subsection).

(i) ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography, ASTM Standard D1946-90 (2006).

(ii) ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), ASTM Standard D4809-06.

(iii) ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, ASTM Standard E169-04.

(iv) ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis, ASTM Standard E168-06.

(v) ASTM Standard Practice for Packed Column Gas Chromatography, ASTM Standard E260-96 (2006).

(vi) ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, ASTM Standard D5580-02.

(vii) ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, ASTM Standard D2879-97 (2002)e1.

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

(ix) ((~~"API Publication 2517, Third Edition," February 1989, "~~)) API Manual of Petroleum Measurement Standards (MPMS) chapter 19.2 (API MPMS 19.2), Evaporative Loss from External Floating-Roof Tanks((~~," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005~~)) (formerly API Publications 2517 and 2519), Third Edition, American Petroleum Institute, Washington D.C., October 2012.

(h) The following publications:

(i) "NFPA 30((÷)) Flammable and Combustible Liquids Code" (((~~2003~~)) 2012), available from the National Fire Protection Association, NFPA Headquarters, 1 Batterymarch Park, Quincy, MA 02169-7471.

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

(iii) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E926-94, Test Method C-Bomb, Acid Digestion Method, available from American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.

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

(v) ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, ASTM Standard D3278-96 (2004)e1, available from American Society for Testing and Materials.

(vi) ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, ASTM Standard D93-06.

(vii) ((~~"API Publication 2517, Third Edition," February 1989, "~~)) API Manual of Petroleum Measurement Standards (MPMS) chapter 19.2 (API MPMS 19.2), Evaporative Loss from External Floating-Roof Tanks((~~," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005~~)) (formerly API Publications 2517 and 2519), Third Edition, American Petroleum Institute, Washington D.C., October 2012.

(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 department approval for the use of an equivalent testing method by submitting a petition, prepared in accordance with WAC 173-303-910(2), to the department.

(6) Reporting analytical results. Ecology requires that all test methods report their analytical results for solid and soil samples on a dry weight basis. Reporting on a dry weight basis compensates for variability in water content and provides a consistent procedure for all analytical results provided to ecology for designation purposes.

(7) "Ground-Water Monitoring List" Appendix IX to 40 C.F.R. Part 264 is replaced with the version in Appendix 5 of *Chemical Testing Methods for Designating Dangerous Waste*, Department of Ecology Publication #97-407, ((~~March 2008~~)) revised December 2014. The Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods* includes the columns "Suggested methods" and "PQL."

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-120 Recycled, reclaimed, and recovered wastes. (1) This section describes the requirements for persons who recycle materials that are solid wastes and dangerous. Except as provided in subsections (2) and (3) of this section, dangerous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsection (4) of this section. Dangerous wastes that are recycled will be known as "recyclable materials."

(2)(a) The following recyclable materials are solid wastes and sometimes are dangerous wastes. However, they are subject only to the

requirements of (b) of this subsection, WAC 173-303-050, 173-303-145 and 173-303-960:

(i) Industrial ethyl alcohol that is reclaimed (except that, unless provided otherwise in an international agreement as specified in 40 C.F.R. 262.58: See export requirements at 40 C.F.R. 261.6 (3)(i)(A) and (B) that are incorporated by reference at WAC 173-303-230(1));

(ii) Reserve;

(iii) Reserved;

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

(v) Fuels produced from the refining of oil-bearing dangerous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing dangerous wastes where such recovered oil is already excluded under WAC 173-303-071 (3)(cc));

(vi) Reserve;

(vii) Coke and coal tar from the iron and steel industry that contains dangerous waste from the iron and steel production process;

(viii)(A) Dangerous waste fuel produced from oil-bearing dangerous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such dangerous wastes, where such dangerous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under 40 C.F.R. 279.11 (which is incorporated by reference at WAC 173-303-515(4)) and so long as no other dangerous wastes are used to produce the dangerous waste fuel;

(B) Dangerous waste fuel produced from oil-bearing dangerous waste from petroleum refining production, and transportation practices, where such dangerous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under 40 C.F.R. 279.11 (which is incorporated by reference at WAC 173-303-515(4)); and

(C) Oil reclaimed from oil-bearing dangerous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under 40 C.F.R. 279.11 (which is incorporated by reference at WAC 173-303-515(4)).

(b) Any recyclable material listed in (a) of this subsection will be subject to the applicable requirements listed in subsection (4) of this section if the department determines, on a case-by-case basis, that:

(i) It is being accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or

(ii) Due to the dangerous constituent(s) in it, any use or reuse would pose a threat to public health or the environment. Such recyclable material will be listed in WAC 173-303-016(6).

(3) The recyclable materials listed in (a) through (h) of this subsection are not subject to the requirements of this section but are subject to the requirements of WAC 173-303-070 through 173-303-110, 173-303-160, 173-303-500 through 173-303-525, and all applicable provisions of WAC 173-303-800 through 173-303-840. <u>The recyclable materials listed in (b), (d), (f) and (g) of this subsection are also subject to WAC 173-303-140.</u>

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

(a) Recycling requirements for state-only dangerous wastes (see WAC 173-303-500);

(b) Recyclable materials used in a manner constituting disposal (see WAC 173-303-505);

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

(d) Dangerous wastes burned ((~~for energy recovery~~)) (as defined in WAC 173-303-510 (1)(a)) in boilers and industrial furnaces that are not regulated under Subpart O of 40 C.F.R. Part 265 or WAC 173-303-670 (see WAC 173-303-510);

(e) Reserved;

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

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

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

(4) Those recycling processes not specifically discussed in subsections (2) and (3) of this section are generally subject to regulation only up to and including storage prior to recycling. For the purpose of this section, the department may determine on a case-by-case basis that recyclable materials received from off-site are not stored if they are moved into an active recycling process within a period of time not to exceed seventy-two hours after being received. In making such a determination, the department will consider factors including, but not limited to, the types and volumes of wastes being recycled, operational factors of the recycling process, and the compliance history of the owner or operator. An active recycling process refers to a dynamic recycling operation that occurs within a recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities. Passive storage-like activities are not eligible for the recycling exemption under this subsection.

The recycling process itself is generally exempt from permitting unless the department determines, on a case-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 173-303-610 (2) and (12),

(vi) WAC 173-303-620 (1)(e),

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

(viii) WAC 173-303-640 (2) through (10) except that requirements to post-closure planning or care in WAC 173-303-640(8) will not apply to closure of recycling units. In lieu of the dates in WAC 173-303-640 (2) and (4), for existing tank systems regulated under this subsection, owners and operators must complete the assessment of the tank system's integrity by June 1, 1992, and must meet the secondary containment requirements of WAC 173-303-640(4) by January 12, 1993;

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

(d) Owners and operators of facilities that store recyclable materials before they are recycled are subject to the following requirements including, but not limited to:

(i) For all recyclers, the applicable provisions of:

(A) WAC 173-303-280 through 173-303-395,

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

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

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

(ii) For recyclers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 C.F.R. Part 265;

(iii) For recyclers with final facility permits, the applicable storage provisions of:

(A) WAC 173-303-600 through 173-303-650, and

(B) WAC 173-303-660.

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

(5) Used oil that is recycled and is also a dangerous waste solely because it exhibits a dangerous waste characteristic or criteria is not subject to the requirements of this chapter except for 40 C.F.R. Part 279 which is incorporated by reference at WAC 173-303-515. Used oil that is recycled includes any used oil that is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

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

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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 C.F.R. Part 268 which are incorporated by reference into this regulation, as modified in (c) through (f) of this subsection, and the restrictions set forth in subsections (3) through (7) of this section. The words "regional administrator" (in 40 C.F.R.) will mean the "department," except for 40 C.F.R. Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g). The authority for implementing these excluded C.F.R. sections remains with the U.S. Environmental Protection Agency. The word "EPA" (in 40 C.F.R.) means "Ecology" at 40 C.F.R. 268.44(m). The exemption and exception provisions of subsections (3) through (7) of this section are not applicable to the federal land disposal restrictions.

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

(b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (7) of this section.

(c) Where 40 C.F.R. 268.7 (a)(1) is incorporated by reference, delete the sentence "Alternatively, the generator must send the waste to a RCRA-permitted dangerous waste treatment facility, where the waste treatment facility must comply with the requirements of 264.13 of this chapter and 268.7(b) of this section."

(d) Where 40 C.F.R. 268.7 (a)(2) is incorporated by reference:

(i) Delete the words "or if the generator chooses not to make the determination of whether his waste must be treated" from the first sentence; and

(ii) Delete the sentence "(Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and must state 'This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination'.)"

(e) Where 40 C.F.R. 268.7 (b)(6) is incorporated by reference, replace the words "for the initial shipment of waste, prepare a one-time certification described in paragraph (b)(4) of this section, and a one-time notice which includes the information in paragraph (b)(3) of this section (except the manifest number)" with the words "submit a certification described in paragraph (b)(4) of this section, and a notice which includes the information listed in paragraph (b)(3) of this section (except for the manifest number) to the department for each shipment".

(f) Where 40 C.F.R. 268.9(d) is incorporated by reference, replace paragraph (d) with the following: Wastes that exhibit a characteristic are also subject to Section 268.7 requirements, except that once the waste is no longer dangerous, a one-time notification and certification must be placed in the generators or treaters files and sent to the department. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D facility receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31.

(i) The notification must include the following information:

(A) Name and address of the RCRA Subtitle D facility receiving the waste shipment; and

(B) A description of the waste as initially generated, including the applicable dangerous waste code(s), treatability group(s), and underlying hazardous constituents (as defined in Sec. 268.2(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

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

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

(3) Definitions.

When used in this section the following terms have the meaning provided in this subsection. All other terms have the meanings given under WAC 173-303-040.

(a) "Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents which have caused a waste to be a dangerous waste under this chapter.

(b) "Land disposal" means placement in a facility or on the land with the intent of leaving the dangerous waste at closure, and includes, but is not limited to, placement for disposal purposes in a: Landfill; surface impoundment; waste pile; injection well; land treatment facility; salt dome or salt bed formation; underground cave or mine; concrete vault or bunker.

(c) "Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

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

(e) "Stabilization" and "solidification" mean a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

(4) Land disposal restrictions and prohibitions. The land disposal requirements of this subsection apply to land disposal in Washington state.

(a) Disposal of extremely hazardous waste (EHW). No person may land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person may land dispose of EHW at the facility established under RCW 70.105.050, except as provided by subsections (5), (6), and (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process EHW to remove or reduce its harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(b) Disposal of liquid waste. Special requirements for bulk and containerized liquids.

(i) The placement of bulk or noncontainerized liquid dangerous waste or dangerous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

(ii) Containers holding free liquids must not be placed in a landfill unless:

(A) All free-standing liquid:

(I) Has been removed by decanting, or other methods; or

(II) Has been mixed with sorbent or stabilized (solidified) so that free-standing liquid is no longer observed; or

(III) Has been otherwise eliminated; or

(B) The container is very small, such as an ampule; or

(C) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(D) The container is a labpack and is disposed of in accordance with WAC 173-303-161 and this chapter.

(iii) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following tests must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" EPA Publication SW-846 as incorporated by reference in WAC 173-303-110 (3)(a).

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

(A) Nonbiodegradable sorbents.

(I) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, ben-

tonite, 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 G21-96 (2002) - Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

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

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

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

(B) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in WAC 173-303-040).

(c) Disposal of solid acid waste. No person may land dispose solid acid waste, except as provided in subsections (5), (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 or other means that establish proof of receipt (including applicable electronic means) 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.

<u>AMENDATORY SECTION</u> (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

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 (as specified by WAC 173-303-600) with the following exceptions:

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

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

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

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

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

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

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

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

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

(C) Excessive noise;

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

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

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

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

(6) Any person who exports or imports hazardous waste subject to the manifesting requirements of WAC 173-303-180 ((~~or to~~)), the universal waste management standards of WAC 173-303-573, or to the export requirements in the spent lead-acid battery management standards of WAC 173-303-520, or from the countries listed in 40 C.F.R. 262.58 (a)(1) for recovery must comply with 40 C.F.R. 262 subpart H. 40 C.F.R. 262 subpart H is incorporated by reference at WAC 173-303-230(1).

(7) The laboratories owned by an eligible academic entity that chooses to be subject to the requirements of WAC 173-303-235 are not subject to (for purposes of this subsection, the terms "laboratory" and "eligible academic entity" shall have the meaning as defined in WAC 173-303-235(1)):

(a) The requirements of WAC 173-303-070(3) or 173-303-200(2), for large quantity generators and generators regulated under WAC 173-303-201, except as provided in WAC 173-303-235; and

(b) The conditions of WAC 173-303-070 (8)(b), for small quantity generators, except as provided in WAC 173-303-235.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-180 Manifest. A generator who transports, or offers for transport a dangerous waste for off-site treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected dangerous waste load, must follow all applicable procedures described in this section.

(1) Form and contents of dangerous waste manifests. 40 C.F.R. Part 262 Appendix - Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions) is incorporated by reference. The manifest must be EPA Form 8700-22 and, if necessary, EPA Form 8700-22A. The manifest must be prepared in accordance with the instructions for these forms, as described in the uniform manifest Appendix of 40 C.F.R. Part 262.

(a) A generator must designate on the manifest one facility that is permitted to handle the waste described on the manifest.

(b) A generator may also designate on the manifest one alternate facility that is permitted to handle his or her waste in the event an emergency prevents delivery of the waste to a primary designated facility.

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

(2) The manifest must consist of enough copies to provide the generator, each transporter, and the designated facility owner/operator with a copy for their records, and another copy to be returned to the generator.

(3) Manifest procedures.

(a) The generator must:

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

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

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

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

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

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

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

(f) For rejected shipments of dangerous waste or container residues contained in nonempty containers that are returned to the generator by the designated facility (following the procedures of WAC 173-303-370 (5)(f)), the generator must:

(i) Sign either:

(A) Item 20 of the new manifest if a new manifest is used for the returned shipment; or

(B) Item 18c of the original manifest if the original manifest is used for the returned shipment.

(ii) Provide the transporter a copy of the manifest;

(iii) Within thirty days of delivery of the rejected shipment or container residues contained in nonempty containers, send a copy of the manifest to the designated facility that returned the shipment to the generator; and

(iv) Retain at the generator's site a copy of each manifest for at least three years from the date of delivery.

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

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

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

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

(6) Special instructions for state-only dangerous waste that designates only by the criteria under WAC 173-303-100 and is not regulated as a hazardous waste under 40 C.F.R. Part 261 or as a hazardous material under the 49 C.F.R. hazardous material regulations. For purposes of completing the uniform hazardous waste manifest, Item ((~~11~~)) 9b, and Item 28 if continuation sheet 8700-22A is used, or to describe a state-only dangerous waste on a shipping paper, the shipping description must include the following in sequence with no additional information interspersed:

(a) Material Not Regulated by DOT;

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

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

(7) Manifest tracking numbers, manifest printing, and obtaining manifests.

(a) 40 C.F.R. 262.21 (a) through (f) and (h) through (m) is incorporated by reference. EPA requirements for printing manifests for use or distribution are included in this section.

(b) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under paragraphs (c) and (e) of 40 C.F.R. 262.21. A registered source may be a:

(i) State agency;

(ii) Commercial printer;

(iii) Dangerous waste generator, transporter or TSDF; or

(iv) Dangerous waste broker or other preparer who prepares or arranges shipments of dangerous waste for transportation.

(c) A generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under these states' authorized programs. Generators also must determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

(8) Waste minimization certification. A generator who initiates a shipment of dangerous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest:

(a) "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment"; or

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

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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 C.F.R. Parts 173, 178, and 179.

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

(3) Marking. The generator must:

(a) Mark each package of dangerous waste in accordance with the applicable United States DOT regulations on hazardous materials under 49 C.F.R. Part 172; and

(b) Mark each container of one hundred nineteen gallons or less of dangerous waste used in such transportation with the following, or equivalent words and information in accordance with 49 C.F.R. 172.304:

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

Generator's Name and Address

.....

.....

.....

Generator's EPA Identification Number

Manifest Tracking Number

.....

(4) Placarding. The generator must placard, or offer the initial transporter the appropriate placards according to United States DOT regulations for hazardous materials under 49 C.F.R. Part 172, Subpart F.

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

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

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

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

(ii) The state shipping description as described in WAC 173-303-180((~~(7)~~)) (6).

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

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

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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) The waste is placed:

(i) In containers and the generator complies with WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 C.F.R. Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a). For container accumulation (including satellite areas as described in subsection (2) of this section), the department may require that the accumulation area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being accumulated, or due to a history of spills or releases from accumulated containers. In addition, any new container accumulation areas (but not including new satellite areas, unless required by the department) constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7); and/or

(ii) In tanks and the generator complies with 40 C.F.R. Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). (Note: A generator, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section.) Such a generator is exempt from the requirements of WAC 173-303-620 and 173-303-610, except for WAC 173-303-610 (2) and (5); and/or

(iii) On drip pads and the generator complies with WAC 173-303-675 and maintains the following records at the facility:

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

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

(iv) In containment buildings and the generator complies with 40 C.F.R. Part 265 Subpart DD, which is incorporated by reference, and the generator has placed its independent qualified registered professional engineer certification that the building complies with the design standards specified in 40 C.F.R. 265.1101 in the facility's oper-

ating record no later than sixty days after the date of initial operation of the unit. Where subpart G and H are referenced in 40 C.F.R. 265.1102, replace them with WAC 173-303-610 and 173-303-620. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator must maintain the following records at the facility:

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

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

((~~In addition, such a generator is exempt from all the requirements in WAC 173-303-610 and 173-303-620, except for WAC 173-303-610(2) and 173-303-610(5).~~))

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

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

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

(i) WAC 173-303-330 through 173-303-360 (personnel training, preparedness and prevention, contingency plan and emergency procedures, and emergencies) except for WAC 173-303-335 (Construction quality assurance program) and WAC 173-303-355 (SARA Title III coordination); and

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

(f) The generator complies with all applicable requirements under 40 C.F.R. Part 268((~~.7(a)(5)~~)).

(g) In addition, such a generator is exempt from all the requirements in WAC 173-303-610 and 173-303-620, except for WAC 173-303-610 (2) and (5).

(2) Satellite accumulation.

(a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) 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 (as defined in WAC 173-303-040) is accumulated ((~~per waste stream~~)), the container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

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

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

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

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

(c) Fifty-five gallons of dangerous waste or one quart of acutely hazardous waste((~~, per waste stream,~~)) (as defined in WAC 173-303-040) is accumulated in a satellite accumulation area.

(4)(a) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, may accumulate F006 waste on-site for more than ninety days, but not more than one hundred eighty days without a permit or without having interim status provided that:

(i) The generator has implemented pollution prevention practices that reduce the amount of any dangerous substances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;

(ii) The F006 waste is legitimately recycled through metals recovery;

(iii) No more than 44,000 pounds of F006 waste is accumulated on-site at any one time; and

(iv) The F006 waste is managed in accordance with the following:

(A) The F006 waste is placed:

(I) In containers and the generator complies with the applicable requirements of WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 C.F.R. Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a); and/or

(II) In tanks and the generator complies with the applicable requirements of 40 C.F.R. Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a); and/or

(III) In containment buildings and the generator complies with subpart DD of 40 C.F.R. part 265 which is incorporated by reference at WAC 173-303-400(3), and has placed its independent qualified registered professional engineer certification that the building complies with the design standards specified in 40 C.F.R. 265.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the following records at the facility:

• A written description of procedures to ensure that the F006 waste remains in the unit for no more than one hundred eighty days, a written description of the waste generation and management practices for the facility showing that they are consistent with the one hundred

eighty-day limit, and documentation that the generator is complying with the procedures; or

• Documentation that the unit is emptied at least once every one hundred eighty days.

(B) In addition, such a generator is exempt from all the requirements in subparts G and H of 40 C.F.R. part 265, except for 265.111 and 265.114 which are incorporated by reference at WAC 173-303-400(3).

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

(D) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Dangerous Waste"; and

(E) The generator complies with the requirements for owners or operators in WAC 173-303-330, 173-303-340, and 173-303-350, and with 40 C.F.R. 268.7 (a)(5) which is incorporated by reference at WAC 173-303-140 (2)(a).

(b) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than ninety days, but not more than two hundred seventy days without a permit or without having interim status if the generator complies with the requirements of (a)(i) through (iv) of this subsection.

(c) A generator accumulating F006 in accordance with (a) and (b) of this subsection who accumulates F006 waste on-site for more than one hundred eighty days (or for more than two hundred seventy days if the generator must transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more), or who accumulates more than 44,000 pounds of F006 waste on-site is an operator of a storage facility and is subject to the facility and permit requirements of this chapter unless the generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period or an exception to the 44,000 pound accumulation limit. Such extensions and exceptions may be granted by the department if F006 waste must remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) or if more than 44,000 pounds of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days or an exception to the accumulation limit may be granted at the discretion of the department on a case-by-case basis.

(5) ((~~**National environmental performance track.** 40 C.F.R. Part 262.34 (j), (k), and (l) are incorporated by reference, except that:~~

~~(a) 262.34 (j)(3)(i) (container management) is replaced with the first sentence of WAC 173-303-200 (1)(b)(i) and 173-303-630(7) (secondary containment); and~~

~~(b) 262.34 (j)(3)(ii) (tank standards) is replaced with WAC 173-303-200 (1)(b)(ii); and~~

~~(c) 262.34 (j)(3)(iii) (drip pads) is replaced with WAC 173-303-200 (1)(b)(iii), except for (A) and (B); and~~

~~(d) 262.34 (j)(6) is replaced with WAC 173-303-200 (1)(c) and (d); and~~

~~(e) The first sentence of 262.34 (j)(7) is replaced with WAC 173-303-200 (1)(e) and (f). The second sentence is replaced with: In addition, the generator is exempt from all the requirements of WAC 173-303-610 and 173-303-620, except for WAC 173-303-610 (2) and (5).~~

~~However, where drip pads are subject to closure requirements in WAC 173-303-675(6), the applicable portions of WAC 173-303-610 and 173-303-620 continue to apply.~~

~~(6)~~)) A generator who sends a shipment of dangerous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of WAC 173-303-370(5) may accumulate the returned waste on-site in accordance with subsection (1) of this section or WAC 173-303-201, depending on the amount of dangerous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must:

(a) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or

(b) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

WAC 173-303-220 Generator reporting. The generator must submit the following reports to the department by the specified due date for each report, or within the time period allowed for each report.

(1) Annual reports.

(a) A generator or any person who has obtained an EPA/state identification number pursuant to WAC 173-303-060 must submit an annual report to the department, on the Dangerous Waste Annual Report according to the instructions on the form (copies are available from the department), no later than March 1 for the preceding calendar year.

(b) In addition, any generator who stores, treats, or disposes of dangerous waste on-site must comply with the annual reporting requirements of WAC 173-303-390, Facility reporting.

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

(2) Exception reports.

(a) A generator who does not receive a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within thirty-five days of the date the waste was accepted by the initial transporter must contact the transporter(s) and/or facility to determine the status of the dangerous waste shipment.

(b) A generator must submit an exception report to the department if he has not received a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within forty-five days of the date the waste was accepted by the initial transporter.

(c) The exception report must include:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery; and

(ii) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of those efforts.

(d) The department may require a generator to submit exception reports in less than forty-five days if it finds that the generator frequently or persistently endangers public health or the environment through improper waste shipment practices.

(e) For rejected shipments of dangerous waste or container residues contained in nonempty containers that are forwarded to an alternate facility by a designated facility using a new manifest (following the procedures of WAC 173-303-370 (5)(e)), the generator must comply with the requirements of (a) through (d) of this subsection, as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of (a) through (d) of this subsection for a shipment forwarding such waste to an alternate facility by a designated facility:

(i) The copy of the manifest received by the generator must have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility; and

(ii) The thirty-five to forty-five day time frames begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

Note: The submission to the department need only be a handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received.

(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.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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

Federal export requirements, administered by EPA, are set forth at 40 C.F.R. 262 Subparts E and H and 40 C.F.R. 261.6 (a)(3)(i)(A) and (B), and specify the procedures applicable to generators and transporters of hazardous waste (as defined in WAC 173-303-040). These requirements are incorporated by reference. Copies of any forms or reports submitted to the administrator of United States EPA as required by 40 C.F.R. 262 Subpart E must also be submitted to the department.

(2) Importing dangerous waste. When importing dangerous waste from a foreign country into Washington state, the United States importer must comply with all the requirements of this chapter for generators, including the requirements of WAC 173-303-180((~~(1)~~)), except that:

(a) In place of the generator's name, address and EPA/state identification number, the name and address of the foreign generator and the importer's name, address and EPA/state identification number must be used; and

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

(c) A person who imports dangerous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests (for example, states, waste handlers, and/or commercial forms printers).

(d) In the international shipments block, the importer must check the import box and enter the point of entry (city and state) into the United States.

(e) The importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with WAC 173-303-370(3).

(3) Empty containers. For the purposes of this chapter, a person who stores, treats, disposes, transports, or offers for transport empty containers of dangerous waste that were for his own use will not be treated as a generator or as a facility owner/operator if the containers are empty as defined in WAC 173-303-160(2), and either:

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

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

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

NEW SECTION

WAC 173-303-235 Alternative requirements for eligible academic laboratories. (1) The following definitions apply to this section:

(a) "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

(b) "Central accumulation area" means an on-site dangerous waste accumulation area subject to either WAC 173-303-200 (large quantity generators) or 173-303-201 (persons who generate more than two hundred twenty pounds but less than two thousand two hundred pounds per calendar month of dangerous waste). A central accumulation area at an eligible academic entity that chooses to be subject to this section must also comply with subsection (12) of this section when accumulating unwanted material and/or dangerous waste.

(c) "College/university" means a private or public, postsecondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

(d) "Eligible academic entity" means a college or university, or a nonprofit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

(e) "Formal written affiliation agreement" for a nonprofit research institute means a written document that establishes a relation-

ship between institutions for the purposes of research and/or education and is signed by authorized representatives from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement. A formal written affiliation agreement for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

(f) "Laboratory" means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a nonproduction basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

(g) "Laboratory clean-out" means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by subsection (9) of this section does not qualify as a laboratory clean-out.

(h) "Laboratory worker" means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, postdoctoral fellows, interns, researchers, technicians, supervisors/managers, and principal investigators. A person does not need to be paid or otherwise compensated for his/her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

(i) "Nonprofit research institute" means an organization that conducts research as its primary function and files as a nonprofit organization under the tax code of 26 U.S.C. 501(c)(3).

(j) "Reactive acutely hazardous unwanted material" means an unwanted material that is one of the acutely hazardous commercial chemical products listed in WAC 173-303-9903 for reactivity.

(k) "Teaching hospital" means a hospital that trains students to become physicians, nurses, or other health or laboratory personnel.

(l) "Trained professional" means a person who has completed the applicable dangerous waste training requirements of WAC 173-303-200 (1)(e)(i) for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with WAC 173-303-201 (2)(c) for generators regulated under WAC 173-303-201 and small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

(m) "Unwanted material" means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for dangerous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid

waste pursuant to WAC 173-303-016, or a dangerous waste pursuant to WAC 173-303-070(2). If an eligible academic entity elects to use another equally effective term in lieu of unwanted material, as allowed by subsection (7)(a)(i)(A) of this section, the equally effective term has the same meaning and is subject to the same requirements as unwanted material under this section.

(n) "Working container" means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

(2) Purpose and applicability.

(a) Large quantity generators and generators regulated under WAC 173-303-201. This section provides alternative requirements to the requirements in WAC 173-303-070(3) and 173-303-200(2) for the dangerous waste determination and accumulation of dangerous waste in laboratories owned by eligible academic entities that choose to be subject to this section, provided that they complete the notification requirements in subsection (4) of this section.

(b) Small quantity generators. This section provides alternative requirements to the conditional exemption in WAC 173-303-070 (8)(b) for the accumulation of dangerous waste in laboratories owned by eligible academic entities that choose to be subject to this section, provided that they complete the notification requirements of subsection (4) of this section.

(3) This section is optional.

(a) Large quantity generators and generators regulated under WAC 173-303-201: Eligible academic entities have the option of complying with this section with respect to its laboratories, as an alternative to complying with the requirements of WAC 173-303-070(3) and 173-303-200(2).

(b) Small quantity generators: Eligible academic entities have the option of complying with this section with respect to its laboratories, as an alternative to complying with the conditional exemption of WAC 173-303-070 (8)(b).

(4) How an eligible academic entity indicates it will be subject to the requirements of this section.

(a) An eligible academic entity must notify the department in writing, using the Washington State Dangerous Waste Site Identification form, that it is electing to be subject to the requirements of this section for all the laboratories owned by the eligible academic entity under the same EPA/state identification number. An eligible academic entity that is a small quantity generator must notify that it is electing to be subject to the requirements of this section for all the laboratories owned by the eligible academic entities that are on-site. An eligible academic entity must submit a separate notification (Washington State Dangerous Waste Site Identification form) for each EPA/state identification number that is electing to be subject to the requirements of this section, and must submit the Washington State Dangerous Waste Site Identification form before it begins operating under this section.

(b) When submitting the Washington State Dangerous Waste Site Identification form, the eligible academic entity must completely fill out the form according to the form instructions including, but not limited to, the following fields:

(i) Reason for submittal;

(ii) Site EPA/state identification number;

(iii) Site name;

(iv) Site location information;
(v) Site land type;
(vi) North American Industry Classification System (NAICS) code(s) for the site;
(vii) Site mailing address;
(viii) Site contact person;
(ix) Operator and legal owner of the site;
(x) Type of regulated waste activity;
(xi) Certification.

(c) An eligible academic entity must keep a copy of the notification on file at the eligible academic entity for as long as its laboratories are subject to this section.

(d) A teaching hospital that is not owned by a college or university must keep a copy of its formal written affiliation agreement with a college or university on file at the teaching hospital for as long as its laboratories are subject to this section.

(e) A nonprofit research institute that is not owned by a college or university must keep a copy of its formal written affiliation agreement with a college or university on file at the nonprofit research institute for as long as its laboratories are subject to this section.

(5) How an eligible academic entity indicates it will withdraw from the requirements of this section.

(a) An eligible academic entity must notify in writing, using the Washington State Dangerous Waste Site Identification form, that it is electing to no longer be subject to the requirements of this section for all the laboratories owned by the eligible academic entity under the same EPA/state identification number and that it will comply with the requirements of WAC 173-303-070(3) and 173-303-200(2) for large quantity generators and for generators regulated under WAC 173-303-201. An eligible academic entity that is a small quantity generator must also notify that it is withdrawing from the requirements of this section for all the laboratories owned by the eligible academic entity that are under the same EPA/state identification number and that it will comply with the conditional exemption in WAC 173-303-070(8). An eligible academic entity must submit a separate notification (Washington State Dangerous Waste Site Identification form) for each EPA/state identification number that is withdrawing from the requirements of this section and must submit the Washington State Dangerous Waste Site Identification form before it begins operating under the requirements of WAC 173-303-070(3) and 173-303-200(2) for large quantity generators and for generators regulated under WAC 173-303-201 or 173-303-070(8) for small quantity generators.

(b) When submitting the Washington State Dangerous Waste Site Identification form, the eligible academic entity must completely fill out the form according to the form instructions including, but not limited to, the following fields:
(i) Reason for submittal;
(ii) Site EPA/state identification number;
(iii) Site name;
(iv) Site location information;
(v) Site land type;
(vi) North American Industry Classification System (NAICS) code(s) for the site;
(vii) Site mailing address;
(viii) Site contact person;
(ix) Operator and legal owner of the site;

(x) Type of regulated waste activity;

(xi) Certification.

(c) An eligible academic entity must keep a copy of the withdrawal notice on file at the eligible academic entity for three years from the date of the notification.

(6) Summary of the requirements of this section. An eligible academic entity that chooses to be subject to this section is not required to have interim status or a final facility Part B permit for the accumulation of unwanted material and dangerous waste in its laboratories, provided the laboratories comply with the provisions of this section and the eligible academic entity has a laboratory management plan (LMP) in accordance with subsection (15) of this section that describes how the laboratories owned by the eligible academic entity will comply with the requirements of this section.

(7) Labeling and management standards for containers of unwanted material in the laboratory. An eligible academic entity must manage containers of unwanted material while in the laboratory in accordance with the requirements in this section.

(a) Labeling: Label unwanted material as follows:

(i) The following information must be affixed or attached to the container:

(A) The words "unwanted material" or another equally effective term that is to be used consistently by the eligible academic entity and that is identified in Part I of the laboratory management plan;

(B) The date that the unwanted material first began accumulating in the container; and

(C) Sufficient information to alert emergency responders to the contents of the container. Examples of information that would be sufficient to alert emergency responders to the contents of the container include, but are not limited to:

(I) The name of the chemical(s);

(II) The type or class of chemical, such as organic solvents or halogenated organic solvents;

(III) The risk(s) associated with the unwanted material.

(ii) The following information may be affixed or attached to the container, but must at a minimum be associated with the container.

This includes information sufficient to allow a trained professional to properly identify whether an unwanted material is a solid and dangerous waste and to assign the proper dangerous waste code(s), pursuant to WAC 173-303-070(3). Examples of information that would allow a trained professional to properly identify whether an unwanted material is a solid or dangerous waste include, but are not limited to:

(A) The name and/or description of the chemical contents or composition of the unwanted material, or, if known, the product of the chemical reaction;

(B) Whether the unwanted material has been used or is unused;

(C) A description of the manner in which the chemical was produced or processed, if applicable.

(b) Management of containers in the laboratory: An eligible academic entity must properly manage containers of unwanted material in the laboratory to assure safe storage of the unwanted material, to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment. Proper container management must include the following:

(i) Containers are maintained and kept in good condition and damaged containers are replaced, overpacked, or repaired;

(ii) Containers are compatible with their contents to avoid reactions between the contents and the container and are made of, or lined with, material that is compatible with the unwanted material so that the container's integrity is not impaired; and

(iii) Containers must be kept closed at all times, except:

(A) When adding, removing or bulking unwanted material;

(B) A working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time the working container must either be closed or the contents emptied into a separate container that is then closed; or

(C) When venting of a container is necessary.

(I) For the proper operation of laboratory equipment, such as with in-line collection of unwanted materials from high performance liquid chromatographs; or

(II) To prevent dangerous situations, such as build-up of extreme pressure.

(8) Training. An eligible academic entity must provide training to all individuals working in a laboratory at the eligible academic entity, as follows:

(a) Training for laboratory workers and students must be commensurate with their duties so they understand the requirements in this section and can implement them.

(b) An eligible academic entity can provide training for laboratory workers and students in a variety of ways including, but not limited to:

(i) Instruction by the professor or laboratory manager before or during an experiment;

(ii) Formal classroom training;

(iii) Electronic/written training;

(iv) On-the-job training; or

(v) Written or oral exams.

(c) An eligible academic entity that is a large quantity generator must maintain documentation for the durations specified in WAC 173-303-330(3) demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training can include, but are not limited to, the following:

(i) Sign-in/attendance sheet(s) for training session(s);

(ii) Syllabus for training session;

(iii) Certificate of training completion; or

(iv) Test results.

(d) A trained professional must:

(i) Accompany the transfer of unwanted material and dangerous waste when the unwanted material and dangerous waste is removed from the laboratory; and

(ii) Make the dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material.

(9) Removing containers of unwanted material from the laboratory.

(a) Removing containers of unwanted material on a regular schedule. An eligible academic entity must either:

(i) Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed six months; or

(ii) Remove containers of unwanted material from each laboratory within six months of each container's accumulation start date.

(b) The eligible academic entity must specify in Part I of its laboratory management plan whether it will comply with (a)(i) or (ii) of this subsection for the regular removal of unwanted material from its laboratories.

(c) The eligible academic entity must specify in Part II of its laboratory management plan how it will comply with (a)(i) or (ii) of this subsection and develop a schedule for regular removals of unwanted material from its laboratories.

(d) Removing containers of unwanted material when volumes are exceeded.

(i) If a laboratory accumulates a total volume of unwanted material (including reactive acutely hazardous unwanted material) in excess of fifty-five gallons before the regularly scheduled removal, the eligible academic entity must ensure that all containers of unwanted material in the laboratory (including reactive acutely hazardous unwanted material):

(A) Are marked on the label that is affixed or attached to the container with the date that fifty-five gallons is exceeded; and

(B) Are removed from the laboratory within ten calendar days of the date that fifty-five gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.

(ii) If a laboratory accumulates more than one quart (or 2.2 pounds) of reactive acutely hazardous unwanted material before the regularly scheduled removal, the eligible academic entity must ensure that all containers of reactive acutely hazardous unwanted material:

(A) Are marked on the label that is affixed or attached to the container with the date that one quart (or 2.2 pounds) is exceeded; and

(B) Are removed from the laboratory within ten calendar days of the date that one quart (or 2.2 pounds) was exceeded, or at the next regularly scheduled removal, whichever comes first.

(10) Where and when to make the dangerous waste determination and where to send containers of unwanted material upon removal from the laboratory.

(a) Large quantity generators and generators regulated under WAC 173-303-201 - An eligible academic entity must ensure that a trained professional makes a dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material in any of the following areas:

(i) In the laboratory before the unwanted material is removed from the laboratory, in accordance with subsection (11) of this section;

(ii) Within four calendar days of arriving at an on-site central accumulation area, in accordance with subsection (12) of this section; and

(iii) Within four calendar days of arriving at an on-site interim status or permitted treatment, storage or disposal facility, in accordance with subsection (13) of this section.

(b) Small quantity generators - An eligible academic entity must ensure that a trained professional makes a dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material in the laboratory before the unwanted material is removed from the laboratory, in accordance with subsection (11) of this section.

(11) Making the dangerous waste determination in the laboratory before the unwanted material is removed from the laboratory. If an eligible academic entity makes the dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material in the laboratory, it must comply with the following:

(a) A trained professional must make the dangerous waste determination, pursuant to WAC 173-303-070(3), before the unwanted material is removed from the laboratory.

(b) If an unwanted material is a dangerous waste, the eligible academic entity must:

(i) Write the words "hazardous waste" or "dangerous wastes" on the container label that is affixed or attached to the container, before the dangerous waste may be removed from the laboratory; and

(ii) Write the appropriate dangerous waste code(s) on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the dangerous waste is transported off-site; and

(iii) Count the dangerous waste toward the eligible academic entity's generator status, pursuant to WAC 173-303-070 (7)(c) and (d), in the calendar month that the dangerous waste determination was made.

(c) A trained professional must accompany all dangerous waste that is transferred from the laboratory(ies) to an on-site central accumulation area or on-site interim status or permitted treatment, storage or disposal facility.

(d) When dangerous hazardous waste is removed from the laboratory:

(i) Large quantity generators and generators regulated under WAC 173-303-201 must ensure it is taken directly from the laboratory(ies) to an on-site central accumulation area, or on-site interim status or permitted treatment, storage or disposal facility, or transported off-site.

(ii) Small quantity generators must ensure it is taken directly from the laboratory(ies) to any of the types of facilities listed in WAC 173-303-070 (8)(b) for dangerous waste.

(e) An unwanted material that is a dangerous waste is subject to all applicable dangerous waste regulations when it is removed from the laboratory.

(12) Making the dangerous waste determination at an on-site central accumulation area. If an eligible academic entity makes the dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material at an on-site central accumulation area, it must comply with the following:

(a) A trained professional must accompany all unwanted material that is transferred from the laboratory(ies) to an on-site central accumulation area.

(b) All unwanted material removed from the laboratory(ies) must be taken directly from the laboratory(ies) to the on-site central accumulation area.

(c) The unwanted material becomes subject to the generator accumulation regulations of WAC 173-303-200 (1)(b)(i) for large quantity generators or WAC 173-303-201 and 173-303-202 for generators regulated under WAC 173-303-201 as soon as it arrives in the central accumulation area.

(d) A trained professional must determine, pursuant to WAC 173-303-070(3), if the unwanted material is a dangerous waste within four calendar days of the unwanted materials' arrival at the on-site central accumulation area.

(e) If the unwanted material is a dangerous waste, the eligible academic entity must:

(i) Write the words "hazardous waste" or "dangerous waste" on the container label that is affixed or attached to the container, within four calendar days of arriving at the on-site central accumulation

area and before the dangerous waste may be removed from the on-site central accumulation area;

(ii) Write the appropriate dangerous waste code(s) on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the dangerous waste may be treated or disposed of on-site or transported off-site;

(iii) Count the dangerous waste toward the eligible academic entity's generator status, pursuant to WAC 173-303-070 (7)(c) and (d) in the calendar month that the dangerous waste determination was made; and

(iv) Manage the dangerous waste according to all applicable dangerous waste regulations.

(13) Making the dangerous waste determination at an on-site interim status or permitted treatment, storage or disposal facility.

If an eligible academic entity makes the dangerous waste determination, pursuant to WAC 173-303-070(3), for unwanted material at an on-site interim status or permitted treatment, storage or disposal facility, it must comply with the following:

(a) A trained professional must accompany all unwanted material that is transferred from the laboratory(ies) to an on-site interim status or permitted treatment, storage or disposal facility.

(b) All unwanted material removed from the laboratory(ies) must be taken directly from the laboratory(ies) to the on-site interim status or permitted treatment, storage or disposal facility.

(c) The unwanted material becomes subject to the terms of the eligible academic entity's dangerous waste permit or interim status as soon as it arrives in the on-site treatment, storage or disposal facility.

(d) A trained professional must determine, pursuant to WAC 173-303-070(3), if the unwanted material is a dangerous waste within four calendar days of the unwanted materials' arrival at an on-site interim status or permitted treatment, storage or disposal facility.

(e) If the unwanted material is a dangerous waste, the eligible academic entity must:

(i) Write the words "hazardous waste" or "dangerous waste" on the container label that is affixed or attached to the container within four calendar days of arriving at the on-site interim status or permitted treatment, storage or disposal facility and before the dangerous waste may be removed from the on-site interim status or permitted treatment, storage or disposal facility; and

(ii) Write the appropriate dangerous waste code(s) on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the dangerous waste may be treated or disposed on-site or transported off-site; and

(iii) Count the dangerous waste toward the eligible academic entity's generator status, pursuant to WAC 173-303-070 (7)(c) and (d) in the calendar month that the dangerous waste determination was made; and

(iv) Manage the dangerous waste according to all applicable dangerous waste regulations.

(14) Laboratory clean-outs.

(a) One time per twelve-month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of this section, except that:

(i) If the volume of unwanted material in the laboratory exceeds fifty-five gallons (or one quart of reactive acutely hazardous unwanted material), the eligible academic entity is not required to remove all unwanted materials from the laboratory within ten calendar days of exceeding fifty-five gallons (or one quart of reactive acutely hazardous unwanted material), as required by subsection (9) of this section. Instead, the eligible academic entity must remove all unwanted materials from the laboratory within thirty calendar days from the start of the laboratory clean-out; and

(ii) For the purposes of on-site accumulation, an eligible academic entity is not required to count a dangerous waste that is an unused commercial chemical product (listed in WAC 173-303-9903, or exhibiting one or more characteristics in WAC 173-303-090 or exhibits a state criteria in WAC 173-303-100) generated solely during the laboratory clean-out toward its dangerous waste generator status, pursuant to WAC 173-303-070 (7)(c) and (d). An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences must be counted toward dangerous waste generator status, pursuant to WAC 173-303-070 (7)(c) and (d), if it is determined to be dangerous waste;

(iii) For the purposes of off-site management, an eligible academic entity must count all its dangerous waste, regardless of whether the dangerous waste was counted toward generator status under (a)(ii) of this subsection, and if it generates more than 2.2 pounds/month of acute hazardous waste, more than 2.2 pounds of WT01 EHW or more than two hundred twenty pounds/month of dangerous waste, the dangerous waste is subject to all applicable dangerous waste regulations when it is transported off-site; and

(iv) An eligible academic entity must document the activities of the laboratory clean-out. The documentation must, at a minimum, identify the laboratory being cleaned out, the date the laboratory clean-out begins and ends, and the volume of dangerous waste generated during the laboratory clean-out. The eligible academic entity must maintain the records for a period of five years from the date the clean-out ends; and

(b) For all other laboratory clean-outs conducted during the same twelve-month period, an eligible academic entity is subject to all the applicable requirements of this section including, but not limited to:

(i) The requirement to remove all unwanted materials from the laboratory within ten calendar days of exceeding fifty-five gallons (or one quart of reactive acutely hazardous unwanted material), as required by subsection (9) of this section; and

(ii) The requirement to count all dangerous waste, including unused dangerous waste, generated during the laboratory clean-out toward its dangerous waste generator status, pursuant to WAC 173-303-070 (7)(c) and (d).

(15) Laboratory management plan. An eligible academic entity must develop and retain a written laboratory management plan, or revise an existing written plan. The laboratory management plan is a site-specific document that describes how the eligible academic entity will manage unwanted materials in compliance with this section. An eligible academic entity may write one laboratory management plan for all the laboratories owned by the eligible academic entity that have opted into this section, even if the laboratories are located at sites with different EPA/state identification numbers. The laboratory management plan must contain two parts with a total of nine elements identified in (a) and (b) of this subsection. In Part I of its laboratory manage-

ment plan, an eligible academic entity must describe its procedures for each of the elements listed in (a) of this subsection. An eligible academic entity must implement and comply with the specific provisions that it develops to address the elements in Part I of the laboratory management plan. In Part II of its laboratory management plan, an eligible academic entity must describe its best management practices for each of the elements listed in (b) of this subsection. The specific actions taken by an eligible academic entity to implement each element in Part II of its laboratory management plan may vary from the procedures described in the eligible academic entity's laboratory management plan, without constituting a violation of this section. An eligible academic entity may include additional elements and best management practices in Part II of its laboratory management plan if it chooses.

(a) The eligible academic entity must implement and comply with the specific provisions of Part I of its laboratory management plan. In Part I of its laboratory management plan, an eligible academic entity must:

(i) Describe procedures for container labeling in accordance with subsection (7)(a) of this section, as follows:

(A) Identifying whether the eligible academic entity will use the term "unwanted material" on the containers in the laboratory. If not, identify an equally effective term that will be used in lieu of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, has the same meaning and is subject to the same requirements as "unwanted material."

(B) Identifying the manner in which information that is "associated with the container" will be imparted.

(ii) Identify whether the eligible academic entity will comply with subsection (9)(a)(i) or (ii) of this section for regularly scheduled removals of unwanted material from the laboratory.

(b) In Part II of its laboratory management plan, an eligible academic entity must:

(i) Describe its intended best practices for container labeling and management (see the required standards in subsection (7) of this section).

(ii) Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties (see the required standards in subsection (8)(a) of this section).

(iii) Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals (see the required standards in subsection (8)(d)(i) of this section).

(iv) Describe its intended best practices for removing unwanted material from the laboratory, including:

(A) For regularly scheduled removals - Develop a regular schedule for identifying and removing unwanted materials from its laboratories (see the required standards in subsection (9)(a)(i) and (ii) of this section).

(B) For removals when maximum volumes are exceeded:

(I) Describe its intended best practices for removing unwanted materials from the laboratory within ten calendar days when unwanted materials have exceeded their maximum volumes (see the required standards in subsection (9)(d) of this section).

(II) Describe its intended best practices for communicating that unwanted materials have exceeded their maximum volumes.

(v) Describe its intended best practices for making dangerous waste determinations, including specifying the duties of the individuals involved in the process (see the required standards in WAC 173-303-070 (7) and subsections (10) through (13) of this section).

(vi) Describe its intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in subsection (14) of this section, including:

(A) Procedures for conducting laboratory clean-outs (see the required standards in subsection (14)(a)(i) through (iii) of this section); and

(B) Procedures for documenting laboratory clean-outs (see the required standards in subsection (14)(a)(iv) of this section).

(vii) Describe its intended best practices for emergency prevention, including:

(A) Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory;

(B) A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date and/or as they degrade;

(C) Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade; and

(D) Procedures for the timely designation of unknown chemicals.

(c) An eligible academic entity must make its laboratory management plan available to laboratory workers, students, or any others at the eligible academic entity who request it.

(d) An eligible academic entity must review and revise its laboratory management plan, as needed.

(16) Unwanted material that is not solid or dangerous waste.

(a) If an unwanted material does not meet the definition of solid waste in WAC 173-303-016, it is no longer subject to this section or to the dangerous waste regulations.

(b) If an unwanted material does not meet the definition of dangerous waste in WAC 173-303-070(2), it is no longer subject to this subsection or to the dangerous waste regulations, but must be managed in compliance with any other applicable regulations and/or conditions.

(17) Nonlaboratory dangerous waste generated at an eligible academic entity. An eligible academic entity that generates dangerous waste outside of a laboratory is not eligible to manage that dangerous waste under this section; and

(a) Remains subject to the generator requirements of WAC 173-303-070(3) and 173-303-200(d) for large quantity generators and generators regulated under WAC 173-303-201 and all other applicable generator requirements of chapter 173-303 WAC, with respect to that dangerous waste; or

(b) Remains subject to the conditional exemption of WAC 173-303-070(8) for small quantity generators, with respect to that dangerous waste.

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

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

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

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

(4) Any person who transports a dangerous waste must also comply with the requirements of WAC 173-303-170 through 173-303-230 for generators, if he:

(a) Transports dangerous waste into the state from another country; or

(b) Mixes dangerous waste of different United States DOT shipping descriptions by mixing them into a single container.

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

(6) Transfer facility. The requirements of this subsection apply to a transporter or marine terminal operator who owns or leases and operates a transfer facility. Transfer of a shipment of dangerous waste from one transport vehicle to another transport vehicle, from one container to another container, and from one transporter to another transporter and any ten-day storage activities may only occur at a transfer facility that is registered with the department. A transporter may store manifested shipments of dangerous waste in containers meeting the requirements of WAC 173-303-190 (1), (2), (3), and (5) for ten days or less at a transfer facility((÷)), provided((,)) that he or she complies with the following:

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

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

(c) WAC 173-303-310 (1) and (2), Security. Instead of WAC 173-303-310(2) for an enclosed or an open flatbed transport vehicle

parked at a transfer facility that has no twenty-four-hour surveillance system or natural or artificial barrier, the transport vehicle must meet the placarding requirements of 49 C.F.R. Part 172 and be secured (that is, locked) or the shipment must be transferred to a secured area of the facility to prevent unknowing entry and minimize unauthorized entry;

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

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

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

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

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

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

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

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

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

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

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

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

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

(8) A transporter who accumulates or stores manifested shipments of dangerous waste for more than ten days at a transfer facility is subject to the dangerous waste management facility general require-

ments and permit requirements of this chapter with respect to the storage of those wastes.

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

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

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

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

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

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

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

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

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

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

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

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

(b) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 C.F.R. part 262, subpart H (incorporated by reference at WAC 173-303-230(1)) must provide a copy of the ((~~tracking~~)) movement document bearing all required sig-

natures to the ((~~notifier,~~)) foreign exporter; to the Office of Enforcement and Compliance Assurance, Office of ((~~Compliance, Enforcement Planning, Targeting and Data Division (2222A)~~)) Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460; and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed ((~~tracking~~)) movement document must be maintained at the facility for at least three years. In addition, such owner or operator shall, as soon as possible, but no later than thirty days after the completion of recovery and no later than one calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

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

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

AMENDATORY SECTION (Amending WSR 95-22-008, filed 10/19/95, effective 11/19/95)

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.

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

((~~(d)~~)) (e) 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.

AMENDATORY SECTION (Amending WSR 95-22-008, filed 10/19/95, effective 11/19/95)

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 or other means that establish proof of receipt (including applicable electronic means), 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.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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

(2) Contingency plan. Each owner or operator must have a contingency plan at his facility for use in emergencies or sudden or nonsudden releases which threaten human health and the environment. If the owner or operator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with Part 112 of Title 40 C.F.R. ((~~or Part 1510 of chapter V~~)), or some other emergency or contingency plan, they need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section and WAC 173-303-360. The owner or operator may develop one contingency plan that meets all regulatory requirements. Ecology recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan") as found at www.nrt.org. When modifications are made to nondangerous waste (non-Hazardous Waste Management Act or nondangerous waste regulation) provisions in an integrated contingency plan, the changes do not trigger the need for a dangerous waste permit modification.

(3) The contingency plan must contain the following:

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

(b) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370 (6), Manifest system, reasons for not accepting dangerous waste shipments;

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

(d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;

(e) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the

plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and

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

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

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response 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.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-370 Manifest system. (1) Applicability. The requirements of this section apply to owners and operators of permitted treatment, storage, and disposal facilities and of dangerous waste recycling facilities operating under the requirements of this chapter who receive dangerous waste from off-site sources. If a facility receives dangerous waste accompanied by a manifest, the owner, operator, or his/her agent must sign and date the manifest as indicated in subsection (2) of this section to certify that the dangerous waste covered by the manifest was received, that the dangerous waste was received except as noted in the discrepancy space of the manifest, or that the dangerous waste was rejected as noted in the manifest discrepancy space.

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

(a) Sign and date, by hand, each copy of the manifest;

(b) Note any discrepancies (as defined in subsection (5)(a) of this section) on each copy of the manifest;

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

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

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

(3) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest and documentation confirming EPA's consent to the import of hazardous waste to the following address within thirty days of delivery: Office

of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division((~~, OFA/OECA~~)) (2254A), U.S. Environmental Protection Agency, ((~~Ariel Rios Building,~~)) 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460.

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

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

(b) Note any significant discrepancies in the manifest or shipping paper, as described in subsection (5) of this section, on each copy of the manifest or shipping paper;

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

(d) Within thirty days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) to the generator; and

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

(5) Manifest discrepancies.

(a) Manifest discrepancies are:

(i) Significant differences (as defined in (b) of this subsection) between the quantity or type of dangerous waste designated on the manifest or shipping paper, and the quantity and type of dangerous waste a facility actually receives;

(ii) Rejected wastes, which may be a full or partial shipment of dangerous waste that the TSDF cannot accept; or

(iii) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in WAC 173-303-160(2).

(b) Significant differences in quantity are: For bulk waste, variations greater than ten percent in weight (for example, tanker trucks, railroad tank cars, etc.); for batch waste, any variations in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

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

(d)(i) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for "empty" containers set forth in WAC 173-303-160(2), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative fa-

cility or to the generator within sixty days of the rejection or the container residue identification.

(ii) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under (e) or (f) of this subsection.

(e) Except as provided in (e)(vii) of this section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with WAC 173-303-180 and the following instructions:

(i) Write the generator's U.S. EPA/state ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.

(ii) Write the name of the alternate designated facility and the facility's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.

(iii) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

(iv) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).

(v) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.

(vi) Sign the generator's/offeror's certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation and mail a signed copy of the manifest to the generator identified in Item 5 of the new manifest.

(vii) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the alternate facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with (e)(i), (ii), (iii), (iv), (v), and (vi) of this subsection.

(f) Except as provided in (f)(vii) of this subsection, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with WAC 173-303-180 and the following instructions:

(i) Write the facility's U.S. EPA ID number in Item 1 of the new manifest. Write the ((~~generator's~~)) facility's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the ((~~generator's~~)) facility's site address, then write the ((~~generator's~~)) facility's site address in the designated space for Item 5 of the new manifest.

(ii) Write the name of the initial generator and the generator's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.

(iii) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

(iv) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).

(v) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.

(vi) Sign the generator's/offeror's certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

(vii) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the generator's information in the alternate facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with (f)(i), (ii), (iii), (iv), (v), ((~~and~~)) (vi)<u>, and (viii)</u> of this subsection.

<u>(viii) For full or partial load rejections and container residues contained in nonempty containers that are returned to the generator, the facility must also comply with the exception reporting requirements in WAC 173-303-220(2).</u>

(g) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in WAC 173-303-160(2) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within thirty days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

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

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

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

(ii) There is a significant discrepancy (as described in subsection (5) of this section) between the shipment and the wastes listed on the manifest or shipping paper; or

(iii) The shipment has arrived in a condition which the owner or operator believes would present an unreasonable hazard to facility operations, or to facility personnel handling the dangerous waste(s)

(including, but not limited to, leaking or damaged containers, and improperly labeled containers).

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

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

(7) Within three working days of the receipt of a shipment subject to 40 C.F.R. part 262, subpart H (which is incorporated by reference at WAC 173-303-230(1)), the owner or operator of the facility must provide a copy of the ((~~tracking~~)) movement document bearing all required signatures to the ((~~notifier~~)) exporter, to the Office of Enforcement and Compliance Assurance, Office of ((~~Compliance, Enforcement Planning, Targeting and Data Division (2222A)~~)) Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460, and to competent authorities of all other concerned countries. The original copy of the ((~~tracking~~)) movement document must be maintained at the facility for at least three years from the date of signature.

(8) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under its state hazardous waste program. Facilities must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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

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

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

(c) Records and results of waste analyses, waste determinations (as required by 40 C.F.R. Parts 264 and 265, Subpart CC), and trial tests required by WAC 173-303-300, General waste analysis, and by 40

C.F.R. sections 264.1034, 264.1063, 264.1083, 265.1034, 265.1063, 265.1084, 268.4(a), and 268.7. Note that data from laboratory analyses for 40 C.F.R. 268.4(a) and 268.7 must meet the requirements of WAC 173-303-110;

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

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

(f) Monitoring, testing, or analytical data, and corrective action where required by 40 C.F.R. Part 265 Subparts F through R and sections 265.1034 (c) through (f), 265.1035, 265.1063 (d) through (i), 265.1064, and 265.1083 through 265.1090 for interim status facilities (incorporated by reference at WAC 173-303-400(3)), and by WAC 173-303-630 through 173-303-695 and 40 C.F.R. sections 264.1034 (c) through (f), 264.1035, 264.1063 (d) through (i), 264.1064, and 264.1082 through 264.1090 for final status facilities (incorporated by reference at WAC 173-303-690, 173-303-691, and 173-303-692). Note that data provided from laboratory analyses for WAC 173-303-400(3) which incorporates by reference 40 C.F.R. Part 265 Subparts F through R, WAC 173-303-140 (4)(b), 173-303-395(1), 173-303-630 through 173-303-680, 173-303-693 and 173-303-695, 40 C.F.R. 268.4(a) and 268.7 must meet the requirements of WAC 173-303-110;

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

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

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

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

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

(m) For an on-site land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under 40 C.F.R. 268.7, except for the manifest number;

(n) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 C.F.R. 268.7;

(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 C.F.R. 268.7;

(p) Any records required under WAC 173-303-280(6); ((~~and~~))

(q) A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that they generate to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment; and

(r) Certifications of major repairs to tank systems as required by WAC 173-303-640 (7)(f).

(2) Recordkeeping instructions. This ((~~paragraph~~)) subsection provides instructions for recording the portions of the operating record which are related to describing the types, quantities, and management of dangerous wastes at the facility. This information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility, as follows:

(a) Each dangerous waste received, treated, stored, or disposed of at the facility must be described by its common name and by its dangerous waste number(s) from WAC 173-303-080 through 173-303-104. Each listed, characteristic, and criteria waste has its own four-digit dangerous waste number. Where a dangerous waste contains more than one process waste or waste constituent the waste description must include all applicable dangerous waste numbers. If the dangerous waste number is not listed, the waste description must include the process which generated the waste;

(b) The waste description must include the waste's physical form (i.e., liquid, solid, sludge, or contained gas);

(c) The estimated or manifest-reported weight, or volume and density, where applicable, of the dangerous waste must be recorded, using one of the units of measure specified in Table 1, below; and

TABLE 1

Unit of Measure	Code[1]
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short tons (2000 lbs)	T
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds	P
Pounds per Hour	J
Kilograms	K
Kilograms per Hour	R
Cubic yards	Y
Cubic meters	C
Acres	B
Acres-feet	A
Hectares	Q

Unit of Measure	Code[1]
Hectare-meter	F
Btus per Hour	I
Tons (2000 lbs).	M

Footnote: [1]Single-digit symbols are used here for data processing purposes.

(d) The method(s) (by handling code(s)) of management for each dangerous waste received or managed, and the date(s) of treatment, recycling, storage, or disposal must be recorded, using the handling code(s) specified in Table 2, below.

TABLE 2 - Handling Codes for Treatment, Storage, and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of dangerous waste received.

1. Storage
   - S01 Container (barrel, drum, etc.)
   - S02 Tank
   - S03 Waste pile
   - S04 Surface impoundment
   - S05 Drip Pad
   - S06 Containment Building (Storage)
   - S99 Other storage (specify)

2. Treatment
   - (a) Thermal Treatment
     - T06 Liquid injection incinerator
     - T07 Rotary kiln incinerator
     - T08 Fluidized bed incinerator
     - T09 Multiple hearth incinerator
     - T10 Infrared furnace incinerator
     - T11 Molten salt destructor
     - T12 Pyrolysis
     - T13 Wet air oxidation
     - T14 Calcination
     - T15 Microwave discharge
     - T18 Other (specify)
   - (b) Chemical treatment
     - T19 Absorption mound
     - T20 Absorption field
     - T21 Chemical fixation
     - T22 Chemical oxidation
     - T23 Chemical precipitation
     - T24 Chemical reduction
     - T25 Chlorination
     - T26 Chlorinolysis
     - T27 Cyanide destruction
     - T28 Degradation
     - T29 Detoxification
     - T30 Ion exchange
     - T31 Neutralization
     - T32 Ozonation
     - T33 Photolysis
     - T34 Other (specify)
   - (c) Physical treatment
   - (i) Separation of components
     - T35 Centrifugation

T36 Clarification
T37 Coagulation
T38 Decanting
T39 Encapsulation
T40 Filtration
T41 Flocculation
T42 Flotation
T43 Foaming
T44 Sedimentation
T45 Thickening
T46 Ultrafiltration
T47 Other (specify)

(ii) Removal of specific components

T48 Absorption-molecular sieve
T49 Activated carbon
T50 Blending
T51 Catalysis
T52 Crystallization
T53 Dialysis
T54 Distillation
T55 Electrodialysis
T56 Electrolysis
T57 Evaporation
T58 High gradient magnetic separation
T59 Leaching
T60 Liquid ion exchange
T61 Liquid-liquid extraction
T62 Reverse osmosis
T63 Solvent recovery
T64 Stripping
T65 Sand filter
T66 Other (specify)

(d) Biological treatment

T67 Activated sludge
T68 Aerobic lagoon
T69 Aerobic tank
T70 Anaerobic tank
T71 Composting
T72 Septic tank
T73 Spray irrigation
T74 Thickening filter
T75 Trickling filter
T76 Waste stabilization pond
T77 Other (specify)
T78-79 (Reserved)

(e) Boilers and industrial furnaces

T80 Boiler
T81 Cement kiln
T82 Lime kiln
T83 Aggregate kiln
T84 Phosphate kiln
T85 Coke oven
T86 Blast furnace
T87 Smelting, melting, or refining furnace
T88 Titanium dioxide chloride process oxidation reactor
T89 Methane reforming furnace

T90 Pulping liquor recovery furnace
T91 Combustion device used in the recovery of sulfur values from spent sulfuric acid
T92 Halogen acid furnaces
T93 Other industrial furnaces listed in WAC 173-303-040 (specify)

(f) Other treatment
T94 Containment building (treatment)

3. Disposal
D79 Underground injection
D80 Landfill
D81 Land treatment
D82 Ocean disposal
D83 Surface impoundment (to be closed as a landfill)
D99 Other disposal (specify)

4. Miscellaneous (Subpart X)
X01 Open burning/open detonation
X02 Mechanical processing
X03 Thermal unit
X04 Geologic repository
X99 Other Subpart X (specify)

(3) Availability, retention and disposition of records.

(a) All facility records, including plans, required by this chapter must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the department who is designated by the director.

(b) The retention period for all facility records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the director.

(c) A copy of records of waste disposal locations and quantities under this section must be submitted to the United States EPA regional administrator, the department, and the local land use and planning authority upon closure of the facility.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-400 Interim status facility standards. (1) Purpose. The purpose of WAC 173-303-400 is to establish standards which define the acceptable management of dangerous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

(2) Applicability.

(a) Except as provided in 40 C.F.R. 265.1080(b), the interim status standards apply to owners and operators of facilities that treat, store, transfer, and/or dispose of dangerous waste. For purposes of this section, interim status applies to all facilities that comply fully with the requirements for interim status under Section 3005(e) of the Federal Resource Conservation and Recovery Act or WAC

173-303-805. The interim status standards also apply to those owners and operators of facilities in existence on November 19, 1980, for RCRA wastes and those facilities in existence on August 9, 1982, for state only wastes who have failed to provide the required notification pursuant to WAC 173-303-060 or failed to file Part A of the permit application pursuant to WAC 173-303-805 (4) and (5). Interim status will end after final administrative disposition of the Part B permit application is completed, or may be terminated for the causes described in WAC 173-303-805(8).

(b) Interim status facilities must meet the interim status standards by November 19, 1980, except that:

(i) Interim status facilities which handle only state designated wastes (that is, not designated by 40 C.F.R. Part 261) must meet the interim status standards by August 9, 1982; and

(ii) Interim status facilities must comply with the additional state interim status requirements specified in subsection (3)(c)(ii), (iii) and (v), of this section, by August 9, 1982.

(c) The requirements of the interim status standards do not apply to:

(i) Persons disposing of dangerous waste subject to a permit issued under the Marine Protection, Research and Sanctuaries Act;

(ii) The owner or operator of a facility managing recyclable materials described in WAC 173-303-120 (2), (3), and (5) (except to the extent that they are referred to in WAC 173-303-515 or 173-303-505, 173-303-520, 173-303-525, or 40 C.F.R. Part 266 subpart H);

(iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(iv) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment units as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(v) Generators accumulating waste for less than ninety days except to the extent WAC 173-303-200 provides otherwise;

(vi) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(vii) The compaction or sorting, by a generator, of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(viii) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(ix) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 C.F.R. section 268.40, Table Treatment Standards for Hazardous Wastes), or

reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a); and

(x) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance.

(xi) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

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

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

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

(xii) WAC 173-303-578 identifies when the requirements of this section apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(xiii)(A) Except as provided in (c)(xiii)(B) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(I) A discharge of a dangerous waste;

(II) An imminent and substantial threat of a discharge of dangerous waste;

(III) A discharge of a material that, when discharged, becomes a dangerous waste;

(IV) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(B) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(C) Any person who is covered by (c)(xiii)(A) of this section and who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(D) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(xiv) The owner or operator of a facility that is permitted to manage solid waste pursuant to chapter 173-350 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173-303-070(8).

(xv) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173-303-160 (2)(b).

(3) Standards.

(a) Interim status standards are the standards set forth by the Environmental Protection Agency in 40 C.F.R. Part 265 Section 265.19 of Subpart B, Subparts F through R, Subpart W, Subparts AA, BB, CC (including references to 40 C.F.R. Parts 60, 61, and 63), DD, EE, and Appendix VI, which are incorporated by reference into this regulation (including, by reference, any EPA requirements specified in those subparts which are not otherwise explicitly described in this chapter), and:

(i) The land disposal restrictions of WAC 173-303-140; the facility requirements of WAC 173-303-280 through 173-303-440 except WAC 173-303-335; and the corrective action requirements of WAC 173-303-646;

(ii) WAC 173-303-630(3), for containers. In addition, for container storage, the department may require that the storage area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being stored, or due to a history of spills or releases from stored containers. Any new container storage areas constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7).

(iii) WAC 173-303-640 (5)(d), for tanks; and

(iv) WAC 173-303-805.

(b) For purposes of applying the interim status standards of 40 C.F.R. Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, CC, DD, and EE to the state of Washington facilities, the federal terms have (and in the case of the wording used in the financial instruments referenced in Subpart H of Part 265, must be replaced with) the following state of Washington meanings:

(i) "Regional administrator" means the "department" except for 40 C.F.R. Parts 270.2; 270.3; 270.5; 270.10 (e)(1), (2) and (4); 270.10 (f) and (g); 270.11 (a)(3); 270.14 (b)(20); 270.32 (b)(2); and 270.51;

(ii) "Hazardous" means "dangerous" except for Subparts AA, BB, CC, and DD. These subparts apply only to hazardous waste as defined in WAC 173-303-040;

(iii) "Compliance procedure" has the meaning set forth in WAC 173-303-040, Definitions;

(iv) "EPA hazardous waste numbers" mean "dangerous waste numbers."

(c) In addition to the changes described in (b) of this subsection, the following modifications are made to interim status standards of 40 C.F.R. Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, CC, DD, and EE:

(i) The words "the effective date of these regulations" means:

(A) November 19, 1980, for facilities which manage any wastes designated by 40 C.F.R. Part 261;

(B) For wastes which become designated by 40 C.F.R. 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 C.F.R. Part 261;

(D) For wastes which become designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 C.F.R. Part 261 subse-

quent to March 12, 1982, the effective date is the date on which the wastes become regulated.

(ii) The following sections and any cross-reference to these sections are not incorporated or adopted by reference:

(A) 40 C.F.R. Parts 260.1 (b)(4)-(6) and 260.20-22.

(B) 40 C.F.R. 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 C.F.R. Parts 268.5 and 6; 268 Subpart B; 268.42(b); and 268.44 (a) through (g).

(D) 40 C.F.R. Parts 270.1 (c)(1)(i); 270.60(b); and 270.64.

(E) 40 C.F.R. 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 C.F.R. Parts 2.106(b); 2.202(b); 2.205(i); 2.209 (b)-(c); 2.212-213; and 2.301-311.

(G) ((~~40 C.F.R. 265.110(c), 40 C.F.R. 265.118 (c)(4), 40 C.F.R. 265.121 and~~)) 40 C.F.R. 265.1080 (e) and (f).

(iii) Where 40 C.F.R. 265 Subparts F through R, W, DD, and EE have been incorporated by reference refer to 40 C.F.R. 260.11, data provided under this section must instead meet the requirements of WAC 173-303-110.

(iv) "Subpart B - general facility standards." References to "EPA" in 40 C.F.R. 265.19, means the "department." Additionally, references to "administrator" means the "director."

(v) "Subpart F - groundwater monitoring."

(A) Section 265.90 (d)(1) is modified by adding the following sentence. "A copy of the plan must be submitted to the department,"

(B) Section 265.90 (d)(3) is modified by adding the following sentence. "A copy of the plan must be submitted to the department,"

(C) Section 265.91(c) includes the requirement that: "Groundwater monitoring wells must be designed, constructed, and operated so as to prevent groundwater contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells",

(D) Section 265.93 (d)(2) is modified by adding the following sentence. "A copy of the plan must be submitted to the department," and

(E) Section 265.93 (d)(5) is modified by adding the following sentence. "A copy of the report must be submitted to the department within 15 days."

(vi) "Subpart G - closure and post-closure."

(A) The third sentence in section 265.112 (d)(1) is modified to read "The owner or operator must submit the closure plan to the department at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units."

(B) The sixth sentence of section 265.112 (d)(1) is modified to read "Owners or operators with approved closure plans must notify the department in writing at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units." The first sentence of section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure, the owner or operator must submit to the department, by registered mail <u>or other means that establish proof of receipt (including appropriate electronic means)</u>, a certification that the dangerous waste management unit or facility, as applicable, has

been closed in accordance with the specifications in the approved closure plan." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

(C) Section 265.113 (e)(5) is modified by changing "annual reports" to "semi-annual reports."

(D) Section 265.115 is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(E) Section 265.120 is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(vii) "Subpart H - financial requirements."

(A) An additional sentence that reads: "Any owner or operator who can provide financial assurances and instruments which satisfy the requirements of WAC 173-303-620 will be deemed to be in compliance with 40 C.F.R. Part 265 Subpart H."

(B) In 40 C.F.R. Parts 265.143(g) and 265.145(g) the following sentence does not apply to the state: "If the facilities covered by the mechanisms are in more than one Region, identical evidence of financial assurance must be submitted to, and maintained with the Regional Administrators of all such Regions." Instead, the following sentence applies: "If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state."

(C) Section 265.143(h) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(D) Section 265.145(h) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(E) Section 265.147(e) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(F) The following sections and any cross-reference to these sections are not incorporated by reference: 40 C.F.R. Parts 265.149 and 265.150;

(viii) "Subpart I use and management of containers."

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

(ix) "Subpart J - tank systems."

(A) Section 265.191(a) is modified so that the date by which an assessment of a tank system's integrity must be completed is January 12, 1990.

(B) Section 265.191(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(C) Section 265.191 (b)(5)(ii) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(D) Section 265.192(a) introductory text is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(E) Section 265.192(b) introductory text is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(F) Section 265.193(a) is modified so that the dates by which secondary containment (which meets the requirements of that section) must be provided are the same as the dates in WAC 173-303-640 (4)(a).

(G) Section 265.193 (i)(2) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(H) Section 265.195(b) is modified by deleting the words "Except as noted under the paragraph (c) of this section."

(I) Section 265.195 is modified by deleting paragraphs (c) and (d).

(J) Section 265.196(f) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer" and by adding the following sentence. "A copy of the plan must be submitted to the department within seven days after returning the tank system to use."

(K) Section 265.201(c) is modified by deleting the words "Except as noted in paragraph (d) of this section."

(L) Section 265.201 is modified by deleting paragraphs (d) and (e).

(x) "Subpart K surface impoundments." Section 265.224(a) is modified by adding the following sentence. "A copy of the plan must be submitted to the department when submitting the proposed action leakage rate under section 265.222."

(xi) "Subpart L waste piles." Section 265.259(a) is modified by adding the following sentence. "A copy of the response action plan must be submitted to the department when submitting the proposed action leakage rate under section 265.255."

(xii) "Subpart M land treatment."

(A) Section 265.273(b) is modified by replacing the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080";

(B) Section 265.280(e) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(xiii) "Subpart N - landfills."

(A) An additional sentence reads: "An owner/operator must not landfill an organic/carbonaceous waste or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford" as allowed under WAC 173-303-700 or as allowed under WAC 173-303-140(4).

(B) Section 265.303(a). "A copy of the response action plan must be submitted to the department when submitting the proposed action leakage rate under section 265.302."

(xiv) "Subpart O incinerators."

(xv) "Subpart P thermal treatment."

(xvi) "Subpart Q chemical, physical and biological treatment."

(xvii) "Subpart R - underground injection." An additional sentence reads: "Owners and operators of wells are prohibited from disposing of EHW or an organic carcinogen designated under WAC 173-303-080 through 173-303-100."

(xviii) "Subpart W drip pads."

(A) Section 265.441(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(B) Section 265.441(b) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(C) Section 265.441(c) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(D) Section 265.443 (a)(4)(ii) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(E) Section 265.443(g) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(F) 265.444(a) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(xix) "Subpart AA air emission standards for process vents."

(xx) "Subpart BB air emission standards for equipment leaks."

(A) Section 265.1061 is modified by adding (d) "If an owner or operator decides no longer to comply with this section, the owner or operator must notify the department in writing that the work practice standard described in 265.1057 (a) through (e) will be followed."

(B) Section 265.1061(b) is modified by adding (b)(3) "An owner or operator must notify the department that the owner or operator has elected to comply with the requirements of this section."

(C) Section 265.1062(a) is modified by adding the sentence "An owner or operator must notify the department before implementing one of the alternative work practices."

(xxi) "Subpart CC air emission standards for tanks, surface impoundments, and containers."

(xxii) "Subpart DD containment buildings."

(A) Section 265.1101 (c)(2) is modified by changing "qualified Professional Engineer" to "independent qualified registered professional engineer."

(B) Section 265.1101 (c)((~~(4) is modified by deleting the words "except for Performance Track member facilities, that must inspect up to once each month, upon approval of the director" and deleting the last sentence of the paragraph.~~)) (3)(iii) is modified by changing "qualified registered professional engineer" to "independent qualified registered professional engineer."

(xxiii) "Subpart EE - hazardous waste munitions and explosives storage."

The first sentence at 40 C.F.R. 265.1202 is modified to exclude the exception for hazardous wastes managed under 261.3(d).

(4) The requirements of this section apply to owners or operators of all facilities that treat, store or dispose of hazardous waste referred to in 40 C.F.R. Part 268, and the 40 C.F.R. Part 268 standards are considered material conditions or requirements of the interim status standards incorporated by reference in subsection (3) of this section.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-505 Special requirements for recyclable materials used in a manner constituting disposal. (1) Applicability. (Also, see WAC 173-303-120(3).)

(a) This section applies to recyclable materials that are applied to or placed on the land:

(i) Without mixing with any other substance(s); or

(ii) After mixing or combining with any other substance(s). These materials will be referred to as "materials used in a manner that constitutes disposal."

(b)(i) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in 40 C.F.R. 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, and the recycler complies with 40 C.F.R. 268.7(b)(6).

(ii) Antiskid/deicing uses of slags, which are generated from high temperature metals recovery (HTMR) processing of dangerous waste K061, K062, and F006, in a manner constituting disposal are not covered by the exemption in (b)(i) of this subsection and remain subject to regulation.

(iii) Fertilizers that contain recyclable materials are not subject to regulation provided that:

(A) They are zinc fertilizers excluded according to WAC 173-303-071 (3)(pp); or

(B) They meet the applicable treatment standards in subpart D of Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) for each hazardous waste that they contain.

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

(iv) The department may recommend registration under chapter 15.54 RCW for a waste-derived fertilizer (including fertilizers that contain recyclable material) or micronutrient fertilizer: Provided, That the registrant submits the information described in (b)(iv)(A) or (B) of this subsection. However, the information requirements in (b)((~~(v)~~)) (iv)(A) of this subsection may not be required if: The registrant provides documentation that the fertilizer has been previously registered in Washington state two or more times using the information in (b)((~~(v)~~)) (iv)(A) of this subsection, and the source materials used to manufacture the product have not changed.

(A) Initial criteria.

(I) The applicable Land Disposal Restriction (LDR) Certification as described in 40 C.F.R. Part 268, or toxicity characteristic leaching procedure (TCLP) data that indicate the product contains less than the maximum concentrations for TCLP metals described in WAC 173-303-090(8); and

(II) Total Halogenated Organic Compounds (HOC) test data that indicate the product contains less than 1% total HOC.

(B) Secondary criteria.

(I) A complete description of the fertilizer manufacturing process, including the location of the manufacturing facility; and

(II) A complete list of all ingredients used in manufacturing the fertilizer and a complete description of the sources of those ingredients, including a description of the original process and location for each of those ingredients; and

(III) Evidence that any waste(s) used in manufacturing the product does not designate as dangerous waste according to procedures described in WAC 173-303-070; and

(IV) Other information as required by the department.

(2) Recyclable materials used in a manner that constitutes disposal are dangerous wastes and are subject to the following requirements:

(a) For generators, WAC 173-303-170 through 173-303-230;

(b) For transporters, WAC 173-303-240 through 173-303-270; and

(c) For facilities that store or use dangerous wastes in a manner constituting disposal, the applicable requirements of 40 C.F.R. Part 268 (incorporated by reference in WAC 173-303-140 (2)(a)) and 173-303-280 through 173-303-840 (except that users of such products are not subject to these standards if the products meet the requirements of subsection (1)(b) of this section).

(d) The use of waste oil, used oil, or other material that is contaminated with dioxin or any other dangerous waste for dust suppression or road treatment is prohibited.

AMENDATORY SECTION (Amending WSR 03-07-049, filed 3/13/03, effective 4/13/03)

WAC 173-303-520 Special requirements for reclaiming spent lead acid battery wastes. This section applies to persons who reclaim (including regeneration) spent lead-acid batteries that are recyclable materials ("spent batteries"). (Also, see WAC 173-303-120(3).)

(1) Persons who generate, transport, or collect spent batteries, who regenerate spent batteries, or who store spent batteries but do not reclaim them (other than spent batteries that are to be regenerated) are subject only to the requirements of WAC 173-303-016 through 173-303-161 except for 173-303-060, and WAC 173-303-960 if such spent batteries are going to a battery reclaimer. Persons who reclaim spent batteries through regeneration (such as by electrolyte replacement) are not subject to 40 C.F.R. Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a).

(a) Exporters who send spent batteries to a foreign destination other than to those OECD countries specified in 40 C.F.R. 262.58(a)(1) which is incorporated by reference in WAC 173-303-230(1) (in which case the exporter is subject to the requirements of 40 C.F.R. part 262, Subpart H which is incorporated by reference in WAC 173-303-230(1)) must:

(i) Comply with the requirements applicable to a primary exporter in 40 C.F.R. 262.53, 262.56(a)(1) through (4), (6), and (b) and 262.57 which are incorporated by reference in WAC 173-303-230(1);

(ii) Export such spent batteries only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent

as defined in 40 C.F.R. 262 Subpart E which is incorporated by reference in WAC 173-303-230(1);

(iii) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(b) A spent battery transporter transporting a shipment of spent batteries to a foreign destination other than to those OECD countries specified in 40 C.F.R. 262.58(a)(1) (in which case the transporter is subject to the requirements of 40 C.F.R. part 262, Subpart H which is incorporated by reference in WAC 173-303-230(1)) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(i) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(ii) The shipment is delivered to the facility designated by the person initiating the shipment.

(2) Owners and operators of battery reclaiming facilities that store spent lead acid batteries prior to reclaiming (other than spent batteries that are to be regenerated) them are subject to the following requirements:

(a) For all reclaimers, the applicable storage provisions of:

(i) WAC 173-303-280 (2) and (3);

(ii) WAC 173-303-282;

(iii) WAC 173-303-283;

(iv) WAC 173-303-290;

(v) WAC 173-303-310 through 173-303-360;

(vi) WAC 173-303-380;

(vii) WAC 173-303-390 (2) and (3);

(viii) WAC 173-303-395; and

(ix) WAC 173-303-800 through 173-303-840.

(b) For reclaimers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 C.F.R. Part 265;

(c) For reclaimers with final facility permits, the applicable storage provisions of:

(i) WAC 173-303-600 through 173-303-650; and

(ii) WAC 173-303-660.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-573 Standards for universal waste management. (1) **Scope.**

(a) This section establishes requirements for managing the following:

(i) Batteries as described in subsection (2) of this section;

(ii) Mercury-containing equipment as described in subsection (3) of this section; and

(iii) Lamps as described in subsection (5) of this section.

(b) This section provides an alternative set of management standards in lieu of regulation under the rest of this chapter except for WAC 173-303-050, 173-303-145, and 173-303-960.

(2) **Applicability((—)) - Batteries.**

(a) Batteries covered under this section.

(i) The requirements of this section apply to persons managing batteries, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(ii) Spent lead-acid batteries which are not managed under WAC 173-303-120 (3)(f) and 173-303-520, are subject to management under this section.

(b) Batteries not covered under this section. The requirements of this section do not apply to persons managing the following batteries:

(i) Spent lead-acid batteries that are managed under WAC 173-303-120(3) and 173-303-520.

(ii) Batteries, as described in WAC 173-303-040, that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070, including those that do not meet the criteria for waste generation in (c) of this subsection.

(iii) Batteries, as described in WAC 173-303-040, that are not dangerous waste. A battery is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100.

(c) Generation of waste batteries.

(i) A used battery becomes a waste on the date it is discarded (for example, when sent for reclamation).

(ii) An unused battery becomes a waste on the date the handler decides to discard it.

(3) **Applicability((—))_-_Mercury-containing equipment.**

(a) Mercury-containing equipment covered under this section. The requirements of this section apply to persons managing mercury-containing equipment, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Mercury-containing equipment not covered under this section. The requirements of this section do not apply to persons managing the following mercury-containing equipment:

(i) Mercury-containing equipment that is not yet a waste under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when mercury-containing equipment becomes a waste;

(ii) Mercury-containing equipment that is not a dangerous waste. Mercury-containing equipment is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100; and

(iii) Equipment and devices from which the mercury-containing components have been removed.

(c) Generation of waste mercury-containing equipment.

(i) Used mercury-containing equipment becomes a waste on the date it is discarded.

(ii) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

(4) Reserve.

(5) **Applicability((—))_-_Lamps.**

(a) Lamps covered under this section. The requirements of this section apply to persons managing lamps, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Lamps not covered under this section. The requirements of this section do not apply to persons managing the following lamps:

(i) Lamps that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when lamps become wastes.

(ii) Lamps that are not dangerous waste. Lamps that do not exhibit one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100 are not dangerous waste.

(c) Generation of waste lamps.

(i) A used lamp becomes a waste on the date it is discarded.

(ii) An unused lamp becomes a waste on the date the handler decides to discard it.

(6) **Applicability((—))__-__Small quantity handlers of universal waste.** Subsections (6) through (16) of this section apply to small quantity handlers of universal waste (as defined in WAC 173-303-040).

(7) **Prohibitions.**

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (13) of this section; or by managing specific wastes as provided in subsection (9) of this section.

(8) **Notification.**

A small quantity handler of universal waste is not required to notify the department of universal waste handling activities.

(9) **Waste management.**

(a) Universal waste batteries. A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (for example, battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it is subject to all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste mercury-containing equipment. A small quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with noncontained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(ii) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(A) Removes <u>and manages</u> the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes the ampules only over or in a containment device (for example, tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from that containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(iii) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(A) Immediately seals the original housing holding the mercury with an airtight seal to prevent the release of any mercury to the environment; and

(B) Follows all requirements for removing ampules and managing removed ampules under (b)(ii) of this subsection; and

(iv)(A) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must

determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules or housings (for example, the remaining mercury-containing device).

(B) If the mercury, residues, and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it subject to WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A small quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A small quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A small quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents the container from being exposed to the elements.

(10) **Labeling/marking.**

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (that is, each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b)(i) Universal waste mercury-containing equipment (that is, each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste Mercury-Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Universal waste lamps (that is, each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(11) **Accumulation time limits.**

(a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of (b) of this subsection are met.

(b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling each individual item of universal waste (for example, each battery, thermostat, mercury-containing equipment, or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(iv) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(12) **Employee training.**

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

(13) **Response to releases.**

(a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with WAC 173-303-170 through 173-303-230.

(14) **Off-site shipments.**

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 C.F.R. Parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 C.F.R. Parts 172 through 180.

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected, or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a small quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a small quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(15) **Tracking universal waste shipments.**

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

(16) **Exports.**

A small quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in 40 C.F.R. 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 C.F.R. part 262, subpart H which is incorporated by reference at WAC 173-303-230) must:

(a) Comply with the requirements applicable to a primary exporter in 40 C.F.R. 262.53, 262.56 (a)(1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 C.F.R. Subpart E of Part 262 which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(17) **Applicability((—))__-__Large quantity handlers of universal waste.**

Subsections (17) through (27) of this section apply to large quantity handlers of universal waste (as defined in WAC 173-303-040).

(18) **Prohibitions.**

A large quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (24) of this section; or by managing specific wastes as provided in subsection (20) of this section.

(19) **Notification.**

(a)(i) Except as provided in (a)(ii) of this subsection, a large quantity handler of universal waste must have sent written notification of universal waste management to the department, and received an EPA Identification Number, before meeting or exceeding the 11,000 pound storage limit and/or before meeting or exceeding the 2,200 pound storage limit for lamps.

(ii) A large quantity handler of universal waste who has already notified the department of their dangerous waste management activities and has received an EPA Identification Number is not required to renotify under this section.

(b) This notification must include:

(i) The universal waste handler's name and mailing address;

(ii) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;

(iii) The address or physical location of the universal waste management activities;

(iv) A list of all of the types of universal waste managed by the handler (for example, batteries, ((~~thermostats,~~)) mercury-containing equipment, and lamps); and

(v) A statement indicating that the handler is accumulating more than 11,000 pounds of universal waste at one time, and/or a statement indicating that the handler is accumulating more than 2,200 pounds of lamps at one time. (For example, if a handler is accumulating ((~~4,000~~)) 6,000 pounds of batteries, 4,500 pounds ((~~of thermostats, 2,000 pounds~~)) of mercury-containing equipment and 600 pounds of universal waste lamps, they would notify for having 11,100 pounds of universal waste at one time - Likewise, if a handler is accumulating ((~~1,000~~)) 6,000 pounds of batteries, ((~~4,000 pounds of thermostats,~~)) 2,000 pounds of mercury-containing equipment and 2,400 pounds of universal waste lamps, they would also need to notify for exceeding the 2,200 pound limit for universal waste lamps.)

(20) **Waste management.**

(a) Universal waste batteries. A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or

damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (for example, battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste mercury-containing equipment. A large quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with noncontained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(ii) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(A) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes ampules only over or in a containment device (for example, tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks of

broken ampules, from that containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(iii) A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(A) Immediately seals the original housing holding the mercury with an airtight seal to prevent the release of any mercury to the environment; and

(B) Follows all requirements for removing ampules and managing removed ampules under (b)(ii) of this subsection; and

(iv)(A) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules or housings (for example, the remaining mercury-containing device).

(B) If the mercury, residues, and/or other solid waste exhibits a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it in compliance with WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A large quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A large quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A large quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents a container from being exposed to the elements.

(21) **Labeling/marking.**

A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (that is, each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b)(i) Mercury-containing equipment (that is, each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Universal waste lamp (that is, each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(22) **Accumulation time limits.**

(a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of (b) of this subsection are met.

(b) A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling the individual item of universal waste (for example, each battery, thermostat, mercury-containing equipment, or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on site that identifies the date the universal waste being accumulated became a waste or was received;

(iv) Maintaining an inventory system on site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(23) **Employee training.**

A large quantity handler of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

(24) **Response to releases.**

(a) A large quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A large quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(25) **Off-site shipments.**

(a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a large quantity handler of universal waste self-transports universal waste off site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 C.F.R. 171 through 180, a large quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 C.F.R. Parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected; or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment con-

taining universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a large quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a large quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(26) **Tracking universal waste shipments.**

(a) Receipt of shipments. A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date of receipt of the shipment of universal waste.

(b) Shipments off site. A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(ii) The quantity of each type of universal waste sent (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date the shipment of universal waste left the facility.

(c) Record retention.

(i) A large quantity handler of universal waste must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(ii) A large quantity handler of universal waste must retain the records described in (b) of this subsection for at least three years from the date a shipment of universal waste left the facility.

(27) **Exports.**

A large quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in 40 C.F.R. 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 C.F.R. part 262, subpart H which is incorporated by reference at WAC 173-303-230) must:

(a) Comply with the requirements applicable to a primary exporter in 40 C.F.R. 262.53, 262.56 (a)(1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 C.F.R. 262 Subpart E which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(28) **Applicability((—))__-__Universal waste transporters.** Subsections (28) through (34) of this section apply to universal waste transporters (as defined in WAC 173-303-040).

(29) **Prohibitions.**

A universal waste transporter is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (32) of this section.

(30) **Waste management.**

(a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 C.F.R. Part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 C.F.R. 171.8. For purposes of the Department of Transportation regulations, a material is considered a dangerous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in WAC 173-303-180. Because universal waste does not require a dangerous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

(b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 C.F.R. 173.2. As universal waste shipments do not require a manifest under WAC 173-303-180, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.," nor may the hazardous material's proper shipping name be modified by adding the word "waste."

(31) **Storage time limits.**

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements for small or large quantity handlers (subsections (6) through (27) of this section) while storing the universal waste.

(32) **Response to releases.**

(a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter must determine whether any material resulting from the release is dangerous waste, and if so, it is subject to all applicable requirements of this chapter. If the waste is determined to be a dangerous waste, the transporter is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(33) **Off-site shipments.**

(a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.

(b) If the universal waste being shipped off site meets the Department of Transportation's definition of hazardous materials under 49 C.F.R. 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 C.F.R. Part 172.

(34) **Exports.**

A universal waste transporter transporting a shipment of universal waste to a foreign destination other than to those OECD countries specified in 40 C.F.R. 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 C.F.R. part 262, subpart H which is incorporated by reference at WAC 173-303-230) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

(35) **Applicability((—))__-__Destination facilities.** Subsections (35) through (37) of this section apply to destination facilities.

(a) The owner or operator of a destination facility (as defined in WAC 173-303-040) is subject to all applicable requirements of WAC 173-303-140 and 173-303-141, 173-303-280 through 173-303-525, 173-303-600 through 173-303-695, 173-303-800 through 173-303-840, and the notification requirement at WAC 173-303-060:

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with WAC 173-303-120 (4)(c).

(36) **Off-site shipments.**

(a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.

(b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

(i) Send the shipment back to the original shipper; or

(ii) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the owner or operator of a destination facility receives a shipment containing dangerous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the shipper. The department will provide instructions for managing the dangerous waste.

(d) If the owner or operator of a destination facility receives a shipment of nondangerous, nonuniversal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

(37) **Tracking universal waste shipments.**

(a) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility.

The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(38) **Imports.**

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this section, immediately after the waste enters the United States, as indicated in (a) through (c) of this subsection:

(a) A universal waste transporter is subject to the universal waste transporter requirements of subsections (28) through (34) of this section.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subsections (6) through (27) of this section, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of subsections (35) through (37) of this section.

(d) Persons managing universal waste that is imported from an OECD country as specified at 40 C.F.R. 262.58 (a)(1), which is incorporated by reference at WAC 173-303-230(1), are subject to (a) through (c) of this subsection, in addition to the requirements of 40 C.F.R. part 262 subpart H, which is incorporated by reference at WAC 173-303-230(1).

(39) **General((—))__-__Petitions.** Subsections (39) and (40) of this section address petitions to include other wastes under this section.

(a) Any person seeking to add a dangerous waste or a category of dangerous waste to this section may petition for a regulatory amendment under subsections (39) and (40) of this section and WAC 173-303-910 (1) and (7).

(b) To be successful, the petitioner must demonstrate to the satisfaction of the department that regulation under the universal waste regulations of this section is: Appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the dangerous waste program. The petition must include the information required by WAC 173-303-910 (1)(b). The petition should also address as many of the factors listed in subsection (40) of this section as are appropriate for the waste or waste category addressed in the petition.

(c) The department will evaluate petitions using the factors listed in subsection (40) of this section. The department will grant or deny a petition using the factors listed in subsection (40) of this section. The decision will be based on the weight of evidence showing that regulation under this section is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the dangerous waste program.

(40) **Factors for petitions to include other wastes under this section.**

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in WAC 173-303-081 or 173-303-082, or (if not listed) a proportion of the waste stream exhibits one or more characteristics or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100. (When a characteristic waste is added to the universal waste regulations of this section by using a generic name to identify the waste category (for example, batteries), the definition of universal waste in WAC 173-303-040 will be amended to include only the dangerous waste portion of the waste category (for example, dangerous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics or criteria (that is, is dangerous waste) is subject to the universal waste regulations of this section;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as large industrial facilities);

(c) The waste or category of waste is generated by a large number of generators (for example, more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other dangerous wastes, and specific management standards proposed or referenced by the petitioner (for example, waste management requirements appropriate to be added to subsections (9), (20), and (30) of this section; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;

(f) Regulation of the waste or category of waste under this section will increase the likelihood that the waste will be diverted from nondangerous waste management systems (for example, the municipal waste stream, nondangerous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with the Hazardous Waste Management Act chapter 70.105 RCW, this chapter, and RCRA Subtitle C.

(g) Regulation of the waste or category of waste under this section will improve implementation of and compliance with the dangerous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

(41) **Applicability((—))__-__Household and conditionally exempt small quantity generator waste.**

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this section:

(i) Household wastes that are exempt under WAC 173-303-071 (3)(c) and are also of the same type as the universal wastes defined at WAC 173-303-040; and/or

(ii) Small quantity generator wastes that are conditionally exempt under WAC 173-303-070(8) and are also of the same type as the universal wastes defined at WAC 173-303-040.

(b) Persons who commingle the wastes described in (a)(i) and (ii) of this subsection together with universal waste regulated under this section must manage the commingled waste under the requirements of this section.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-600 Final facility standards. Purpose, scope, and applicability.

(1) ((~~The purpose of~~)) Final facility standards are established in WAC 173-303-600 through 173-303-695, ((~~is to establish~~)) and also include WAC 173-303-280 through 173-303-395. Final facility standards are minimum statewide standards which describe the acceptable management of dangerous waste. ((~~In addition to WAC 173-303-600 through 173-303-695, the final facility standards include WAC 173-303-280 through 173-303-395.~~))

(2) The final facility standards apply to owners and operators of all facilities which treat, store or dispose of dangerous waste, and which are not exempted by subsection (3) of this section. Only permitted facilities which treat, store or dispose of dangerous waste and owners or operators of a facility which recycles dangerous waste in compliance with subsection (5) of this section can receive dangerous waste from off-site sources, unless exempted by subsection (3) of this section.

(3) The final facility standards do not apply to:

(a) Persons whose disposal activities are permitted under the Marine Protection, Research and Sanctuaries Act, except that storage, or treatment facilities where dangerous waste is loaded onto an ocean vessel for incineration or disposal at sea are subject to final facility standards;

(b) Persons whose disposal activities are permitted under the underground injection control program of the Safe Drinking Water Act, except that storage, or treatment facilities needed to handle dangerous wastes are subject to final facility standards;

(c) The owner or operator of a POTW which treats, stores, or disposes of dangerous waste provided he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(d) A generator accumulating waste on site in compliance with WAC 173-303-200;

(e) The owner or operator of a facility which is permitted to manage solid waste pursuant to chapter 173-350 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173-303-070(8);

(f) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173-303-160 (2)(b);

(g) A transporter storing a manifested shipment of dangerous waste for ten days or less in accordance with WAC 173-303-240(6);

(h) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance;

(i) The owner or operator of a facility which is in compliance with the interim status requirements of WAC 173-303-400 and

173-303-805, until final administrative disposition of his final facility permit;

(j) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment unit as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(k) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(l) The compaction or sorting of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(m) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(n) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 C.F.R. section 268.40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a);

(o) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

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

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

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

(p)(i) Except as provided in (p)(ii) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(ii) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(iii) Any person who is covered by (p)(i) of this subsection and who continues or initiates dangerous waste treatment or containment

activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(iv) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;

(q) WAC 173-303-578 identifies when the requirements of WAC 173-303-600 apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(4) Reserve.

(5) The owner or operator of a facility which recycles dangerous waste may, for such recycled wastes only, comply with the applicable recycling standards specified in WAC 173-303-120 and 173-303-500 through 173-303-525 in lieu of the final facility standards.

(6) The owner or operator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

(7) The final facility requirements apply to owners or operators of all facilities that treat, store, or dispose of hazardous wastes referred to in 40 C.F.R. Part 268, which is incorporated by reference at WAC 173-303-140(2).

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-610 Closure and post-closure. (1) Applicability.

(a) Subsections (2) through (6) of this section, (which concern closure), apply to the owners and operators of all dangerous waste facilities.

(b) Subsections (7) through (11) of this section, (which concern post-closure care), apply to the owners and operators of all regulated units (as defined in WAC 173-303-040) at which dangerous waste will remain after closure, to tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills, to surface impoundments, waste piles, and miscellaneous units as specified in WAC 173-303-650(6), 173-303-660(9), and 173-303-680(4), respectively; to containment buildings that are required under 40 C.F.R. 264.1102 (incorporated by reference at WAC 173-303-695) to meet the requirements for landfills; and, unless otherwise authorized by the department, to the owners and operators of all facilities which, at closure, cannot meet the removal or decontamination limits specified in subsection (2)(b) of this section.

(c) Owners and operators of off-site recycling facilities subject to WAC 173-303-120 (3) or (4), and off-site used oil processors subject to regulation under WAC 173-303-515(9) are subject to:

(i) WAC 173-303-610(2) Closure performance standard; and

(ii) WAC 173-303-610(12) Off-site recycling and used oil process- or closure plans.

(d) For the purposes of the closure and post-closure requirements, any portion of a facility which closes is subject to the applicable closure and post-closure standards even if the rest of the facility does not close and continues to operate.

(e) Except for subsection (2)(a) of this section, the director may, in an enforceable document, replace all or part of the requirements of this section and the unit-specific requirements referenced in subsection (2)(b) of this section with alternative requirements when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section (or the unit-specific requirements referenced in subsection (2)(b) of this section) because the alternative requirements will protect human health and the environment.

(2) Closure performance standard. The owner or operator must close the facility in a manner that:

(a)(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes or eliminates to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, surface water, groundwater, or the atmosphere; and

(iii) Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

(b) Where the closure requirements of this section, or of WAC 173-303-630(10), 173-303-640(8), 173-303-650(6), 173-303-655(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4), or 40 C.F.R. 264.1102 (incorporated by reference at WAC 173-303-695) call for the removal or decontamination of dangerous wastes, waste residues, or equipment, bases, liners, soils or other materials containing or contaminated with dangerous wastes or waste residue, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

(i) For soils, groundwater, surface water, and air, the numeric cleanup levels calculated using unrestricted use exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as of the effective date or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745; and

(ii) For all structures, equipment, bases, liners, etc., clean closure standards will be set by the department on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610 (2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

(3) Closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the dangerous waste at partial or final closure are required by WAC 173-303-650(6) and 173-303-660(9) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with WAC 173-303-806(4), and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved closure plan will become a condition of any permit. The department's decision must assure that the approved closure plan is consistent with subsections (2), (3), (4), (5), and (6) of this section, and the applicable requirements of WAC 173-303-630(10), 173-303-640(8), 173-303-645, 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680(2), and 40 C.F.R. 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 Class 1 modification with prior approval under WAC 173-303-830(4));

(iv) A detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all dangerous wastes, and identification of the type(s) of the off-site dangerous waste management units to be used, if applicable;

(v) A detailed description of the steps needed to remove or decontaminate all dangerous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

(vi) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and runoff control;

(vii) A schedule for closure of each dangerous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each dangerous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of

the time required to treat or dispose of all dangerous waste inventory and of the time required to place a final cover must be included.); and

(viii) For facilities that use trust funds to establish financial assurance under WAC 173-303-620 (4) or (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(ix) For facilities where the director has applied alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e), or 173-303-620 ((~~(8)(d)~~)) (1)(d)(i), the closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(b) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or request to the department for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:

(A) Changes in operating plans or facility design affect the closure plan; or

(B) There is a change in the expected year of closure, if applicable; or

(C) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan; or

(D) The owner/operator requests the director apply alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e), or 173-303-620 ((~~(8)~~)) (1)(d).

(iii) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than thirty days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to prepare a contingent closure plan under WAC 173-303-650(6) or 173-303-660(9), must submit an amended closure plan to the department no later than sixty days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665, or no later than thirty days from that date if the determination is made during partial or final closure. The department will approve, disapprove, or modify this amended plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved closure plan will become a condition of any permit issued.

(iv) The department may request modifications to the plan under the conditions described in (b)(ii) of this subsection. The owner or operator must submit the modified plan within sixty days of the de-

partment's request, or within thirty days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the department will be approved in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(c) Notification of partial closure and final closure.

(i) The owner or operator must notify the department in writing at least sixty days prior to the date on which they expect to begin closure of a surface impoundment, waste pile, land treatment, or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the department in writing at least forty-five days prior to the date on which they expect to begin closure of a treatment or storage tank, container storage, or incinerator unit, or final closure of a facility with only such units.

(ii) The date when he "expects to begin closure" must be either:

(A) No later than thirty days after the date on which any dangerous waste management unit receives the known final volume of dangerous wastes or, if there is a reasonable possibility that the dangerous waste management unit will receive additional dangerous wastes, no later than one year after the date on which the unit received the most recent volume of dangerous waste. If the owner or operator of a dangerous waste management unit can demonstrate to the department that the dangerous waste management unit or facility has the capacity to receive additional dangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit; or

(B) For units meeting the requirements of subsection (4)(d) of this section, no later than thirty days after the date on which the dangerous waste management unit receives the known final volume of nondangerous wastes, or if there is a reasonable possibility that the dangerous waste management unit will receive additional nondangerous wastes, no later than one year after the date on which the unit received the most recent volume of nondangerous wastes. If the owner or operator can demonstrate to the department that the dangerous waste management unit has the capacity to receive additional nondangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit.

(iii) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order to cease receiving dangerous wastes or to close, then the requirements of (c) of this subsection do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in subsection (4) of this section.

(iv) Removal of wastes and decontamination or dismantling of equipment. Nothing in this subsection will preclude the owner or operator from removing dangerous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(4) Closure; time allowed for closure.

(a) Within ninety days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at a dangerous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or

dispose of on site, all dangerous wastes in accordance with the approved closure plan. The department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, and either:

(i) The activities required to comply with this paragraph will, of necessity, take longer than ninety days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is a reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within one hundred eighty days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at the dangerous waste management unit or facility. The department may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating dangerous waste management unit or facility, including compliance with all applicable permit requirements, and either:

(i) The partial or final closure activities will, of necessity, take longer than one hundred eighty days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(c) The demonstrations referred to in (a)(i) <u>and (ii)</u> and (b)(i) <u>and (ii)</u> of this subsection must be made as follows: The demonstrations in (a)(i) <u>and (ii)</u> of this subsection must be made at least thirty days prior to the expiration of the specified ninety-day period; and the demonstration in (b)(i) <u>and (ii)</u> 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 C.F.R. 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, groundwater monitoring and response program, human exposure assessment required under RCRA section 3019, and closure and post-closure plan, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of dangerous constituents in the nondangerous wastes, and changes in closure activities, including the expected year of closure if applicable under subsection (3)(a)(viii) of this section, as a result of the receipt of nondangerous wastes following the final receipt of dangerous wastes; and

(iii) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nondangerous wastes following receipt of the final volume of dangerous wastes; and

(iv) The request to modify the permit and the demonstration referred to in (d)(i) and (ii) of this subsection are submitted to the department no later than one hundred twenty days prior to the date on which the owner or operator of the facility receives the known final volume of dangerous wastes at the unit, or no later than ninety days after the effective date of this rule in the state in which the unit is located, whichever is later.

(e) In addition to the requirements in (d) of this subsection, an owner or operator of a dangerous wastes surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004 (o)(1) and 3005 (j)(1) or 42 U.S.C. 3004 (o)(2) or (3) or 3005 (j)(2), (3), (4) or (13) must:

(i) Submit with the request to modify the permit:

(A) A contingent corrective measures plan, unless a corrective action plan has already been submitted under WAC 173-303-645(10); and

(B) A plan for removing dangerous wastes in compliance with (e)(ii) of this subsection; and

(ii) Remove all dangerous wastes from the unit by removing all dangerous liquids, and removing all dangerous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(iii) Removal of dangerous wastes must be completed no later than ninety days after the final receipt of dangerous wastes. The department may approve an extension to this deadline if the owner or operator demonstrates that the removal of dangerous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(iv) If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters of constituents specified in the permit or that exceeds the facility's groundwater protection standard at the point of

compliance, if applicable, is detected in accordance with the requirements in WAC 173-303-645, the owner or operator of the unit:

(A) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by (e)(i) of this subsection no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

(B) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

(C) May be required by the department to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(v) During the period of corrective action, the owner or operator must provide semiannual reports to the department that describe the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of nondangerous wastes on the effectiveness of the corrective action.

(vi) The department may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in (e)(iv) of this subsection, or fails to make substantial progress in implementing corrective action and achieving the facility's groundwater protection standard or background levels if the facility has not yet established a groundwater protection standard.

(vii) If the owner or operator fails to implement corrective measures as required in (e)(iv) of this subsection or if the department determines that substantial progress has not been made pursuant to (e)(vi) of this subsection the department will:

(A) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadline in (a) and (b) of this subsection and provide a detailed statement of reasons for this determination; and

(B) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty days after the date of the notice.

(C) If the department receives no written comments, the decision will become final five days after the close of the comment period. The department will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within fifteen days of the final notice and that closure must begin in accordance with the deadlines in (a) and (b) of this subsection.

(D) If the department receives written comments on the decision, it will make a final decision within thirty days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the department determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in (a) and (b) of this subsection.

(E) The final determinations made by the department under (e)(vii)(C) and (D) of this subsection are not subject to administrative appeal.

(5) Disposal or decontamination of equipment, structures and soils. During the partial and final closure periods, all contaminated

equipment, structures and soils must be properly disposed of or decontaminated unless otherwise 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 or other means that establish proof of receipt (including applicable electronic means), a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent qualified registered professional engineer. Documentation supporting the independent qualified registered professional engineer's certification must be furnished to the department upon request until it releases the owner or operator from the financial assurance requirements for closure under WAC 173-303-620(4).

(7) Post-closure care and use of property.

(a) Post-closure care for each dangerous waste management unit subject to post-closure requirements must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

(i) Groundwater monitoring and reporting as required by WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and

(ii) Maintenance and monitoring of waste containment systems as applicable.

(b) Any time preceding partial closure of a dangerous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the department may, in accordance with the permit modification procedures in WAC 173-303-800 through 173-303-840:

(i) Shorten the post-closure care period applicable to the dangerous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the dangerous waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the dangerous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the dangerous waste management unit or facility if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of dangerous waste at levels which may be harmful to human health and the environment).

(c) The department may require, at partial or final closure, continuation of any of the security requirements of WAC 173-303-310 during part or all of the post-closure period when:

(i) Dangerous wastes may remain exposed after completion of partial or final closure; or

(ii) Access by the public or domestic livestock may pose a hazard to human health.

(d) Post-closure use of property on or in which dangerous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the department finds that the disturbance:

(i) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(ii) Is necessary to reduce a threat to human health or the environment.

(e) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in subsection (8) of this section.

(8) Post-closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and certain piles from which the owner or operator intends to remove or decontaminate the dangerous wastes at partial or final closure are required by WAC 173-303-650 and 173-303-660, respectively, to have written contingent post-closure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent post-closure plans under WAC 173-303-650 or 173-303-660 must submit a post-closure plan to the department within ninety days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the post-closure requirements. The plan must be submitted with the permit application, in accordance with WAC 173-303-806, and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved post-closure plan will become a condition of any permit issued.

(b) For each dangerous waste management unit subject to the requirements of this subsection, the post-closure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(i) A description of the planned groundwater monitoring activities and frequencies at which they will be performed;

(ii) A description of the planned maintenance activities, and frequencies at which they will be performed to comply with WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680 during the post-closure care period, to ensure:

(A) The integrity of the cap and final cover or other containment structures in accordance with the requirements of 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and

(B) The function of the facility monitoring equipment;

(iii) The name, address, and phone number of the person or office to contact about the dangerous waste disposal unit or facility during the post-closure care period;

(iv) And, for facilities where the director has applied alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e) or 173-303-620 (8)(d), the post-closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the department upon request,

including request by mail. After final closure has been certified, the person or office specified in (b)(iii) of this subsection must keep the approved post-closure plan during the remainder of the post-closure period.

(d) Amendment of plan. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended post-closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or request to the department for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan whenever:

(A) Changes in operating plans or facility design affect the approved post-closure plan; or

(B) There is a change in the expected year of final closure, if applicable; or

(C) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan; or

(D) The owner/operator requests the director to apply alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e), or 173-303-620 ((~~(8)~~)) (1)(d).

(iii) The owner or operator must submit a written request for a permit modification at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to submit a contingent post-closure plan under WAC 173-303-650 or 173-303-660 must submit a post-closure plan to the department no later than ninety days after the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665. The department will approve, disapprove, or modify this plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved post-closure plan will become a permit condition.

(iv) The department may request modifications to the plan under the conditions described in (d)(ii) of this subsection. The owner or operator must submit the modified plan no later than sixty days after the department's request, or no later than ninety days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the department will be approved, disapproved, or modified in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(9) Notice to local land authority. No later than the submission of the certification of closure of each dangerous waste disposal unit, the owner or operator of a disposal facility must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department a survey plat indicating the location and dimensions of landfill cells or other dangerous waste disposal units with respect to permanently surveyed benchmarks. This plat must be

prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the dangerous waste disposal unit in accordance with the applicable requirements of this section. In addition, no later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department, a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For wastes disposed of before November 19, 1980 (March 12, 1982, for facilities subject to this chapter but not subject to 40 C.F.R. Part 264), the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(10) Notice in deed to property.

(a) No later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes (as defined in WAC 173-303-040) disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within sixty days of certification of closure of the first dangerous waste disposal unit and within sixty days of certification of closure of the last dangerous waste disposal unit, the owner or operator must:

(i) Record, in accordance with state law, a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that:

(A) The land has been used to manage dangerous wastes;

(B) Its use is restricted under this section; and

(C) The survey plat and record of the type, location, and quantity of dangerous wastes disposed of within each cell or other dangerous waste disposal unit of the facility required in subsection (9) of this section have been filed with the local zoning authority, or the authority with jurisdiction over local land use, and with the department; and

(ii) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in (b)(i) of this subsection, including a copy of the document in which the notation has been placed, to the department.

(c) If the owner or operator or any subsequent owner of the land upon which a dangerous waste facility was located wishes to remove dangerous wastes and dangerous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in WAC 173-303-800 through 173-303-840. The owner or operator must demonstrate that the removal of dangerous wastes will satisfy the criteria of subsection (7)(d) of this section. By removing dangerous waste, the owner or operator may become a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chap-

ter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the department approve either:

(i) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(ii) The addition of a notation to the deed or instrument indicating the removal of the dangerous waste.

(11) Certification of completion of post-closure care. No later than sixty days after completion of the established post-closure care period for each dangerous waste disposal unit, the owner or operator must submit to the department, by registered mail <u>or other means that establish proof of receipt (including applicable electronic means)</u>, a certification that the post-closure care period for the dangerous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent qualified registered professional engineer. Documentation supporting the independent qualified registered professional engineer's certification must be furnished to the department upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under WAC 173-303-620(6).

(12) Off-site recycling and used oil processor closure plans. The owner or operator of an off-site recycling facility subject to regulation under WAC 173-303-120 (3), (4), or used oil processor or rerefiner subject to WAC 173-303-515(9) must have a written closure plan.

(a) Submittal. For new facilities, the closure plan must be submitted with the notification required under WAC 173-303-060. For existing facilities, the closure plan must be submitted within one hundred eighty days of the effective date of this regulation. For closure plans denied under (b) of this subsection that will be resubmitted, the amended plan must be resubmitted within ninety days after the owner or operator receives the denial.

(b) Review by department. Decision to approve or deny. Closure plans must be submitted to department for review, comment, approval or denial. The department decision to approve a closure plan must assure it is consistent with requirements in subsections (2) and (12) of this section. The department decision to deny a closure plan must be justified on the inability or unwillingness of the owner and operator to meet requirements in subsections (2) and (12) of this section or WAC 173-303-620 (1)(e). The department's decision may be appealed under the provisions of WAC 173-303-845.

(c) Availability. A copy of the approved closure plan and all updates to the plan must be maintained at the facility and furnished to the department upon request, including request by mail, until final closure is completed and certified in accordance with subsection (6) of this section.

(d) Contents of plan. The closure plan must identify steps necessary to perform final closure of recycling units at any point during its active life. The closure plan must include at least:

(i) An estimate of the maximum inventory of dangerous wastes or used oil ever on-site over the active life of the facility;

(ii) Descriptions, schedules, and disposal or decontamination procedures in subsections (3), (4), (5), (6) of this section, except any provisions dealing with permits, permit applications, modifications or approvals. The term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit" in these subsec-

tions. Any references to permits or permit modifications in these subsections do not apply.

(e) Obligation to amend. At least sixty days prior to a major change at an off-site recycling or used oil processor/rerefining facility, the owners/operator of that facility must submit an amended closure plan. A major change may include the addition of a recycling or recovery process that is subject to WAC 173-303-120 (3) or (4), any increase in the maximum inventory of dangerous waste or used oil described in the previously approved closure plan, the closure of an existing recycling unit, or a change in ownership or operational control. The department must approve or deny, with justification, the revised closure plan. Refer to (a) of this subsection when a closure plan is denied if the closure plan needs to be resubmitted. Alternatively, the owner or operator may challenge the denial pursuant to WAC 173-303-845.

(f) Notification of closure. At least forty-five days prior to closure, an owner/operator must provide written notice to the department of intent to close.

(g) Relationship to closure plans for permitted facilities. A facility owner/operator that is subject to permitting and closure planning requirements for storage, treatment or disposal that is also required to prepare a closure plan for off-site recycling or used oil processing/rerefining, may satisfy the requirements of this subsection by combining all closure requirements in a single closure plan.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-620 Financial requirements. (1) Applicability.

(a) The requirements of subsections (3), (4), (7), (8), (9), and (10) of this section, apply to owners and operators of all dangerous waste facilities, except as provided otherwise in this section.

(b) The requirements of subsections (5) and (6) of this section apply to owners and operators of:

(i) Dangerous waste disposal facilities;

(ii) Tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills;

(iii) Miscellaneous units as specified in WAC 173-303-680(4);

(iv) Waste piles and surface impoundments to the extent that WAC 173-303-650 and 173-303-660, respectively, require that such facilities comply with this section; and

(v) Containment buildings that are required under WAC 173-303-695 to meet the requirements for landfills.

(c) States and the federal government are exempt from the requirements of this section. Operators of state or federally owned facilities are exempt from the requirements of this section, except subsections (3) and (5) of this section. Operators of facilities who are under contract with (but not owned by) the state or federal government must meet all of the requirements of this section.

(d) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for financial assurance when he or she:

(i) Applies alternative requirements for groundwater monitoring, closure or post-closure under WAC 173-303-610 (1)((~~(d)~~)) (e) or 173-303-645 (1)(e); and

(ii) Determines that it is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(e) Except as provided in (c) of this subsection, the requirements of subsections (3), (4), (8), (9) and (10) of this section apply to owners and operators of off-site recycling facilities and processors/rerefiners of used oil, except the term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit."

(i) If the closure plan for an off-site recycling or used oil processing/rerefining facility has not been approved by the department within one year of submittal to the department, the department may determine the closure cost estimate and direct the facility to establish financial assurance in that amount. Note that the schedule for partially funded trust funds for existing facilities of WAC 173-303-620 (4)(c)(i) may apply.

(ii) Relationship to closure cost estimates and financial responsibility for permitted facilities. A facility owner/operator that is subject to closure cost estimating and financial responsibility requirements for dangerous waste management units and recycling unit may choose to consolidate those requirements into a single mechanism for submittal to the department.

(2) Definitions. As used in this section, the following listed or referenced terms have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of WAC 173-303-610(3), or for off-site recycling or used oil processing facilities prepared in accordance with WAC 173-303-610(12);

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (3) of this section;

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (5) of this section;

(d) "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation;

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of WAC 173-303-610 (7), (8), (9), and (10);

(f) "Regional administrator" means the department;

(g) "Hazardous waste" means dangerous waste; and

(h) The additional terms listed and defined in 40 C.F.R. 264.141 (f), (g), and (h) are incorporated by reference.

(3) Cost estimate for facility closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in WAC 173-303-610 (2) through (6), and applicable closure requirements in WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4) and 173-303-695. The closure cost estimate:

(i) Must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make

closure the most expensive, as indicated by its closure plan (see WAC 173-303-610 (3)(a));

(ii) Must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. On a case-by-case basis, the department may determine that a party that shares common ownership, a common parent corporation, or other higher-tier corporate ownership, may not qualify as a third party. (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~~)) the guarantor can demonstrate that on-site disposal capacity will exist at all times over the life of the facility;

(iii) May not incorporate any salvage value that may be realized with the sale of dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure;

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

(iv) May not incorporate a zero cost for dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), that might have economic value; and

(v) May not be reduced for "net present value," "present discounted value," or other adjustments.

(b) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before submission of updated information to the department as specified in subsection (4) of this section. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product or Gross Domestic Product* as published by the United States Department of Commerce in its survey of current business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest closure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted closure cost estimate.

(4) Financial assurance for facility closure.

(a) An owner or operator of a TSD, or off-site recycling or used oil processing/rerefining facility must establish financial assurance for closure of the facility. The owner or operator must choose from the following options or combination of options:

(i) Closure trust fund;

(ii) Surety bond guaranteeing payment into a closure trust fund;

(iii) Surety bond guaranteeing performance of closure;

(iv) Closure letter of credit;

(v) Closure insurance; or

(vi) Financial test and/or corporate guarantee for closure.

(b) In satisfying the requirements of financial assurance for facility closure in this subsection, the owner or operator must meet all the requirements for the mechanisms listed above as set forth in 40 C.F.R. 264.143 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(c) An owner or operator of an off-site recycling or used oil processing/rerefining facility may also meet the requirements of this subsection through the use of an assigned security deposit held in a Washington state bank. This mechanism is not available to an owner or operator of a TSD.

(i) The department will establish minimum standards for the assigned security deposit mechanism. These standards will include, but are not limited to, the language to be used in the assignment form. Copies of the assignment forms will be available from the department.

(ii) The department is not required to accept an assigned security deposit that does not meet the established minimum standards.

(d) 40 C.F.R. 264.143 is modified by the following requirements:

(i) Partially funded trust funds of 264.143 (a)(3) may not be accepted as a mechanism for a closure trust fund for TSDs. Owners and operators of existing used oil and recycling units that become subject to this section may establish a partially funded closure trust fund with a pay-in period of five years. The fund must be fully funded no later than five years (and the first, second, third, fourth, and fifth payments due no later than one, two, three, four, and five year(s) respectively) after the date of the department's approval of the closure plan under WAC 173-303-610 (12)(b);

(ii) Insurance companies providing closure coverage must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;

(iii) Ecology must be named as secondary beneficiary on an insurance policy;

(iv) Facility owners/operators and corporate guarantors requesting the use of the financial test ((~~and~~)) or corporate guarantee must

meet a minimum tangible net worth criterion of ((~~twenty~~)) twenty-five million dollars;

(v) Facility owners/operators and corporate guarantors requesting the use of the financial test or corporate guarantee are not required to submit a "negative assurance" report, such as the one detailed in 40 C.F.R. 264.143 (f)(3)(iii). A financial test or corporate guarantee submission must instead include a CPA report based on an "Agreed Upon Procedures" engagement that complies with the American Institute of Certified Public Accountants' "Statement on Auditing Standards No. 75, Engagements to apply Agreed-Upon Procedures to Specific Elements, Accounts or Items of a Financial Statement" or any subsequent equivalent document from AICPA. This report must describe the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

(e) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9), must demonstrate financial assurance for closure of the facility or recycling units. In addition to the requirements of 40 C.F.R. 264.143, as amended by this subsection, the financial assurance must meet the following requirements:

(i) For existing facilities choosing a surety bond guaranteeing payment, surety bond guaranteeing performance, letter of credit, insurance, financial test, corporate guarantee, or assigned security deposit, the mechanism must be established within thirty-six months of the effective date of this section;

(ii) Owners and operators of existing facilities choosing a partially funded trust fund mechanism must establish a fully funded trust fund within sixty months of approval of the closure plan by the department (see (c)(i) of this subsection);

(iii) For new facilities, financial assurance must be established and submitted to the department at least sixty days prior to the acceptance of the first shipment of wastes.

(f) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9) may request an alternative mechanism for financing the closure of recycling units that is determined by the department to be equivalent to one of the methods listed in (a) of this subsection. This may include any alternative mechanism as may be established through action by the Washington state legislature. An assigned security deposit that meets the department's standards is an equivalent alternative mechanism within the meaning of this section.

(g) The amount of financial assurance for closure must not be less than the facility's current closure cost estimate. Financial assurance amounts, regardless of mechanism, may not be reduced for "net present value," "present discounted value," or other adjustments.

(5) Cost estimate for post-closure monitoring and maintenance.

(a) The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in WAC 173-303-610 (7) through (10), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), and 173-303-680(4). The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither

a parent nor a subsidiary of the owner or operator. On a case-by-case basis, the department may determine that a party that shares common ownership, a common parent corporation, or other higher-tier corporate ownership may not qualify as a third party. (See definition of parent corporation in subsection (2)(d) of this section.) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required by WAC 173-303-610.

(b) During the active life of the facility, the owner or operator must revise the post-closure cost estimate within thirty days after the department has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with subsection (6) of this section. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subsection (6) of this section. The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product* or *Gross Domestic Product* as published by the United States Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest post-closure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted post-closure cost estimate.

(6) Financial assurance for post-closure monitoring and maintenance.

(a) An owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure care plan. ((~~He~~)) The owner or operator must choose from the following options or combination of options:

(i) Post-closure trust fund, except that the use of partially funded trust funds, as provided in 40 C.F.R. 264.145(a), will not be allowed by the department;

(ii) Surety bond guaranteeing payment into a post-closure trust fund;

(iii) Surety bond guaranteeing performance of post-closure care;

(iv) Post-closure letter of credit;

(v) Post-closure insurance; however, financial or insurance institutions providing such insurance must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best; or

(vi) Financial test and/or corporate guarantee for post-closure care, except that the criterion for minimum tangible net worth in 40 C.F.R. 264.145(f) must be in an amount of at least ((~~twenty~~)) twenty-five million dollars;

(vii) Facility owners/operators and corporate guarantors requesting the use of the financial test or corporate guarantee are not required to submit a "negative assurance" report, such as the one detailed in 40 C.F.R. 264.145 (f)(3)(iii). A financial test or corporate guarantee submission must instead include a CPA report based on an "Agreed Upon Procedures" engagement that complies with the American Institute of Certified Public Accountants' "Statement on Auditing Standards No. 75, Engagements to apply Agreed-Upon Procedures to Specific Elements, Accounts or Items of a Financial Statement" or any subsequent equivalent document from AICPA. This report must describe the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

(b) In satisfying the requirements of financial assurance for facility post-closure care in this subsection, the owner or operator must meet all the requirements set forth in 40 C.F.R. 264.145 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(c) The amount of financial assurance for post-closure must not be less than the facility's current post-closure cost estimate. Financial assurance amounts, regardless of mechanism, may not be reduced for "net present value," "present discounted value," or other adjustments.

(7) Use of a mechanism for financial assurance of both closure and post-closure care. An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both 40 C.F.R. 264.143 and 264.145 which are incorporated by reference. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

(8) Liability requirements.

(a) An owner or operator of a TSD facility, off-site recycling or used oil processing/rerefining facility, or a group of such facilities must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 C.F.R. 264.147(a), which is incorporated by reference, with the following additional requirements:

(i) The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least two

million five hundred thousand dollars per occurrence with an annual aggregate of at least five million dollars, exclusive of legal defense costs. For facilities that meet the criteria listed in 40 C.F.R. 264.147(b), the owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of seven million dollars per occurrence with an annual aggregate of fourteen million dollars, exclusive of legal defense costs.

(ii) Insurance companies providing liability coverage must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;

((~~(ii)~~)) (iii) The department may file claims against liability insurance when contamination occurs as a result of releases or discharges of dangerous wastes or used oil from recycling units subject to regulation under this section to waters of the state as defined under chapter 90.48 RCW;

((~~(iii)~~)) (iv) Facility owners/operators and corporate guarantors requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of ((~~twenty~~)) twenty-five million dollars.

(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 C.F.R. 264.147(b), 264.147 (f), (g), (h), (i), and (j) which are incorporated by reference.

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the department that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the department. The request for a variance must be submitted to the department as part of the application under WAC 173-303-806(4) for a facility that does not have a permit, or pursuant to the procedures for permit modification under WAC 173-303-830 for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The department may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the department to determine a level of financial responsibility other than that required by (a) or (b) of this subsection. Any request for a variance for a permitted facility will be treated as a request for a permit modification under WAC 173-303-830.

(d) Adjustments by the department. If the department determines that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the department may adjust the level of financial responsibility required under (a) or (b) of this subsection as may be necessary to protect human health and the environment. This ad-

justed 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 C.F.R. section 264.147(f), Financial test for liability coverage, (g) Guarantee for liability coverage, (h) Letter of credit for liability coverage, (i) Surety bond for liability coverage, and (j) Trust fund for liability coverage.

(9) Incapacity of owners or operators, guarantor or financial institutions.

(a) An owner or operator must notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), United States Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in 40 C.F.R. 264.143(f) and 264.145(f) must make such a notification if ((~~he~~)) the guarantor is named as debtor, as required under the terms of the corporate guarantee (40 C.F.R. 264.151(h)).

(b) An owner or operator who fulfills the requirements of 40 C.F.R. 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 C.F.R. 264.151 which is incorporated by reference, except that:

(a) The words "regional administrator" and "environmental protection agency" must be replaced with the words Washington state department of ecology;

(b) The words "hazardous waste" must be replaced with the words "dangerous waste";

(c) Any other words specified by the department must be changed as necessary to assure financial responsibility of the facility in accordance with the requirements of this section; and

(d) Whenever 40 C.F.R. 264.151 requires that owners and operators notify several regional administrators of their financial obligations, the owner or operator must notify both the department and all regional

administrators of regions that are affected by the owner or operator's financial assurance mechanisms.

Copies of the financial instruments with the appropriate word changes will be available from the department by June 30, 1984.

(11) Financial assurance requirements for corrective action sites are detailed in WAC 173-303-64620(5).

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

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~~)) owners and operators to protect their containers from the elements by means of a building or other protective covering if the department determines that such protection is necessary to prevent a release of waste or waste constituents due to the nature of the waste or design of the container. The building or other protective covering must allow adequate inspection under subsection (6) of this section.

(8) Special requirements for ignitable or reactive waste.

(a) Containers holding reactive waste exhibiting a characteristic specified in WAC 173-303-090 (7)(a)(vi), (vii) or (viii) must be stored in a manner equivalent to the International Fire Code's "*American Table of Distances for Storage of Explosives*" Table 3304.5.2(2) or

"*Table of Separation Distances for Low Explosives*" Table 3304.5.2(3), 2003 edition, or the version adopted by the local fire district.

(b) The owner or operator must design, operate, and maintain ignitable waste and reactive waste (other than a reactive waste which must meet (a) of this subsection) container storage in a manner equivalent with the International Fire Code. Where no specific standard or requirements are specified in the International Fire Code, or in existing state or local fire codes, applicable sections of the NFPA Pamphlet #30, "*Flammable and Combustible Liquids Code*," must be used. The owner/operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(9) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(c) A storage container holding a dangerous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate.

(10) Closure. At closure, all dangerous waste and dangerous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with dangerous waste or dangerous waste residues must be decontaminated or removed.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a container in accordance with the applicable requirements of 40 C.F.R. Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-640 Tank systems. (1) Applicability.

(a) The regulations in WAC 173-303-640 apply to owners and operators of facilities that use tank systems to treat or store dangerous waste, except as (b), (c), and (d) of this subsection provides otherwise.

(b) Tank systems that are used to store or treat dangerous waste which contain no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in subsection (4) of this section. To demonstrate the absence or presence of free liquids in the stored/treated waste, the Paint Filter Liquids Test Method 9095B described in "*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*" EPA Publication SW-846 as incorporated by reference at WAC 173-303-110 (3)(a) must be used.

(c) Tank systems, including sumps, as defined in WAC 173-303-040, that serve as part of a secondary containment system to collect or contain releases of dangerous wastes are exempted from the requirements in subsection (4)(a) of this section.

(d) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in WAC 173-303-040 and regulated under WAC 173-303-675, must meet the requirements of this section.

(2) Assessment of existing tank system's integrity.

(a) For each existing tank system, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in (b) of this subsection, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that attests to the tank system's integrity by January 12, 1988, for underground tanks that do not meet the requirements of subsection (4) of this section and that cannot be entered for inspection, or by January 12, 1990, for all other tank systems.

(b) Tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, must conduct this assessment within twelve months after the date that the waste becomes a dangerous waste.

(c) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(i) Design standard(s), if available, according to which the tank system was constructed;

(ii) Dangerous characteristics of the waste(s) that have been and will be handled;

(iii) Existing corrosion protection measures;

(iv) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(v) Results of a leak test, internal inspection, or other tank system integrity examination such that:

(A) For nonenterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

(B) For other than nonenterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that addresses cracks, leaks, corrosion, and erosion.

Note: Three publications may be used, where applicable, as guidelines in conducting other than a leak test: *Tank Inspection, Repair, Alteration, and Reconstruction*, API Standard 653, ((~~Addendum 4 issued in December 1999~~)) Fourth Edition, April 2009; *Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste*, Ecology Publication No. 94-114; and *Steel Tank Institute* publication ((~~#SP001-00~~)) #SP001-05 *Standard for the Inspection of ((~~In-Service Shop Fabricated~~)) Aboveground Storage Tanks ((~~for Storage of Combustible and Flammable Liquids~~* copyright 2000)) 5th Edition, revised September 2011.

(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 and existing tank systems or components, prior to their being put into service.

(ii) For tank systems that store or treat materials that become dangerous wastes, within two years of the dangerous waste listing, or when the tank system has reached fifteen years of age, whichever comes later.

(b) Secondary containment systems must be:

(i) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

(ii) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of (b) of this subsection, secondary containment systems must be at a minimum:

(i) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, stress of installation, and the stress of daily operations (including stresses from nearby vehicular traffic);

(ii) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(iii) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of dangerous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the owner or operator can demonstrate to the department that existing detection technologies or site conditions will not allow detection of a release within twenty-four hours; and

(iv) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the department that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

Note: If the collected material is a dangerous waste under WAC 173-303-070, it is subject to management as a dangerous waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-400 and WAC 173-303-600 through 173-303-695. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a publicly owned treatment works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 C.F.R. 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; and

(F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(iii) Double-walled tanks must be:

(A) Designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four hours, or at the earliest practicable time, if the owner or operator can demonstrate to the department, and the department concludes, that the existing detec-

tion 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 shutoff devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shutoff devices) that are visually inspected for leaks on a daily basis.

(g) The owner or operator may obtain a variance from the requirements of this subsection if the department finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous waste or dangerous constituents into the groundwater, or surface water at least as effectively as secondary containment during the active life of the tank system or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with (g)(ii) of this subsection, be exempted from the secondary containment requirements of this section.

(i) In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the department will consider:

(A) The nature and quantity of the wastes;

(B) The proposed alternate design and operation;

(C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater; and

(D) All other factors that would influence the quality and mobility of the dangerous constituents and the potential for them to migrate to groundwater or surface water.

(ii) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the department will consider:

(A) The potential adverse effects on groundwater, surface water, and land quality taking into account:

(I) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

(II) The hydrogeological characteristics of the facility and surrounding land;

(III) The potential for health risks caused by human exposure to waste constituents;

(IV) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(V) The persistence and permanence of the potential adverse effects.

(B) The potential adverse effects of a release on groundwater quality, taking into account:

(I) The quantity and quality of groundwater and the direction of groundwater flow;

(II) The proximity and withdrawal rates of groundwater users;

(III) The current and future uses of groundwater in the area; and

(IV) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality.

(C) The potential adverse effects of a release on surface water quality, taking into account:

(I) The quantity and quality of groundwater and the direction of groundwater flow;

(II) The patterns of rainfall in the region;

(III) The proximity of the tank system to surface waters;

(IV) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

(V) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality.

(D) The potential adverse effects of a release on the land surrounding the tank system, taking into account:

(I) The patterns of rainfall in the region; and

(II) The current and future uses of the surrounding land.

(iii) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7) of this section, except subsection (7)(d) of this section; and

(B) Decontaminate or remove contaminated soil to the extent necessary to:

(I) Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(II) Prevent the migration of dangerous waste or dangerous constituents to groundwater or surface water.

(C) If contaminated soil cannot be removed or decontaminated in accordance with (g)(iii)(B) of this subsection, comply with the requirements of subsection (8) of this section.

(iv) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7)(a), (b), (c), and (d) of this section; and

(B) Prevent the migration of dangerous waste or dangerous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator must comply with the requirements of subsection (8)(b) of this section; and

(C) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of (a) through (f) of this subsection or reapply for a variance from secondary containment and meet the requirements for new tank systems in subsection (3) of this section if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(h) The following procedures must be followed in order to request a variance from secondary containment:

(i) The department must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in (g) of this subsection according to the following schedule:

(A) For existing tank systems, at least twenty-four months prior to the date that secondary containment must be provided in accordance with (a) of this subsection.

(B) For new tank systems, at least thirty days prior to entering into a contract for installation.

(ii) As part of the notification, the owner or operator must also submit to the department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in (g)(i) or (ii) of this subsection;

(iii) The demonstration for a variance must be completed within one hundred eighty days after notifying the department of an intent to conduct the demonstration; and

(iv) If a variance is granted under this subsection, the department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, must comply with the following:

(i) For nonenterable underground tanks, a leak test that meets the requirements of subsection (2)(c)(v) of this section or other tank integrity method, as approved or required by the department, must be conducted at least annually.

(ii) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(i) of this subsection or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(iii) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

Note: Three publications may be used, where applicable, as guidelines for assessing the overall condition of the tank system: *Tank Inspection, Repair, Alteration, and Reconstruction,* API Standard 653, ((~~Addendum 4 issued in December 1999~~)) Fourth Edition, April 2009; *Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste*, Ecology Publication No. 94-114; and *Steel Tank Institute* publication ((~~#SP001-00~~)) #SP001-05 *Standard for the Inspection of ((~~In-Service Shop Fabricated~~)) Aboveground Storage Tanks ((~~for Storage of Combustible and Flammable Liquids~~* copyright 2000)) 5th Edition, revised September 2011.

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

(v) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in (i)(i) through (iii) of this subsection, the owner or operator must comply with the requirements of subsection (7) of this section.

(5) General operating requirements.

(a) Dangerous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(i) Spill prevention controls (e.g., check valves, dry disconnect couplings);

(ii) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(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 C.F.R. Part 302 may require the owner or operator to notify the National Response Center of a release.

(c) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(i) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

(ii) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(d) The owner or operator must document in the operating record of the facility an inspection of those items in (a) through (c) of this subsection. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of dangerous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

(i) If the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection:

(i) Prevent further migration of the leak or spill to soils or surface water; and

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(i) Any release to the environment must be reported to the department and other authorities immediately in accordance with WAC 173-303-145. Any release above the "reportable quantity" must also be reported to the National Response Center pursuant to 40 C.F.R. Part 302.

(ii) Within thirty days (or fifteen days if classified as an emergency) of detection of a release to the environment, a report containing the following information must be submitted to the department:

(A) Likely route of migration of the release;

(B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty days, these data must be submitted to the department as soon as they become available;

(D) Proximity to downgradient drinking water, surface water, and populated areas; and

(E) Description of response actions taken or planned.

(F) In the event of an emergency, additional information as required by WAC 173-303-360.

(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 C.F.R. 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 publication NFPA-30 *Flammable and Combustible Liquids Code* -((~~1981~~)) 2012, or as required by state and local fire codes when such codes are more stringent. The owner or operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(10) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless WAC 173-303-395 (1)(b) is complied with.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a tank in accordance with the applicable requirements of 40 C.F.R. Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-645 Releases from regulated units. (1) Applicability.

(a)(i) Except as provided in (b) of this subsection, the regulations in this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste. The owner or operator must satisfy the requirements identified in (a)(ii) of this subsection for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

(ii) All solid waste management units must comply with the requirements in WAC 173-303-64620. Regulated units (as defined in WAC 173-303-040) must comply with the requirements of subsections (2) through (12) of this section, in lieu of WAC 173-303-64620, for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The corrective action financial responsibility requirements of WAC 173-303-64620 apply to corrective action regulated units.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this section if:

(i) The owner or operator is exempted under WAC 173-303-600; or

(ii) He operates a unit which the department finds:

(A) Is an engineered structure;

(B) Does not receive or contain liquid waste or waste containing free liquids;

(C) Is designed and operated to exclude liquid, precipitation, and other run-on and runoff;

(D) Has both inner and outer layers of containment enclosing the waste;

(E) Has a leak detection system built into each containment layer;

(F) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

(G) To a reasonable degree of certainty, will not allow dangerous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(iii) The department finds, pursuant to WAC 173-303-655 (8)(d), that the treatment zone of a land treatment unit does not contain levels of dangerous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of WAC 173-303-655(6) has not shown a statistically significant increase in dangerous constituents below the treatment zone during the operating life of the unit. An exemption under this subsection can only relieve an owner or operator of responsibility to meet the requirements of this section during the post-closure care period; or

(iv) The department finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under this subsection on assumptions that maximize the rate of liquid migration.

(c) The regulations under this section apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this section:

(i) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure in accordance with the removal or decontamination limits specified in WAC 173-303-610 (2)(b);

(ii) Apply during the post-closure care period if the owner or operator is conducting a detection monitoring program under subsection (9) of this section; and

(iii) Apply during the compliance period under subsection (7) of this section, if the owner or operator is conducting a compliance monitoring program under subsection (10) of this section, or a corrective action program under subsection (11) of this section.

(d) Regulations in this section may apply to miscellaneous units when necessary to comply with WAC 173-303-680 (2) through (4).

(e) <u>The regulations of this section apply to all owners and operators subject to the requirements of WAC 173-303-800(12), when the department issues either a post-closure permit or an enforceable document (as defined in WAC 173-303-040) at the facility. When the department issues an enforceable document, references in this section to "in the permit" mean "in the enforceable document."</u>

<u>(f)</u> The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for groundwater monitoring and corrective action when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(2) Required programs.

(a) Owners and operators subject to this section must conduct a monitoring and response program as follows:

(i) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit are detected at the compliance point under subsection (6) of this section, the owner or operator must institute a compliance monitoring program under subsection (10) of this section. Detected is defined as statistically significant evidence of contamination as described in subsection (9)(f) of this section;

(ii) Whenever the groundwater protection standard under subsection (3) of this section, is exceeded, the owner or operator must institute a corrective action program under subsection (11) of this section. Exceeded is defined as statistically significant evidence of increased contamination as described in subsection (10)(h) of this section. Exceeded is defined as statistically significant evidence of contamination as described in WAC 173-303-645 (10)(d);

(iii) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit exceed concentration limits under subsection (5) of this section, in groundwater between the compliance point under subsection (6) of this section and the downgradient facility property boundary, the owner or operator must institute a corrective action program under subsection (11) of this section; and

(iv) In all other cases, the owner or operator must institute a detection monitoring program under subsection (9) of this section.

(b) The department will specify in the facility permit the specific elements of the monitoring and response program. The department may include one or more of the programs identified in (a) of this subsection, in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the department will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

(3) Groundwater protection standard. The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that dangerous constituents under subsection (4) of this section, detected in the groundwater from a regulated unit do not exceed the concentration limits under subsection (5) of this section, in the uppermost aquifer underlying the waste management area beyond the point of compliance under subsection (6) of this section, during the compliance period under subsection (7) of this section. To the extent practical, the department will establish this groundwater protection standard in the facility permit at the time the permit is issued. If the department determines that an established standard is not protective enough, or if the department decides that it is not practical to establish standards at the time of permit issuance, the department will establish the groundwater protection standard in the facility permit when dangerous constituents have been detected in the groundwater from a regulated unit.

(4) Dangerous constituents.

(a) The department will specify in the facility permit the dangerous constituents to which the groundwater protection standard of subsection (3) of this section, applies. Dangerous constituents are constituents identified in the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), and any other constit-

uents not listed there which have caused a waste to be regulated under this chapter, that may be or have been detected in groundwater in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the department has excluded them under (b) of this subsection.

The department may also specify in the permit indicator parameters (e.g., specific conductance, pH, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents or reaction products as identified in the detection monitoring program under subsection (9)(a) of this section, that provide a reliable indication of the presence of dangerous constituents in the groundwater.

(b) The department will exclude a constituent on the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), or other identified constituent from the list of dangerous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the department will consider the following:

(i) Potential adverse effects on groundwater quality, considering:

(A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of groundwater and the direction of groundwater flow;

(D) The proximity and withdrawal rates of groundwater users;

(E) The current and future uses of groundwater in the area;

(F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(I) The persistence and permanence of the potential adverse effects;

(ii) Potential adverse effects on hydraulically-connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the regulated unit;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of groundwater, and the direction of groundwater flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the regulated unit to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects; and

(iii) Any identification of underground sources of drinking water and exempted aquifers made pursuant to chapter 90.48 RCW, chapter 270, Laws of 1983, and other applicable state laws and regulations.

(5) Concentration limits.

(a) The department will specify in the facility permit concentration limits in the groundwater for dangerous constituents established under subsection (4) of this section. The concentration of a dangerous constituent:

(i) Must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or

(ii) For any of the constituents listed in Table 1 of this subsection, must not exceed the respective value given in that table if the background level of the constituent is below the value given in Table 1; or

(iii) Must not exceed an alternate limit established by the department under (b) of this subsection.

Table 1.
Maximum Concentration of Constituents
for Groundwater Protection

Constituent	Maximum Concentration[1]
Arsenic	0.05
Barium	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 groundwater protection standard of subsection (3) of this section, applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

Alternatively, the point of compliance may be any closer points identified by the department at the time the permit is issued, considering the risks of the facility, the wastes and constituents managed there, the potential for waste constituents to have already migrated past the alternate compliance point, and the potential threats to ground and surface waters.

(b) The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

(7) Compliance period.

(a) The department will specify in the facility permit the compliance period during which the groundwater protection standard of subsection (3) of this section applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of subsection (10) of this section.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in (a) of this subsection, the compliance period is extended until the owner or operator can demonstrate that the groundwater protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(8) General groundwater monitoring requirements.

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

(a) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that:

(i) Represent the quality of background groundwater that has not been affected by leakage from a regulated unit;

A determination of background groundwater quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(A) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(B) Sampling at other wells will provide an indication of background groundwater quality that is representative or more representative than that provided by the upgradient wells; and

(ii) Represent the quality of groundwater passing the point of compliance.

(iii) Allow for the detection of contamination when dangerous waste or dangerous constituents have migrated from the waste management area to the uppermost aquifer.

(b) If a facility contains more than one regulated unit, separate groundwater monitoring systems are not required for each regulated unit, provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point of dangerous constituents from the regulated units that have entered the groundwater in the uppermost aquifer.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative groundwater samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata. Wells must meet the requirements applicable to resource protection wells, which are set forth in chapter 173-160 WAC, "Minimum standards for construction and maintenance of wells."

(d) The groundwater monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance; and

(v) Chain of custody control.

(e) The groundwater monitoring program must include consistent sampling and analytical methods that ensure reliable groundwater sampling, accurately measure dangerous constituents and indicator parameters in groundwater samples, and provide a reliable indication of groundwater quality below the waste management area.

(f) The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater is sampled.

(g) In detection monitoring or where appropriate in compliance monitoring, data on each dangerous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to groundwater from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which will be specified in the unit permit upon approval by the department. This sampling procedure will be:

(i) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or

(ii) An alternate sampling procedure proposed by the owner or operator and approved by the department.

(h) The owner or operator will specify one of the following statistical methods to be used in evaluating groundwater monitoring data for each hazardous constituent which, upon approval by the department, will be specified in the unit permit. The statistical test chosen must be conducted separately for each dangerous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with (i)(v) of this subsection, the pql must be proposed by the owner or operator and approved by the department. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in (i) of this subsection.

(i) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing

of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(ii) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(iii) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(iv) A control chart approach that gives control limits for each constituent.

(v) Another statistical test method submitted by the owner or operator and approved by the department.

(i) Any statistical method chosen under (h) of this subsection for specification in the unit permit must comply with the following performance standards, as appropriate:

(i) The statistical method used to evaluate groundwater monitoring data must be appropriate for the distribution of chemical parameters or dangerous constituents. If the distribution of the chemical parameters or dangerous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(ii) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(iii) If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter values must be proposed by the owner or operator and approved by the department if it finds it to be protective of human health and the environment.

(iv) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the department if it finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(v) The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (pql) approved by the department under (h) of this subsection that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of

precision and accuracy during routine laboratory operating conditions that are available to the facility.

(vi) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(j) Groundwater monitoring data collected in accordance with (g) of this subsection including actual levels of constituents must be maintained in the facility operating record. The department will specify in the permit when the data must be submitted for review.

(9) Detection monitoring program. An owner or operator required to establish a detection monitoring program under this subsection must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor for indicator parameters (e.g., pH, specific conductance, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents, or reaction products that provide a reliable indication of the presence of dangerous constituents in groundwater. The department will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(i) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and

(iv) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.

(b) The owner or operator must install a groundwater monitoring system at the compliance point, as specified under subsection (6) of this section. The groundwater monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The owner or operator must conduct a groundwater monitoring program for each chemical parameter and dangerous constituent specified in the permit pursuant to (a) of this subsection in accordance with subsection (8)(g) of this section. The owner or operator must maintain a record of groundwater analytical data as measured and in a form necessary for the determination of statistical significance under subsection (8)(h) of this section.

(d) The department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or dangerous constituent specified in the permit under (a) of this subsection in accordance with subsection (8)(g) of this section.

(e) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter of dangerous constituent specified in the permit pursuant to (a) of this subsection at a frequency specified under (d) of this subsection.

(i) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. These

method(s) must compare data collected at the compliance point(s) to the background groundwater quality data.

(ii) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The department will specify in the facility permit what period of time is reasonable after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.

(g) If the owner or operator determines pursuant to (f) of this subsection that there is statistically significant evidence of contamination for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what chemical parameters or dangerous constituents have shown statistically significant evidence of contamination:

(ii) Immediately sample the groundwater in all monitoring wells and determine whether constituents in the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) are present, and if so, in what concentration. However, the department, on a discretionary basis, may allow sampling for a site-specific subset of constituents from the "Ground-Water Monitoring List" Appendix and other representative/related waste constituents.

(iii) For any "Ground-Water Monitoring List" Appendix compounds found in the analysis pursuant to (g)(ii) of this subsection, the owner or operator may resample within one month or according to an alternative site-specific schedule approved by the director and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds in (g)(ii) of this subsection, the dangerous constituents found during this initial "Ground-Water Monitoring List" Appendix analysis will form the basis for compliance monitoring.

(iv) Within ninety days, submit to the department an application for a permit modification to establish a compliance monitoring program meeting the requirements of subsection (10) of this section. The application must include the following information:

(A) An identification of the concentration of any "Ground-Water Monitoring List" Appendix constituent detected in the groundwater at each monitoring well at the compliance point;

(B) Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of subsection (10) of this section;

(C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of subsection (10) of this section;

(D) For each dangerous constituent detected at the compliance point, a proposed concentration limit under subsection (5)(a)(i) or (ii) of this section, or a notice of intent to seek an alternate concentration limit under subsection (5)(b) of this section; and

(v) Within one hundred eighty days, submit to the department:

(A) All data necessary to justify an alternate concentration limit sought under subsection (5)(b) of this section; and

(B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of subsection (11) of this section unless:

(I) All dangerous constituents identified under (g)(ii) of this subsection are listed in Table I of subsection (5) of this section and their concentrations do not exceed the respective values given in that Table; or

(II) The owner or operator has sought an alternate concentration limit under subsection (5)(b) of this section for every dangerous constituent identified under (g)(ii) of this subsection.

(vi) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant difference for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The owner operator may make a demonstration under this subsection in addition to, or in lieu of, submitting a permit modification application under (g)(iv) of this subsection; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in (g)(iv) of this subsection unless the demonstration made under this subsection successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(A) Notify the department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he intends to make a demonstration under this subsection;

(B) Within ninety days, submit a report to the department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

(C) Within ninety days, submit to the department an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

(D) Continue to monitor in accordance with the detection monitoring program established under this section.

(h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, he or she must, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

(10) Compliance monitoring program. An owner or operator required to establish a compliance monitoring program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard under subsection (3) of this section. The department will specify the groundwater protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must install a groundwater monitoring system at the compliance point as specified under subsection (6) of this section. The groundwater monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with subsection (8)(g) and (h) of this section.

(i) The owner or operator must conduct a sampling program for each chemical parameter or dangerous constituent in accordance with subsection (8)(g) of this section.

(ii) The owner or operator must record groundwater analytical data as measured and in form necessary for the determination of statistical significance under subsection (8)(h) of this section for the compliance period of the facility.

(d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or dangerous constituent specified in the permit, pursuant to (a) of this subsection, at a frequency specified under (f) of this subsection.

(i) In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with subsection (5) of this section.

(ii) The owner or operator must determine whether there is statistically significant evidence of increased 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 groundwater samples.

(e) The owner or operator must determine the rate and direction of groundwater flow in the uppermost aquifer at least annually.

(f) The department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with subsection (8)(g) of this section.

(g) Annually, the owner or operator must determine whether additional dangerous waste constituents from the Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* (which is incorporated at WAC 173-303-110 (3)(c)), which could possibly be present but are not on the detection monitoring list in the permit, are actually present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in (f) of this subsection. To accomplish this, the owner or operator must consult with the department to determine on a case-by-case basis: Which sample collection event during the year will involve enhanced sampling; the number of monitoring wells at the compliance point to undergo enhanced sampling; the number of samples to be collected from each of these monitoring wells; and the specific constituents from the "Ground-Water Monitoring List" Appendix for which these samples must be analyzed. If

the enhanced sampling event indicates that "Ground-Water Monitoring List" Appendix constituents are present in the groundwater that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the department, and repeat the analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the department within seven days after completion of the initial analysis, and add them to the monitoring list.

(h) If the owner or operator determines, pursuant to (d) of this subsection, that any concentration limits under subsection (5) of this section are being exceeded at any monitoring well at the point of compliance, he must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded;

(ii) Submit to the department an application for a permit modification to establish a corrective action program meeting the requirements of subsection (11) of this section, within ninety days, or within sixty days if an engineering feasibility study has been previously submitted to the department under subsection (9)(h)(v) of this section. For regulated units managing EHW, time frames of sixty days and forty-five days, respectively will apply. However, if the department finds that the full extent of the ninety/sixty-day or the sixty/forty-five-day time periods will increase the likelihood to cause a threat to public health, or the environment, it can at its discretion reduce their duration. In specifying shorter limits, the department will consider the following factors:

(A) The physical and chemical characteristics of the dangerous constituents and parameters in the groundwater;

(B) The hydrogeological characteristics of the facility and of the surrounding land;

(C) The rate of movement and direction of flow of the affected groundwater;

(D) The proximity to and withdrawal rates of groundwater users downgradient; and

(E) The current and future uses of groundwater in the concerned area; and

(iii) The application must at a minimum include the following information:

(A) A detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under (a) of this subsection; and

(B) A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this subsection.

(i) If the owner or operator determines, pursuant to (d) of this subsection, that the groundwater concentration limits under this section are being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natu-

ral variation in the groundwater. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make appropriate changes to the compliance monitoring program at the facility; and

(iv) Continue to monitor in accord with the compliance monitoring program established under this section.

(j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(11) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard under subsection (3) of this section. The department will specify the groundwater protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section, for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must implement a corrective action program that prevents dangerous constituents and parameters from exceeding their respective concentration limits at the compliance point by removing the dangerous waste constituents and parameters or treating them in place. The permit will specify the specific measures that will be taken.

(c) The owner or operator must begin corrective action within a reasonable time period after the groundwater protection standard is exceeded. The department will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of subsection (10)(i)(ii) of this section.

(d) In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under subsection (10) of this section, and must be as effective as that program in determining compliance with the groundwater protection standard under subsection (3) of this section, and in determining the success of a corrective action program under (e) of this subsection, where appropriate.

(e) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove

or treat in place any dangerous constituents or parameters under subsection (4) of this section, that exceed concentration limits under subsection (5) of this section, in groundwater between the compliance point under subsection (6) of this section, and the downgradient facility property boundary; and beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. For a facility seeking or required to have a permit, the corrective action measures to be taken must be specified in the permit.

(i) Corrective action measures under this subsection must be initiated at the effective date of the modified permit and completed without time delays considering the extent of contamination.

(ii) Corrective action measures under this subsection may be terminated once the concentration of dangerous constituents and parameters under subsection (4) of this section, is reduced to levels below their respective concentration limits under subsection (5) of this section.

(f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the groundwater monitoring program under (d) of this subsection, that the groundwater protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(g) The owner or operator must report in writing to the department on the effectiveness of the corrective action program. The owner or operator must submit these reports 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 Tox-

ics 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.

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

WAC 173-303-64620 Requirements. (1) The owner or operator of a facility must institute corrective action as necessary to protect human health and the environment for all releases of dangerous wastes and dangerous constituents, including releases from all solid waste management units at the facility. Corrective action is required regardless of the time at which waste was managed at the facility or placed in such units and regardless of whether such facilities or units were intended for the management of solid or dangerous waste. Assurances of financial responsibility for such corrective action must be provided.

(2) The owner/operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment. Additionally, as necessary to protect human health and the environment, the department may require the owner/operator to implement on site measures to address releases which have migrated beyond the facility boundary. Assurances of financial responsibility for such corrective action must be provided.

(3) In the case of a facility seeking or required to have a permit under the provisions of chapter 173-303 WAC, corrective action must be specified in the permit. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completion of such corrective action.

(4) At a minimum, corrective actions must be consistent with the following requirements of chapter 173-340 WAC.

(a) As necessary to select a cleanup action consistent with WAC 173-340-360, 173-340-350, state remedial investigation and feasibility study. Information that is adequate to support selection of a cleanup action consistent with WAC 173-340-360 but was developed under a different authority (for example, as part of closure under WAC 173-303-610 or as part of a federally overseen cleanup) may be used.

(b) WAC 173-340-360, selection of cleanup actions.

(c) WAC 173-340-400, implementation of the cleanup action.

(d) WAC 173-340-410, compliance monitoring requirements.

(e) WAC 173-340-420, periodic review.

(f) WAC 173-340-440, institutional controls.

(g) WAC 173-340-700 through 173-340–760, cleanup standards.

(5) At a minimum, financial assurance for corrective actions as required in subsections (1) and (2) of this section must be consistent with the following requirements:

(a) Unless otherwise specified, the definitions and requirements for allowable financial assurance mechanisms as set forth in the current financial assurance rules covering closure and post-closure in this section and as incorporated by reference in 40 C.F.R. 264.141, 264.143, 264.145, and 264.151 will be the definitions and requirements for allowable financial assurance for corrective action purposes. The words "corrective action" are to be substituted for the words "clo-

sure," "post closure," "post-closure," or "postclosure" in the above listed regulations as needed to produce this result.

(b) Within thirty days from the effective date of a permit, agreed order or consent decree, the owner or operator shall submit to the department for review and approval a written cost estimate to cover the activities listed in the applicable Scope of Work and Schedule document(s). If the department rejects the cost estimate as submitted, the department shall provide to the owner or operator a revised cost estimate amount that will be the approved cost estimate.

(c) Within thirty days after the department's final approval of the owner or operator's cost estimate amount or the owner or operator's receipt of the department's approved cost estimate amount, the owner or operator shall establish and maintain continuous coverage of financial assurance in the amount of the approved cost estimate and submit the applicable financial assurance documentation. If the department does not accept, reject, or revise the owner or operator's cost estimate within sixty days after submittal, the cost estimate will be deemed approved for purposes of this section.

(d) Adjustments by the department. If the department determines that the timing or content of submission of cost estimates and financial assurance documents are not consistent with the degree and duration of risk associated with the corrective action activities, the department may adjust the level of financial assurance or timing of document submission required under this section as may be necessary to protect human health and the environment. This adjusted level or timing 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 corrective action activities, it may require that the owner or operator of the facility comply with this section. 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) If during the course of the corrective action activities the owner or operator is required to submit an additional work plan(s) under the applicable permit, agreed order or consent decree, or to conduct activities related to corrective action not previously part of the original cost estimate, the process outlined in (b) of this subsection shall apply in the submission process of an additional work plan(s) and the resulting additional cost estimate(s).

(f) All cost estimates must be based on the costs to the owner or operator of hiring a third party to complete the work and shall be in accordance with the requirements of WAC 173-303-620.

(g) The owner or operator shall annually adjust all cost estimates for inflation using the procedure outlined in WAC 173-303-620 (3)(c). However, the department may also allow a reduction in the owner or operator's cost estimate for corrective action work actually performed during the previous year.

(h) Acceptable financial assurance mechanisms are trust funds, surety bonds, letters of credit, insurance, the financial test, and the corporate guarantee, consistent with WAC 173-303-620. The department may allow other financial assurance mechanisms if they are consistent with the laws of Washington and if the owner or operator dem-

onstrates to the satisfaction of the department that those mechanisms provide adequate financial assurance.

(i) If the owner or operator is using the financial test or corporate guarantee to meet its financial assurance obligation, the annual inflationary adjustment shall occur within ninety days after the close of the owner's or operator's fiscal year. If the owner or operator is using any mechanism other than the financial test or corporate guarantee, this adjustment shall occur each year within thirty days after the anniversary of the effective date of the permit, agreed order, consent decree, or alternative effective date pursuant to (d) of this subsection.

(j) If the owner or operator seeks to establish financial assurance by using a letter of credit or a surety bond, the owner or operator shall at the same time establish and thereafter maintain a standby trust fund acceptable to the department into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by the department pursuant to regulation.

(k) The owner or operator shall notify the department's site manager or project coordinator and the financial assurance officer by certified mail of the commencement of a voluntary or involuntary bankruptcy proceeding, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if it is named as debtor as required under the terms of the corporate guarantee.

(l) Once the owner or operator has established financial assurance with an acceptable mechanism as described above, the facility will be deemed to be without the required financial assurance:

(i) In the event of bankruptcy of the trustee or issuing institution; or

(ii) If the authority of the trustee institution to act as trustee has been suspended or revoked; or

(iii) If the authority of the institution issuing the surety bond, letter of credit, or insurance policy has been suspended or revoked.

In the event of bankruptcy of the trustee or a suspension or revocation of the authority of the trustee institution to act as a trustee, the owner or operator must establish a replacement financial assurance mechanism by any means specified in WAC 173-303-620 or other financial instrument as approved by the department within sixty days after such an event.

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

WAC 173-303-64690 Staging piles. The requirements for staging piles in 40 C.F.R. Part 264.554 are incorporated by reference. The word "director" in 40 C.F.R. means "department." Section 264.554(c)(2) is modified by changing "qualified professional engineer" to "independent qualified registered professional engineer."

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-650 Surface impoundments. (1) Applicability. The regulations in this section apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of dangerous waste.

(2) Design and operating requirements.

(a)(i) Any surface impoundment that is not covered by (j) of this subsection must have a liner for all portions of the impoundment (except for an existing portion of a surface impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with subsection (6)(a)(i) of this section. For 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 groundwater monitoring requirements of WAC 173-303-645, or the unsaturated zone monitoring requirements of WAC 173-303-655(6).

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents listed in WAC 173-303-9905, or which otherwise cause his wastes to be regulated under this chapter, into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must be designed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(e) A surface impoundment must be designed to repel birds.

(f) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent their failure. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(g) Earthen dikes must be kept free of:

(i) Perennial woody plants with root systems which could weaken its structural integrity; and

(ii) Burrowing mammals which could weaken its structural integrity or create leaks through burrows.

(h) Earthen dikes must have a protective cover, such as grass, shale or rock to minimize wind and water erosion and to preserve their structural integrity.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing TSD facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-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 1×10^{-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 3×10^{-4} m^2/sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal system specified in (j) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) The double liner requirement set forth in (j) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8) or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this paragraph, the term "liner" means a liner designed, constructed, installed, and operated to prevent dangerous waste from passing into the liner at any time during the active life of the facility, or a liner

designed, constructed, installed, and operated to prevent dangerous waste from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of (j) of this subsection on the basis of a liner designed, constructed, installed, and operated to prevent dangerous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to groundwater monitoring and corrective action;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in WAC 173-303-040); and

(C) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits under RCRA section 3005(c); or

(iii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into groundwater or surface water at any future time.

(m) The owner or operator of any replacement surface impoundment unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from subsection (2)(a)(i) of this section) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of overtopping control systems;

(ii) Sudden drops in the level of the impoundment's contents; and

(iii) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from ((~~a~~)) <u>an independent</u> qualified <u>registered professional</u> engineer that the impoundment's dike, including that portion of any dike which pro-

vides 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~~)) an independent qualified registered professional 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)~~)) (iii)(D) and (E), and (4)(d) of this

section, and comply with all other applicable leak detection system requirements of this chapter;

(iii) Maintain and monitor the groundwater monitoring system and comply with all applicable requirements of WAC 173-303-645; and

(iv) Prevent run-on and runoff from eroding or otherwise damaging the final cover.

(c)(i) If an owner or operator plans to close a surface impoundment in accordance with (a)(i) of this subsection, and the impoundment does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (2)(b) of this section, then:

(A) The closure plan for the impoundment under WAC 173-303-610(3) must include both a plan for complying with (a)(i) of this subsection, and a contingent plan for complying with (a)(ii) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) The owner or operator must prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of an impoundment subject to (c) of this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a)(i) of this subsection.

Reserve.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

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

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

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

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

(8) Special requirements for incompatible wastes. Incompatible wastes and materials must not be placed in the same surface impoundment, unless WAC 173-303-395 (1)(b) is complied with.

(9) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) The wastes F020, F021, F022, F023, F026, or F027 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to groundwater, surface water, or air so as to protect human health and the environment.

(10) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to WAC 173-303-650 (2)(j) or (k). The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under WAC 173-303-650 (4)(d) to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and if the unit is closed in accordance with WAC 173-303-650 (6)(b), monthly during the post-closure care period when monthly monitoring is required under WAC 173-303-650 (4)(d).

(11) Response actions.

(a) The owner or operator of surface impoundment units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(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 subsec-

tion, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b)(iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(12) Air emission standards. The owner or operator must manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of 40 C.F.R. Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

(13) Existing and newly regulated surface impoundments. The requirements of 3005 (j)(1) and (6) of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, are incorporated by reference. Surface impoundments regulated for the first time by a listing or characteristic adopted after November 8, 1984, must comply with new unit requirements or stop dangerous waste activity by four years after the date of adoption of the new listing or characteristic.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-660 Waste piles. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that store or treat dangerous waste in piles.

(b) The regulations in this section do not apply to owners or operators of waste piles that will be closed with wastes left in place. Such waste piles are subject to regulation under WAC 173-303-665 (Landfills).

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither runoff nor leachate is generated is not subject to regulation under subsection (2) of this section, or under WAC 173-303-645, provided that:

(i) Liquids or materials containing free liquids are not placed in the pile;

(ii) The pile is protected from surface water run-on by the structure or in some other manner;

(iii) The pile is designed and operated to control dispersal of the waste by wind, by means other than wetting; and

(iv) The pile will not generate leachate through decomposition or other reactions.

(d) Reserve.

(2) Design and operating requirements.

(a) A waste pile (except for an existing portion of a waste pile) must have:

(i) A liner that is designed, constructed, installed and maintained to prevent any migration of wastes out of the pile into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the pile and to the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(B) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) A liner and leachate collection and removal system must be protected from plant growth which could adversely affect any component of the system.

(c) The owner or operator must submit an engineering report with his permit application stating the basis for selecting the liner required in subsection (2)(a)(i) of this section. The statement must be certified by an independent, qualified registered professional engineer.

(d) The owner or operator will be exempted from the requirements of (a), (b), and (c) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents identified under WAC 173-303-645(4) into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(e) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto any portion of the pile during peak discharge from at least a twenty-five-year storm.

(f) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) Collection and holding facilities (e.g., tanks or basins) associated with run-on and runoff control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(h) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new waste pile unit, each lateral expansion of a waste pile unit, and each replacement of an existing waste pile unit must install two or more liners and a leachate collection and removal system above and between such liners.

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-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 x 10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-5} m^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 groundwater.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) Subitem (j) of this subsection does not apply to monofills that are granted a waiver by the department in accordance with WAC 173-303-650 (2)(l).

(m) The owner or operator of any replacement waste pile unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Action leakage rate.

(a) The department must approve an action leakage rate for waste piles subject to subsection (2)(j) or (k) of this 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 characteris-

tics, 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 runoff control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c) An owner or operator required to have a leak detection system under subsection (2)(j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(6) Containment system repairs((—))___-__Contingency plans.

(a) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by (d) of this subsection. Indications of possible failure of the containment system include liquid detected in the leachate detection system, evidence of leakage or the potential for leakage in the base, erosion of the base, or apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials.

(b) Whenever there is a positive indication of a failure of the containment system, the waste pile must be removed from service. Indications of positive failure of the containment system include waste detected in the leachate detection system, or a breach (e.g., a hole, tear, crack, or separation) in the base.

(c) If the waste pile must be removed from service as required by (b) of this subsection, the owner or operator must:

(i) Immediately stop adding wastes to the pile;

(ii) Immediately contain any leakage which has occurred or is occurring;

(iii) Immediately cause the leak to be stopped; and

(iv) If the leak cannot be stopped by any other means, remove the waste from the base.

(d) As part of the contingency plan required in WAC 173-303-350, the owner or operator must specify:

(i) A procedure for complying with the requirements of (c) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service. For EHW piles, the owner or operator must submit with his permit application a statement signed by an inde-

pendent, 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~~)) an independent qualified registered professional engineer as meeting the design specifications approved in the permit.

(f) A waste pile that has been removed from service pursuant to (b) of this subsection, and will not be repaired, must be closed in accordance with subsection (9) of this section.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a waste pile, unless the waste and waste pile satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) Addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under WAC 173-303-090, and complies with WAC 173-303-395 (1)(b); or

(b)(i) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; and

(ii) The generator complies with WAC 173-303-395 (1)(d).

(8) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless WAC 173-303-395 (1)(b) is complied with.

(b) A pile of dangerous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device. Piles of incompatible wastes must not be served by the same containment system.

(c) Dangerous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with WAC 173-303-395 (1)(b).

(9) Closure and post-closure care.

(a) At closure, the owner or operator must remove or decontaminate all dangerous waste, waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them in accordance with this chapter.

(b) If, after removing or decontaminating all residues and making all reasonable efforts regarding removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated (except that no EHW may ever be left in place), he must close the facility and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills, WAC 173-303-665(6).

(c)(i) The owner or operator of a waste pile that does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (1)(c) or (2)(d) of this section, must:

(A) Include in the closure plan for the pile under WAC 173-303-610(3) both a plan for complying with (a) of this subsection, and a contingent plan for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of a pile must include the cost of complying with the contingent closure plan and the contingent post-closure plan but are not required to include the cost of expected closure under (a) of this subsection.

(10) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in subsection (1)(c) of this section) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to groundwater, to surface water, or air so as to protect human health and the environment.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-665 Landfills. (1) Applicability. The regulations in this section apply to owners and operators of facilities that dispose of dangerous waste in landfills, except as WAC 173-303-600 provides otherwise. No landfill will be permitted to dispose of EHW, except for the Hanford facility under WAC 173-303-700.

(2) Design and operating requirements.

(a) Any landfill that is not covered by (h) of this subsection must have a liner system for all portions of the landfill (except for an existing portion of a landfill). The liner system must have:

(i) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or groundwater or surface water at anytime during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The owner or opera-

tor 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~~)) an independent qualified registered professional engineer. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent failure under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(B) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and groundwater or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and runoff control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(f) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(g) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(h) The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must:

(A) Include a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) Include a composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-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 un-

der the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.

(i) The department may approve alternative design or operating practices to those specified in (h) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(j) The double liner requirement set forth in (h) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8), with dangerous waste numbers D004 through D017 or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in WAC 173-303-040); and

(C) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits under RCRA 3005(c); or

(D) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into groundwater or surface water at any future time.

(k) The owner or operator of any replacement landfill unit is exempt from (h) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of landfills exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and runoff control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems.

(c)(i) An owner or operator required to have a leak detection system under subsection (2)(h) or (j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semiannually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(5) Surveying and recordkeeping. The owner or operator of a landfill must maintain the following items in the operating record required under WAC 173-303-380:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each dangerous waste type within each cell.

(6) Closure and post-closure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(i) Provide long-term minimization of migration of liquids through the closed landfill;

(ii) Function with minimum maintenance;

(iii) Promote drainage and minimize erosion or abrasion of the cover;

(iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10) including maintenance and monitoring throughout the post-closure care period. The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsections (2)(h) and (4)(c) of this section, where such a system is present between double liner systems;

(iii) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(iv) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of WAC 173-303-645;

(v) Prevent run-on and runoff from eroding or otherwise damaging the final cover; and

(vi) Protect and maintain surveyed benchmarks used in complying with subsection (5) of this section.

(c) Reserve.

(7) Special requirements for incompatible wastes. Incompatible wastes, or incompatible wastes and materials must not be placed in the same landfill cell, unless WAC 173-303-395 (1)(b) is complied with.

(8) Action leakage rate.

(a) The department must approve an action leakage rate for landfill units subject to subsection (2)(h) or (j) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding l 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 con-

tain other wastes which may generate heat sufficient to cause ignition of the waste.

(11) Special requirements for hazardous wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in a landfill unless the owner or operator operates the landfill in accord with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through the soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring requirements.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to groundwater, surface water, or air so as to protect human health and the environment.

(12) Special requirements for containers. Unless they are very small, such as an ampule, containers must be either:

(a) At least ninety percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

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

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-800 Permit requirements for dangerous waste management facilities. (1) The purpose of WAC 173-303-800 through 173-303-840 is to establish the requirements for permits which will allow a dangerous waste facility to operate without endangering the public health and the environment.

(2) The owner/operator of a dangerous waste facility that transfers, treats, stores, or disposes (TSD) or recycles dangerous waste must, when required by this chapter, obtain a permit in accordance with WAC 173-303-800 through 173-303-840 covering the active life, closure period, groundwater 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), or obtain an enforceable document in lieu of a post-closure permit, as provided under subsection (12) of this section. If a post-closure permit is required, the permit must address applicable groundwater monitoring, unsaturated zone monitoring, cor-

rective action, and post-closure care requirements of this chapter. The denial of a permit for the active life of a dangerous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this section.

(3) TSD facility permits will be granted only if the objectives of the siting and performance standards set forth in WAC 173-303-282 and 173-303-283 are met.

(4) Permits will be issued according to the requirements of all applicable TSD facility standards.

(5) The owner/operator of a TSD facility is responsible for obtaining all other applicable federal, state, and local permits authorizing the development and operation of the TSD facility.

(6) The terms used in regard to permits which are not defined in WAC 173-303-040 have the same meanings as set forth in 40 C.F.R. 270.2.

(7) Exemptions.

(a) A permit for an on-site cleanup action may be exempted as provided in a consent decree or order signed by the department and issued pursuant to chapter 70.105D RCW.

(b) A permit is not required for an on-site cleanup action performed by the department pursuant to chapter 70.105D RCW.

(c) Further exemptions.

(i) A person is not required to obtain a dangerous waste permit for treatment or containment activities taken during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(E) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(ii) Any person who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(iii) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below are not required to obtain a dangerous waste permit. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

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

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

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

(8) Each permit issued under this chapter will contain terms and conditions as the department determines necessary to protect human health and the environment.

(9) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 40 C.F.R. 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 C.F.R. 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 C.F.R. Part 264.111 standards for closure by removal were met. If the department believes that 40 C.F.R. 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 C.F.R. 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 C.F.R. 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 C.F.R. Part 265 closure, as referenced by WAC 173-303-400, to a 40 C.F.R. 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 C.F.R. Part 265 closure met 40 C.F.R. 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 C.F.R. 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 C.F.R. 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 C.F.R. 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).

(12) Enforceable documents for post-closure care. At the discretion of the department, an owner or operator may obtain, in lieu of a post-closure permit, an enforceable document imposing the requirements of 40 C.F.R. 265.121 as incorporated by reference in WAC 173-303-400 (3)(a). "Enforceable document" has the same meaning as defined in WAC 173-303-040.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-806 Final facility permits. (1) Applicability. This section applies to all dangerous waste facilities required to have a final facility permit. The final facility permit requirements are applicable to:

(a) Final status TSD facilities; and

(b) Certain recycling facilities that are not exempt from the permit requirements.

(2)(a) Application. Any person subject to the permit requirements of this section who intends to operate a new TSD facility must comply with WAC 173-303-281 and apply for a final facility permit. The department may, at any time, require the owner or operator of an existing TSD facility to apply for a final facility permit. Such owner or operator will be allowed one hundred eighty days to submit his application; the department may extend the length of the application period if it finds that there are good reasons to do so. The owner or operator of an existing TSD facility may voluntarily apply for a final facility permit at any time. Any person seeking a final facility permit must complete, sign, and submit an application to the department. An application must consist of a Part A permit form (which can be obtained from the department), and the contents of Part B as specified in subsection (4) of this section. The requirements for the contents of a part A permit application are at WAC 173-303-803(3).

(b) Persons covered by permits by rule (WAC 173-303-802) need not apply. Procedures for applications, issuance and administration of emergency permits are found exclusively in WAC 173-303-804. Procedures for application, issuance and administration of research, development, and demonstration permits are found exclusively in WAC 173-303-809.

(3) Effective regulations. A final facility permit will include all applicable requirements of this chapter which are in effect on the date that the permit is issued by the department. WAC 173-303-840(7) provides a means for reopening permit proceedings at the discretion of the department where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. Any other changes to the final facility permit will be in accordance with the permit modification requirements of WAC 173-303-830.

(4) Contents of Part B. Part B of a permit application must consist of the information required in (a) through (m) of this subsection.

(a) General requirements. Part B of the permit application consists of the general information requirements of this subsection, and the specific information requirements in (b) through (h) of this subsection as applicable to the facility. The Part B information requirements presented in (a) through (h) of this subsection, reflect the standards promulgated in WAC 173-303-600. These information requirements are necessary in order for the department to determine compliance with WAC 173-303-600 through 173-303-670. If owners and operators of TSD facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the department may make allowance for submission of such information on a case-by-case basis. Information required in Part B must be submitted to the department and signed in accordance with requirements in WAC 173-303-810(12). Certain technical data, such as design drawings and specifications, and engineering studies must be certified by a registered professional engineer. For post-closure permits, only the information specified in WAC 173-303-806 (4)(o) is required in part B of the permit application. 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 C.F.R. 264.1033, 264.1035, 264.1052, 264.1053, 264.1058, 264.1064, 264.1067, 264.1084, 264.1085, 264.1086, and 264.1088.

(vi) A justification of any request for a waiver(s) of the preparedness and prevention requirements of WAC 173-303-340, or a description of the procedures used to comply with these requirements.

(vii) A copy of the contingency plan required by WAC 173-303-350: Include, where applicable, as part of the contingency plan, specific requirements in WAC 173-303-640(7), 173-303-650(5) and 173-303-660(6).

(viii) A description of procedures, structures, or equipment used at the facility to:

(A) Prevent hazards and contain spills in unloading/loading operations (for example, ramps, berms, pavement, special forklifts);

(B) Prevent runoff from dangerous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(C) Prevent contamination of water supplies;

(D) Mitigate effects of equipment failure and power 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 flood plain area;

(C) Surface waters including intermittent streams;

(D) Surrounding land uses (residential, commercial, agricultural, recreational);

(E) A wind rose (i.e., prevailing windspeed and direction);

(F) Orientation of the map (north arrow);

(G) Legal boundaries of the TSD facility site;

(H) Access control (fences, gates);

(I) Injection and withdrawal wells both on-site and off-site;

(J) Buildings; treatment, storage, or disposal operations; or other structure (recreation areas, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.);

(K) Barriers for drainage or flood control; and

(L) Location of operational units within the TSD facility site, where dangerous waste is (or will be) treated, stored, or disposed (include equipment clean-up areas).

(Note - For large TSD facilities the department will allow the use of other scales on a case-by-case basis.)

(xix) Applicants may be required to submit such information as may be necessary to enable the department to carry out its duties under other state or federal laws as required.

(xx) Additional information requirements. The following additional information regarding protection of groundwater is required from owners or operators of dangerous waste facilities containing a regulated unit except as otherwise provided in WAC 173-303-645 (1)(b):

(A) A summary of the groundwater monitoring data obtained during the interim status period under 40 C.F.R. 265.90 through 265.94, where applicable;

(B) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (that is, the information obtained from hydrogeologic investigations of the facility area);

(C) On the topographic map required under (a)(xviii) of this subsection, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under WAC 173-303-645(6), the proposed location of groundwater monitoring wells as required under WAC 173-303-645(8), and, to the extent possible, the information required in (a)(xx)(B) of this subsection;

(D) A description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application was submitted that:

(I) Delineates the extent of the plume on the topographic map required under (a)(xviii) of this subsection;

(II) Identifies the concentration of each constituent throughout the plume or identifies the maximum concentrations of each constituent in the plume. (Constituents are those listed in Appendix "Ground-Water Monitoring List" in *Chemical Testing Methods for Designating Dangerous Waste* which is incorporated at WAC 173-303-110 (3)(c) and (7), and any other constituents not listed there which have caused a managed waste to be regulated under this chapter.);

(E) Detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of WAC 173-303-645(8);

(F) If the presence of dangerous constituents has not been detected in the groundwater at the time of permit 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 groundwater;

(II) A proposed groundwater monitoring system;

(III) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(IV) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

(G) If the presence of dangerous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of WAC 173-303-645(10). The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of WAC 173-303-645(11) except as provided in WAC 173-303-645 (9)(h)(v). Alternatively, the owner or operator can obtain written authorization in advance from the department to submit a proposed permit schedule for development and submittal of such information. To demonstrate compliance with WAC 173-303-645(10), the owner or operator must address the following items:

(I) A description of the wastes previously handled at the facility;

(II) A characterization of the contaminated groundwater, including concentrations of dangerous constituents and parameters;

(III) A list of constituents and parameters for which compliance monitoring will be undertaken in accordance with WAC 173-303-645 (8) and (10);

(IV) Proposed concentration limits for each dangerous constituent and parameter, based on the criteria set forth in WAC 173-303-645 (5)(a), including a justification for establishing any alternate concentration limits;

(V) Detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of WAC 173-303-645(8); and

(VI) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating groundwater monitoring data; and

(H) If dangerous constituents or parameters have been measured in the groundwater which exceed the concentration limits established un-

der WAC 173-303-645(5), Table 1, or if groundwater monitoring conducted at the time of permit application under 40 C.F.R. 265.90 through 265.94 at the waste boundary indicates the presence of dangerous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of WAC 173-303-645(11). However, an owner or operator is not required to submit information to establish a corrective action 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 groundwater, including concentrations of dangerous constituents and parameters;

(II) The concentration limit for each dangerous constituent and parameter found in the groundwater as set forth in WAC 173-303-645(5);

(III) Detailed plans and an engineering report describing the corrective action to be taken;

(IV) A description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action; and

(V) The permit may contain a schedule for submittal of the information required in (a)(xx)(H)(III) and (IV) of this subsection, provided the owner or operator obtains written authorization from the department prior to submittal of the complete permit application.

(xxi) Contingent groundwater protection program. The following actions are required for owners or operators of proposed land-based facilities and may be required for owners/operators of existing land-based facilities, except as provided in WAC 173-303-645 (1)(b).

(A) Contingent groundwater protection program. The owner or operator must develop a contingent groundwater protection program. The purpose of this program will be to prevent the migration of dangerous waste or dangerous waste constituents from waste management units to the nearest hydraulically downgradient receptor at any time during the life of the facility. For the purposes of this subsection, the downgradient receptor will be the facility property line, perennial surface water or domestic well, whichever is nearest to the dangerous waste management unit. The contingent groundwater protection program must at a minimum:

(I) Define the local and regional hydrogeologic characteristics. The contingent groundwater protection program must be based on a sufficient understanding of site geology, hydrology, and other factors to allow evaluation of its adequacy by the department. Site characterization must be performed in sufficient detail to provide, at a minimum, the following information: Site geostratigraphy; site hydrostratigraphy; identification of aquifers, aquitards, and aquicludes; flow models for each stratum (i.e., porus media or fracture flow); the distribution of vertical and horizontal hydraulic conductivity; effective porosity; horizontal and vertical hydraulic gradients; groundwater travel time to receptors; and heterogeneity for each stratigraphic unit. Site interpretative models must include ranges of tested values: The provisions of WAC 173-303-806 (4)(a)(xx) and 173-303-645, must be

used as guidance in the development of the contingent groundwater protection program.

(II) Identify the range of potential release scenarios that could occur during facility operation and the post-closure care period. The scenarios must incorporate the intended design(s) of the dangerous waste management unit(s), wastes to be placed in the dangerous waste management unit(s), waste and leachate chemistry, waste, and soil and rock geochemical interactions, and the results of site characterization pursuant to WAC 173-303-806 (4)(a)(xx) and (xxi);

(III) Include specific physical action to be taken if dangerous waste or dangerous waste constituents are detected in one or more of the monitoring wells. The physical actions must be based upon engineering feasibility studies describing remedial actions established from site specific conditions and waste features. Such actions may include installation of a pump and treat system between the monitoring well and the receptor or installation of a section of slurry wall to decrease groundwater travel times. The description of the systems must also provide how the remediation system will achieve cleanup, its efficiency, and the time frames involved;

(IV) Incorporate the design, construction, and sampling methods outlined in WAC 173-303-645 (8)(c), (d), (e), (f), and (g);

(V) Demonstrate to the satisfaction of the department that the owner/operator of the dangerous waste management facility has the financial capability to implement the proposed groundwater protection plan; and

(VI) Include reporting procedures to the department.

(B) The response actions identified in WAC 173-303-806 (4)(a)(xxi)(A)(III) must be activated if the presence of dangerous waste or dangerous waste constituents have been detected at the point of compliance in accordance with WAC 173-303-645 (9)(g), and must continue until the concentration of dangerous waste or dangerous waste constituents under WAC 173-303-645(4) are reduced to levels below their respective concentration limits specified in WAC 173-303-645(5).

(C) If the owner/operator does not demonstrate that the groundwater protection program will prevent the migration of dangerous waste or its constituents to the nearest receptor, the department will require corrections to be made in the protection program, increase setbacks from the nearest receptor, or deny the permit.

(xxii) Additional requirements for incineration facilities. The following actions regarding the protection of human health and the environment must be taken by owners/operators of proposed hazardous waste incineration facilities and may be required for owners or operators of existing incineration facilities.

(A) Ambient monitoring program. The owner/operator will be required to develop an ambient monitoring program. The purpose of this ambient monitoring program will be to: Gather baseline environmental information characterizing on-site and off-site environmental conditions prior to facility operation; and, to identify and measure changes in the environment which may be linked to the construction and operation of the facility. The ambient monitoring program must, at a minimum:

(I) Include a characterization of facility emission sources and pathways of contaminant transport.

(II) Characterize local and regional ecosystems, including agricultural, and their sensitivity to the potential contaminants from the facility.

(III) Incorporate the findings of the environmental impact statement's health risk assessment and/or other assessments specific to the proposal or available to the scientific community regarding emissions from dangerous waste management facilities and their potential human health and environmental effects.

(IV) Identify sensitive indicator plants and animals for biomonitoring, identify specific chemical constituents of concern, sampling locations, sampling frequency, sampling and analytical methods, chain of custody procedures, quality assurance/quality control procedures, reporting times, recordkeeping procedures, and data evaluation procedures.

(B) Environmental review procedures. The owner/operator must establish procedures to allow for public review of facility operation and all monitoring data required by the facility's permit. In developing this process, the owner/operator must, at a minimum:

(I) Coordinate this effort with the public and interested local organizations;

(II) Identify the informational needs of the community and develop a public information process which meets these needs; and

(III) Develop procedures allowing full access by the public to all monitoring data required by the permit.

(C) Impact mitigation plan. Prior to the department issuing a permit, the owner/operator must submit an impact mitigation plan which demonstrates to the satisfaction of the department that the owner/operator will mitigate all probable significant adverse impacts, including economic, due to facility location and operations. The owner/operator must use as a basis for identifying probable significant adverse economic impacts those probable economic impacts identified during a public review process, such as the environmental impact statement scoping process, if applicable.

The plan must include, but is not limited to, a description of what the owner/operator will do to reduce or prevent any probable significant impacts before they occur, to mitigate such impacts should they occur, and to ensure the owner/operator has and will have the financial capability to implement such preventative and mitigative measures. Mitigation measures may include, as an element, financial compensation to adversely affected parties.

This plan may be submitted with environmental reports the department requires for compliance with the State Environmental Policy Act, with the written citizen proponent negotiation report and agreements, or with the Part B permit application. If the plan does not demonstrate that the owner/operator is capable of adequately mitigating the identified probable significant adverse economic impacts, the department will require modification of the plan or of the proposed facility location, or will deny the permit application. The department must be satisfied with the plan prior to the issuance of the permit.

(xxiii) Information requirements for solid waste management units.

(A) The following information is required for each solid waste management unit:

(I) The location of the unit on the topographic map required under (a)(xviii) of this subsection.

(II) Designation of type of unit.

(III) General dimensions and structural description (supply any available drawings).

(IV) Time frame over which the unit was operated.

(V) Specification of all wastes that have been managed in the unit, to the extent available.

(B) The owner/operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of dangerous wastes or dangerous constituents from such unit or units.

(C) The owner/operator must conduct and provide the results of sampling and analysis of groundwater, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the department determines it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

WAC 173-303-806 (4)(a)(xxiv):

(xxiv) Information requirements for known releases.

(A) In order to provide for corrective action necessary to protect human health and the environment, the following information is required for all known significant releases of dangerous waste and dangerous constituents (as defined by WAC 173-303-64610(4)) at, and from, the facility. A significant release is a release which has affected or has the potential to affect human health or the environment at or beyond the facility.

(I) The location of the release on the topographic map required under (a)(xviii) of this subsection.

(II) General dimensions of the release and any relevant structural description. For example, if the release is from a storage tank, provide a structural description of the tank. Supply any available drawings.

(III) Time frame over which the release occurred.

(IV) Specification of all dangerous waste or dangerous constituents (as defined by WAC 173-303-64610(4)) present in the release, to the extent available.

(xxv) A summary of the preapplication meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under WAC 173-303-281 (3)(c).

(xxvi) For land disposal facilities, if a case-by-case extension has been approved under 40 C.F.R. 268.5 or a petition has been approved under 40 C.F.R. 268.6, a copy of the notice of approval for the extension or petition is required.

(b) Specific Part B information requirements for containers. Except as otherwise provided in WAC 173-303-600(3), owners or operators of facilities that store containers of dangerous waste must provide the following additional information:

(i) A description of the containment system to demonstrate compliance with WAC 173-303-630(7). Show at least the following:

(A) Basic design parameters, dimensions, and materials of construction including allowance for a twenty-five-year, twenty-four-hour storm;

(B) How the design promotes positive drainage control or how containers are kept from contact with standing liquids in the containment system;

(C) Capacity of the containment system relative to the volume of the largest container to be stored;

(D) Provisions for preventing or managing run-on;

(E) How accumulated liquids can be analyzed and removed to prevent overflow; and

(F) A description of the building or other protective covering for EHW containers;

(ii) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with WAC 173-303-630 (7)(c), including:

(A) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

(B) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;

(iii) A description of the procedures for labeling containers;

(iv) Sketches, drawings, or data demonstrating compliance with WAC 173-303-630(8) (location of buffer zone and containers holding ignitable or reactive wastes) and WAC 173-303-630 (9)(c) (location of incompatible wastes), where applicable;

(v) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with WAC 173-303-630 (9)(a) and (b), and 173-303-395 (1)(b) and (c); and

(vi) Information on air emission control equipment as required in (m) of this subsection.

(c) Specific Part B information requirements for tanks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use tanks to store or treat dangerous waste must provide the following information:

(i) A written assessment that is reviewed and certified by an independent, qualified, registered professional engineer as to the structural integrity and suitability for handling dangerous waste of each tank system, as required under WAC 173-303-640 (2) and (3);

(ii) Dimensions and capacity of each tank;

(iii) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

(iv) A diagram of piping, instrumentation, and process flow for each tank system;

(v) A description of materials and equipment used to provide external corrosion protection, as required under WAC 173-303-640 (3)(a)(iii)(B);

(vi) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with WAC 173-303-640 (3)(b), (c), (d), and (e);

(vii) Detailed plans and a description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of WAC 173-303-640 (4)(a), (b), (c), (d), (e), and (f);

(viii) For tank systems for which a variance from the requirements of WAC 173-303-640(4) is sought (as provided by WAC 173-303-640 (4)(g)):

(A) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous waste or dangerous constituents into the groundwater or surface water during the life of the facility; or

(B) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

(ix) Description of controls and practices to prevent spills and overflows, as required under WAC 173-303-640 (5)(b);

(x) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of WAC 173-303-640 (9) and (10);

(xi) A description of the marking and/or labeling of tanks;

(xii) Tank design to prevent escape of vapors and emissions of acutely or chronically toxic (upon inhalation) EHW; and

(xiii) Information on air emission control equipment as required in (m) of this subsection.

(d) Specific Part B information requirements for surface impoundments. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store, treat, or dispose of dangerous waste in surface impoundments must provide the following additional information:

(i) A list of the dangerous wastes placed or to be placed in each surface impoundment;

(ii) Detailed plans and an engineering report describing how the surface impoundment is designed, and is or will be constructed, operated and maintained to meet the requirements of WAC 173-303-650 (2)(j), (10), (11), and 173-303-335, addressing the following items:

(A) The liner system (except for an existing portion of a surface impoundment), including the certification required by WAC 173-303-650 (2)(a)(i)(D) for EHW management. If an exemption from the requirement for a liner is sought as provided by WAC 173-303-650 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the groundwater or surface water at any future time;

(B) Prevention of overtopping;

(C) Structural integrity of dikes;

(D) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment must meet the requirements of WAC 173-303-650 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-650 (2)(k), (l), or (m), submit appropriate information;

(E) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(F) The construction quality assurance (CQA) plan if required under WAC 173-303-335; and

(G) Proposed action leakage rate, with rationale, if required under WAC 173-303-650(10), and response action plan, if required under WAC 173-303-650(11).

(iii) Reserve.

(iv) A description of how each surface impoundment, including the double liner system, leak detection system, cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of WAC 173-303-650 (4)(a), (b), and (d). This information should be included in the inspection plan submitted under (a)(v) of this subsection;

(v) A certification by ((~~a~~)) <u>an independent</u> qualified <u>registered professional</u> 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~~)) <u>an independent</u>

qualified registered professional engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(vi) A description of the procedure to be used for removing a surface impoundment from service, as required under WAC 173-303-650 (5)(b) and (c). This information should be included in the contingency plan submitted under (a)(vii) of this subsection;

(vii) A description of how dangerous waste residues and contaminated materials will be removed from the unit at closure, as required under WAC 173-303-650 (6)(a)(i). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-650 (6)(a)(ii) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(viii) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how WAC 173-303-650(7) will be complied with;

(ix) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how WAC 173-303-650(8) will be complied with;

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how the surface impoundment is or will be designed to meet the requirements of WAC 173-303-650(9); and

(xi) Information on air emission control equipment as required in (m) of this subsection.

(e) Specific Part B information requirements for waste piles. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store or treat dangerous waste in waste piles must provide the following additional information:

(i) A list of dangerous wastes placed or to be placed in each waste pile;

(ii) If an exemption is sought to WAC 173-303-660(2), and 173-303-645 as provided by WAC 173-303-660 (1)(c), an explanation of how the standards of WAC 173-303-660 (1)(c) will be complied with;

(iii) Detailed plans and an engineering report describing how the waste pile is designed, and is or will be constructed, operated, and maintained to meet the requirements of WAC 173-303-335, 173-303-660 (2)(j), (11) and (12), addressing the following items:

(A)(I) The liner system (except for an existing portion of a pile) if the waste pile must meet the requirements of WAC 173-303-660(2), including the ((~~licensed~~)) independent qualified registered professional 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 groundwater or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of WAC 173-303-660 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-660 (2)(k), (l), or (m), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-660(3), and response action plan, if required under WAC 173-303-660(4);

(B) Control of run-on;

(C) Control of runoff;

(D) Management of collection and holding units associated with run-on and runoff control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iv) Reserve.

(v) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system and appurtenances for control of run-on and runoff, will be inspected in order to meet the requirements of WAC 173-303-660(5). This information should be included in the inspection plan submitted under (a)(v) of this subsection. If an exemption is sought to WAC 173-303-645 pursuant to WAC 173-303-660(4), describe in the inspection plan how the inspection requirements of WAC 173-303-660 (4)(a)(iii) will be complied with;

(vi) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(vii) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of WAC 173-303-660(7) will be complied with;

(viii) If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how WAC 173-303-660(8) will be complied with;

(ix) A description of how dangerous waste, waste residues and contaminated materials will be removed from the waste pile at closure, as required under WAC 173-303-660 (9)(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665 (6)(a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a waste pile that is not enclosed (as defined in WAC 173-303-660 (1)(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-660(10).

(f) Specific Part B information requirements for incinerators. Except as WAC 173-303-670(1) and subsection (4)(f)(v) of this section provide otherwise, owners and operators of facilities that incinerate dangerous waste must fulfill the informational requirements of (f) of this subsection.

(i) When seeking an exemption under WAC 173-303-670 (1)(b) (ignitable or reactive wastes only):

(A) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is ignitable; or

(B) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is reactive for characteristics other than those listed in WAC 173-303-090 (7)(a)(iv) and (v), and will not be burned when other dangerous wastes are present in the combustion zone; or

(C) Documentation that the waste is a dangerous waste solely because it possesses the characteristic of ignitability, as determined by the tests for characteristics of dangerous waste under WAC 173-303-090; or

(D) Documentation that the waste is a dangerous waste solely because it possesses the reactivity characteristics listed in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii), and (viii), and that it will not be burned when other dangerous wastes are present in the combustion zone.

(ii) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with WAC 173-303-807.

(iii) In lieu of a trial burn, the applicant may submit the following information;

(A) An analysis of each waste or mixture of wastes to be burned including:

(I) Heating value of the waste in the form and composition in which it will be burned;

(II) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste;

(III) An identification of any dangerous organic constituents listed in WAC 173-303-9905 or, if not listed, which cause the waste(s) to be regulated, which are present in the waste to be burned, except that the applicant need not analyze for constituents which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in WAC 173-303-110 (3)(a), or their equivalent as approved by the department;

(IV) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified in WAC 173-303-110 (3)(a); and

(V) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC's) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in WAC 173-303-670(4);

(B) A detailed engineering description of the incinerator, including:

(I) Manufacturer's name and model number of incinerator;

(II) Type of incinerator;

(III) Linear dimension of incinerator unit including cross sectional area of combustion chamber;

(IV) Description of auxiliary fuel system (type/feed);

(V) Capacity of prime mover;

(VI) Description of automatic waste feed cutoff system(s);

(VII) Stack gas monitoring and pollution control monitoring system;

(VIII) Nozzle and burner design;

(IX) Construction materials; and

(X) Location and description of temperature, pressure, and flow indicating devices and control devices;

(C) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in (f)(iii)(A) of this subsection. This analysis should specify the principal organic dangerous constituents (PODC's) which the applicant has identified in the waste for which a permit is sought, and any differences from the PODC's in the waste for which burn data are provided;

(D) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

(E) A description of the results submitted from any previously conducted trial burn(s) including:

(I) Sampling and analysis techniques used to calculate performance standards in WAC 173-303-670(4); and

(II) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

(F) The expected incinerator operation information to demonstrate compliance with WAC 173-303-670 (4) and (6), including:

(I) Expected carbon monoxide (CO) level in the stack exhaust gas;

(II) Waste feed rate;

(III) Combustion zone temperature;

(IV) Indication of combustion gas velocity;

(V) Expected stack gas volume, flow rate, and temperature;

(VI) Computed residence time for waste in the combustion zone;

(VII) Expected hydrochloric acid removal efficiency;

(VIII) Expected fugitive emissions and their control procedures; and

(IX) Proposed waste feed cutoff limits based on the identified significant operating parameters;

(G) Such supplemental information as the department finds necessary to achieve the purposes of this subsection;

(H) Waste analysis data, including that submitted in (f)(iii)(A) of this subsection, sufficient to allow the department to specify as permit principal organic dangerous constituents (permit PODC's) those constituents for which destruction and removal efficiencies will be required; and

(I) Test protocols and sampling and analytical data to demonstrate the designation status under WAC 173-303-070 of:

(I) Incinerator ash residues, if any; and

(II) Residues from the air pollution control devices.

(iv) The department will approve a permit application without a trial burn if the department finds that:

(A) The wastes are sufficiently similar; and

(B) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under WAC 173-303-670(6)) operating conditions that will ensure that the performance standards in WAC 173-303-670(4) will be met by the incinerator.

(v) When an owner or operator of a dangerous waste incineration unit becomes subject to dangerous waste permit requirements after October 12, 2005, or when an owner or operator of an existing dangerous waste incinerator unit demonstrates compliance with the air emission standards and limitations in 40 C.F.R. part 63, subpart EEE (that is, by conducting a comprehensive performance test and submitting a Noti-

fication of Compliance under 40 C.F.R. 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of 40 C.F.R. part 63, subpart EEE), the requirements of this subsection do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to comply with 40 C.F.R. 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this subsection, on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). Note that 40 C.F.R. part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to 40 C.F.R. Part 63 you must get an air permit from ecology or the local air authority.

(g) Specific Part B information requirements for land treatment facilities. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use land treatment to dispose of dangerous waste must provide the following additional information:

(i) A description of plans to conduct a treatment demonstration as required under WAC 173-303-655(3). The description must include the following information:

(A) The wastes for which the demonstration will be made and the potential dangerous constituents in the waste;

(B) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(C) Any specific laboratory or field test that will be conducted, including:

(I) The type of test (e.g., column leaching, degradation);

(II) Materials and methods, including analytical procedures;

(III) Expected time for completion; and

(IV) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

(ii) A description of a land treatment program, as required under WAC 173-303-655(2). This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(A) The wastes to be land treated;

(B) Design measures and operating practices necessary to maximize treatment in accordance with WAC 173-303-655 (4)(a) including:

(I) Waste application method and rate;

(II) Measures to control soil pH;

(III) Enhancement of microbial or chemical reactions; and

(IV) Control of moisture content;

(C) Provisions for unsaturated zone monitoring, including:

(I) Sampling equipment, procedures, and frequency;

(II) Procedures for selecting sampling locations;

(III) Analytical procedures;

(IV) Chain of custody control;

(V) Procedures for establishing background values;

(VI) Statistical methods for interpreting results; and

(VII) The justification for any dangerous constituents recommended for selection as principal dangerous constituents, in accordance with the criteria for such selection in WAC 173-303-655 (6)(a);

(D) A list of dangerous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to WAC 173-303-300;

(E) The proposed dimensions of the treatment zone;

(iii) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of WAC 173-303-655(4). This submission must address the following items:

(A) Control of run-on;

(B) Collection and control of runoff;

(C) Minimization of runoff of dangerous constituents from the treatment zone;

(D) Management of collection and holding facilities associated with run-on and runoff control systems;

(E) Periodic inspection of the unit. This information should be included in the inspection plan submitted under (a)(v) of this subsection; and

(F) Control of wind dispersal of particulate matter, if applicable;

(iv) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under WAC 173-303-655(5) will be conducted including:

(A) Characteristics of the food-chain crop for which the demonstration will be made;

(B) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(C) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(D) Characteristics of the comparison crop including the location and conditions under which it was or will be grown; and

(E) If cadmium is present in the land treated waste, a description of how the requirements of WAC 173-303-655 (5)(b) will be complied with;

(v) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under WAC 173-303-655 (8)(a)(viii) and (c)(ii). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under (a)(xiii) of this subsection;

(vi) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of WAC 173-303-655(9) will be complied with; and

(vii) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how WAC 173-303-655(10) will be complied with.

(viii) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-655(12). This submission must address the following items as specified in WAC 173-303-655(12):

(A) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(B) The attenuative properties of underlying and surrounding soils or other materials;

(C) The mobilizing properties of other materials codisposed with these wastes; and

(D) The effectiveness of additional treatment, design, or monitoring techniques.

(h) Specific Part B information requirements for landfills. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that dispose of dangerous waste in landfills must provide the following additional information;

(i) A list of the dangerous wastes placed or to be placed in each landfill or landfill cell;

(ii) Detailed plans and an engineering report describing how the landfill is designed, and is or will be constructed, operated and maintained to comply with the requirements of WAC 173-303-335, 173-303-665 (2), (8) and (9) addressing the following items:

(A)(I) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of WAC 173-303-665 (2)(a), including the ((~~licensed~~)) independent qualified registered professional engineer's certification required by WAC 173-303-665 (2)(a)(i). If an exemption from the requirements for a liner and a leachate collection and removal system is sought, as provided by WAC 173-303-665 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituent into the groundwater or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of WAC 173-303-665 (2)(h). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-665 (2)(j), (k) or (l), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-665(8), and response action plan, if required under 173-303-665(9);

(B) Control of run-on;

(C) Control of runoff;

(D) Management of collection and holding facilities associated with run-on and runoff control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iii) Reserve.

(iv) A description of how each landfill, including the double liner system, leachate collection and removal system, cover systems, and appurtenances for control for run-on and runoff will be inspected in order to meet the requirements of WAC 173-303-665(4). This information must be included in the inspection plan submitted under (a)(v) of this subsection;

(v) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with WAC 173-303-665 (6)(a), and a description of how each landfill will be maintained and monitored after closure in

accordance with WAC 173-303-665 (6)(b) and (c). This information should be included in the closure and post-closure plans submitted under (a)(xiii) of this subsection;

(vi) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how WAC 173-303-665(7) will be complied with;

(vii) A description of how each landfill will be designed and operated in order to comply with WAC 173-303-140.

(i) Specific Part B information requirements for miscellaneous units. Except as otherwise provided in WAC 173-303-680(1), owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units must provide the following additional information:

(i) A detailed description of the unit being used or proposed for use, including the following:

(A) Physical characteristics, materials of construction, and dimensions of the unit;

(B) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of WAC 173-303-680 (2) and (3); and

(C) For disposal units, a detailed description of the plans to comply with the post-closure requirements of WAC 173-303-680(4).

(ii) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of WAC 173-303-680(2). If the applicant can demonstrate that he does not violate the environmental performance standards of WAC 173-303-680(2) and the department agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(iii) Information on the potential pathways of exposure of humans or environmental receptors to dangerous waste or dangerous constituents and on the potential magnitude and nature of such exposures.

(iv) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(v) Any additional information determined by the department to be necessary for evaluation of compliance of the unit with the environmental performance standards of WAC 173-303-680(2).

(j) Specific Part B information requirements for process vents. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have process vents to which WAC 173-303-690 applies must provide the following additional information:

(i) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-690 on the effective date that the facility becomes subject to the provisions of WAC 173-303-690 or 40 C.F.R. 265 Subpart AA incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 C.F.R. section 264.1033 (a)(2).

(ii) Documentation of compliance with the process vent standards in 40 C.F.R. 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 C.F.R. 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 C.F.R. 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 C.F.R. 264.1035 (b)(3).

(iv) Documentation of compliance with 40 C.F.R. 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 C.F.R. 264.1033(k).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (incorporated by reference at WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device ((~~design~~)) information. The design analysis must address the vent stream characteristics and control device operation parameters as specified in 40 C.F.R. 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 C.F.R. 264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

(k) Specific Part B information requirements for equipment. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have equipment to which WAC 173-303-691 applies must provide the following additional information:

(i) For each piece of equipment to which WAC 173-303-691 applies:

(A) Equipment identification number and dangerous waste management unit identification.

(B) Approximate locations within the facility (e.g., identify the dangerous waste management unit on a facility plot plan).

(C) Type of equipment (e.g., a pump or pipeline valve).

(D) Percent by weight total organics in the hazardous waste stream at the equipment.

(E) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(F) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(ii) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-691 on the effective date that the facility becomes subject to the provisions of WAC 173-303-691 or 40 C.F.R. Part 265 Subpart BB incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 C.F.R. 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 C.F.R. section 264.1035 (b)(3).

(iv) Documentation that demonstrates compliance with the equipment standards in 40 C.F.R. sections 264.1052 to 264.1059. This documentation will contain the records required under 40 C.F.R. 264.1064. The department may request further documentation before deciding if compliance has been demonstrated.

(v) Documentation to demonstrate compliance with 40 C.F.R. 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 C.F.R. 264.1033(j).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device ((~~design~~)) information. The design analysis must address the vent stream characteristics and control device operation parameters as specified in 40 C.F.R. 264.1035 (b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

(l) Special Part B information requirements for drip pads.

Except as otherwise provided by WAC 173-303-600(3), owners and operators of dangerous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

(i) A list of hazardous wastes placed or to be placed on each drip pad.

(ii) If an exemption is sought to WAC 173-303-645, as provided by WAC 173-303-645(1), detailed plans and an engineering report describing how the requirements of WAC 173-303-645 (1)(b) will be met.

(iii) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of WAC 173-303-675(4), including the as-built

drawings and specifications. This submission must address the following items as specified in WAC 173-303-675(2):

(A) The design characteristics of the drip pad;

(B) The liner system;

(C) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

(D) Practices designed to maintain drip pads;

(E) The associated collection system;

(F) Control of run-on to the drip pad;

(G) Control of runoff from the drip pad;

(H) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

(I) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(J) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;

(K) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;

(L) Provisions for ensuring that collection and holding units associated with the run-on and runoff control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

(M) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(N) A description of how each drip pad, including appurtenances for control of run-on and runoff, will be inspected in order to meet the requirements of WAC 173-303-675(4). This information should be included in the inspection plan submitted under (a)(v) of this subsection.

(O) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of WAC 173-303-675 (4)(a) through (f).

(P) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under WAC 173-303-675 (6)(a). For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665(6) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection.

(m) Specific Part B information requirements for air emission controls for tanks, surface impoundments, and containers (Subpart CC) at 40 C.F.R. 270.27 are incorporated by reference.

(n) When an owner or operator of a cement ((~~or~~)) kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler or hydrochloric acid production furnace demonstrates compliance with the air

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

(o) For post-closure permits, the owner or operator is required to submit only the information specified in (a)(i), (iv), (v), (vi), (xi), (xiii), (xiv), (xvi), (xviii), (xx), (xxiii) of this subsection, unless the department determines that additional information from (a), (c), (d), (e), (g), and (h) of this subsection is necessary. The owner or operator is required to submit the same information when an alternative authority is used in lieu of a post-closure permit as provided in WAC 173-303-800(12).

(5) Construction. A person may begin physical construction of a new facility, or of new portions of an existing facility if the new portions would amount to reconstruction under interim status (WAC 173-303-805(7)), only after complying with WAC 173-303-281, submitting Part A and Part B of the permit application and receiving a final facility permit. All permit applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(6) Reapplications. Any dangerous waste facility with an effective final facility permit must submit a new application one hundred eighty days prior to the expiration date of the effective permit, unless the department grants a later date provided that such date will never be later than the expiration date of the effective permit.

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

(7) Continuation of expiring permits.

(a) When the owner/operator submits a timely application for a final facility permit and the application is determined by the department to be complete pursuant to subsection (8) of this section, the facility is allowed to continue operating under the expiring or expired permit until the effective date of the new permit.

(b) When the facility is not in compliance with the conditions of the expiring or expired permit, the department may choose to do any of the following:

(i) Initiate enforcement action based upon the permit which has been continued;

(ii) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(iii) Issue a new permit with appropriate conditions; and/or

(iv) Take other actions authorized by this chapter.

(8) Completeness. The department will not issue a final facility permit before receiving a complete application, except for permits by rule or emergency permits. An application for a permit is complete when the department receives an application form and any supplemental information which are completed to the department's satisfaction. The

department may consider an application for a permit to be complete notwithstanding the failure of the owner or operator to submit the exposure information described in subsection (12) of this section. The department may deny a permit for the active life of a dangerous waste management facility or unit before receiving a complete application for a permit.

(9) Recordkeeping. Applicants must keep records of all data used to complete the permit applications, and any supplemental information submitted to the department for a period of at least three years from the date the application is signed.

(10) General permit conditions. All final facility permits will contain general permit conditions described in WAC 173-303-810.

(11) Permit duration.

(a) Final facility permits will be effective for a fixed term not to exceed ten years.

(b) The department may issue any final facility permit for a duration that is less than the full allowable term.

(c) The term of a final facility permit will not be extended beyond ten years, unless otherwise authorized under subsection (7) of this section.

(d) Each permit for a land disposal facility will be reviewed by the department five years after the date of permit issuance or reissuance and will be modified as necessary, as provided in WAC 173-303-830(3).

(12) Exposure information. Any part B permit application submitted by an owner or operator of a facility that stores, treats, or disposes dangerous waste in a surface impoundment or a landfill must be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to dangerous wastes or dangerous constituents through releases related to the unit. At a minimum, such information must address:

(a) Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

(b) The potential pathways of human exposure to dangerous waste or constituents resulting from the releases described under (a) of this subsection; and

(c) The potential magnitude and nature of the human exposure resulting from such releases.

(13) Grounds for denial. A permit application will be denied pursuant to the procedures in WAC 173-303-840 if it is determined that the proposed location and/or activity endangers public health and the environment as demonstrated by the permit applicant's failure to satisfy the performance standards of WAC 173-303-283.

(14) Permit changes. All final facility permits will be subject to the requirements of permit changes, WAC 173-303-830.

(15) Procedures for decision making. Issuance of final facility permits will be subject to the procedures for decision making described in WAC 173-303-840.

(16) Other requirements for final recycling facility permits. In lieu of issuing a final recycling facility permit, the department may, after providing opportunity for public comment in accordance with WAC 173-303-840, defer to a permit already issued under other statutory authority administered by the department (such as the State Water Pollution Control Act, chapter 90.48 RCW, the State Clean Air Act, chapter 70.94 RCW, etc.) which incorporates the requirements of this sec-

tion, and WAC 173-303-500 through 173-303-525 for recycling facilities.

(17)(a) If the department concludes, based on one or more of the factors listed in (a)(i) through (ix) of this subsection, that compliance with the standards of 40 C.F.R. part 63, subpart EEE alone may not be protective of human health or the environment, the department will require the additional information or assessment(s) necessary to determine whether additional controls are necessary to ensure protection of human health and the environment. This includes information necessary to evaluate the potential risk to human health and/or the environment resulting from both direct and indirect exposure pathways. The department may also require a permittee or applicant to provide information necessary to determine whether such an assessment(s) should be required.

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

(i) Particular site-specific considerations such as proximity to receptors (such as schools, hospitals, nursing homes, day care centers, parks, community activity centers, or other potentially sensitive receptors), unique dispersion patterns, etc.;

(ii) Identities and quantities of emissions of persistent, bioaccumulative or toxic pollutants considering enforceable controls in place to limit those pollutants;

(iii) Identities and quantities of nondioxin products of incomplete combustion most likely to be emitted and to pose significant risk based on known toxicities (confirmation of which should be made through emissions testing);

(iv) Identities and quantities of other off-site sources of pollutants in proximity of the facility that significantly influence interpretation of a facility-specific risk assessment;

(v) Presence of significant ecological considerations, such as the proximity of a particularly sensitive ecological area;

(vi) Volume and types of wastes, for example wastes containing highly toxic constituents;

(vii) Other on-site sources of hazardous air pollutants that significantly influence interpretation of the risk posed by the operation of the source in question;

(viii) Adequacy of any previously conducted risk assessment, given any subsequent changes in conditions likely to affect risk; and

(ix) Such other factors as may be appropriate.

(b) Reserved.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-810 General permit conditions. (1) Purpose and applicability. This section sets forth the general permit conditions that are applicable to all permits, except interim status permits and permits by rule, to assure compliance with this chapter. If the conditions of this section are incorporated in a permit by reference, a specific citation to this section must be given in the permit.

(2) Duty to comply. The permittee must comply with all conditions of his permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee need not comply with the conditions of his permit to the extent and for the duration such noncompliance is authorized in an emergency permit.

(3) Duty to reapply. If the permittee wishes to continue an activity regulated by the permit after its expiration date, the permittee must apply for and obtain a new permit.

(4) Duty to halt or reduce activity. A permittee who has not complied with his permit, and who subsequently is subject to enforcement actions, may not argue that it would have been necessary to halt or reduce the permitted activities in order to maintain compliance with the conditions of the permit.

(5) Duty to mitigate. The permittee must take all steps required by the department to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.

(6) Proper operation and maintenance. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(7) Permit actions. The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance, does not stay any permit condition.

(8) Effect of a permit.

(a) Compliance with a final facility permit during its term constitutes compliance for the purpose of enforcement with chapter 173-303 WAC except for permit modifications and those requirements not included in the permit that:

(i) Become effective by statute;

(ii) Are adopted under 40 C.F.R. Part 268 restricting the placement of dangerous waste in or on the land;

(iii) Are adopted under WAC 173-303-650 through 173-303-665 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of WAC 173-303-830 Class [1]1 permit modifications; or

(iv) Are adopted under 40 C.F.R. Subparts AA, BB, or CC which are incorporated by reference at WAC 173-303-400 (3)(a) limiting air emissions.

(b) <u>A permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in WAC 173-303-830 (3) and (5), or the permit may be modified upon the request of the permittee as set forth in WAC 173-303-830(4).</u>

(c) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

((~~(c)~~)) (d) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or regulations.

(9) Duty to provide information. The permittee must furnish to the department, within a reasonable time, any information which it may request to determine whether cause exists for modifying, revoking and reissuing, or terminating a permit, or to determine compliance with a permit. The permittee must also furnish to the department, upon request, copies of records required to be kept by the permit.

(10) Inspection and entry. The permittee must allow representatives of the department, upon the presentation of proper credentials, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by chapter 173-303 WAC, any substances or parameters at any location.

(11) Monitoring and monitoring records.

(a) Reserve.

(b) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

(c) The permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by WAC 173-303-380 (1)(q), and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at any time.

(d) Records of monitoring information must include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(e) The permittee must maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the facility, and for disposal facilities for the post-closure period as well.

(12) Signatory requirement. All applications, reports, or information submitted to the department must be signed in accordance with this subsection and must be certified according to subsection (13) of this section.

(a) Applications. When a dangerous waste facility is owned by one person, but is operated by another person, then the operator will be the permit applicant and responsible for developing the permit appli-

cation 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 submit-

ting 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 or other means that establish proof of receipt (including applicable electronic means), a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and either

(Note: In certifying construction or modification, the independent qualified registered professional engineer is responsible only for certifying those portions of the facility which are identified in chapter 173-303 WAC as specifically requiring certification by an independent qualified registered professional engineer.)

(ii) The department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(iii) Within fifteen days of the date of submission of the letter, the permittee has not received notice from the department of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of dangerous waste.

(b) Anticipated noncompliance. The permittee must give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of dangerous waste; and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the modified portion of the facility except as provided in WAC 173-303-830(4).

(c) Transfers. The permit is not transferable to any person except after notice to the department. The department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

(d) Monitoring reports. Monitoring results (including monitoring of the facility's impacts as required by the applicable sections of this chapter) must be reported at the intervals specified elsewhere in the permit.

(e) Compliance schedules. Reports of permit compliance or noncompliance or any progress reports on interim and final permit require-

ments contained in any compliance schedule must be submitted no later than fourteen days following each scheduled date.

(f) Immediate reporting. The permittee must immediately report any noncompliance which may endanger health or the environment. Information must be provided orally to the department as soon as the permittee becomes aware of the circumstances. A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances provided that the department may waive the written submission requirement in favor of a written report, to be submitted within fifteen days. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Information which must be reported immediately must include:

(i) Release of dangerous waste that may cause an endangerment to drinking water supplies or ground or surface waters;

(ii) Any information of a release or discharge of dangerous waste, fire, or explosion from the permitted facility which could threaten the environment or human health outside the facility;

(iii) The following description of any such occurrence:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

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

(E) The extent of injuries, if any;

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

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Other noncompliance. The permittee must report all instances of noncompliance not reported under (d), (e), and (f) of this subsection, at the time monitoring reports are submitted. The reports must contain the information listed in (f) of this subsection.

(h) Other information. Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, he must promptly submit this information.

(i) Other reports. In addition, the following reports are required when appropriate:

(i) Manifest discrepancy report as required by WAC 173-303-370(5);

(ii) Unmanifested waste report as required by WAC 173-303-390(1); and

(iii) Annual report as required by WAC 173-303-390(2).

(15) Confidentiality.

(a) Information submitted by the owner/operator of a facility identified as confidential will be treated in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(b) Proprietary information can be held confidential if:

(i) The processes are unique to the owner/operator's business or the owner/operator's competitive position may be adversely affected if the information is released to the public or to a competitor; and

(ii) The director determines that granting the owner/operator's request is not detrimental to the public interest and is in accord with the policies and purposes of chapter 43.21A RCW.

(c) Claims of confidentiality for permit application information must be substantiated at the time the application is submitted and in the manner prescribed in the application instructions. Claims of confidentiality for the name and address of any permit applicant will be denied.

(d) If a submitter does not provide substantiation, the department will notify the owner/operator by certified mail of the requirement to do so. If the department does not receive the substantiation within ten days after the submitter receives the notice, the department will place the unsubstantiated information in the public file.

(e) The department will determine if the owner/operator's request meets the confidential information criteria.

(16) General permit conditions. Information repository. The director may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in WAC 173-303-281 (6)(b). The information repository will be governed by the provisions in WAC 173-303-281 (6)(c) through (f).

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

WAC 173-303-811 Permits for boilers and industrial furnaces burning hazardous waste. The introductory paragraph of 40 C.F.R. 270.66 is incorporated by reference. It applies to an owner or operator of a cement ((~~or~~)) kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace that demonstrates compliance with the air emission standards and limitations in 40 C.F.R. part 63, subpart EEE.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-830 Permit changes. (1) Purpose and applicability. This section describes the types of permit changes that may be made to all permits issued by the director. This section does not apply to permits by rule or interim status permits.

(2) Transfer of permits.

(a) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under (b) of this subsection or subsection (3) of this section) to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate act.

(b) Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the director in accordance with subsection (4) of this section. The new owner or operator must submit a revised permit application no later than ninety days prior to the scheduled change. A written agreement containing a specific date for transfer of permit responsibility be-

tween the current and new permittees must also be submitted to the director. When a transfer of ownership or operational control occurs, the old owner or operator must comply with the requirements of WAC 173-303-620 (Financial requirements) until the new owner or operator has demonstrated that he or she is complying with the financial requirements. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change of ownership or operational control of the facility. Upon demonstration to the director by the new owner or operator of compliance with the financial requirements, the director will notify the old owner or operator that he or she no longer needs to comply with the financial requirements as of the date of demonstration.

(3) Modification or revocation and reissuance of permits. When the director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit, receives a request for revocation and reissuance, or conducts a review of the permit file), the director may determine whether or not one or more of the causes listed in (a) and (b) of this subsection for modification or revocation and reissuance or both exist. If cause exists, the director may modify or revoke and reissue the permit accordingly, subject to the limitations of (c) of this subsection, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. All other aspects of the existing permit remain in effect for the duration of the unmodified permit. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. During any revocation and reissuance proceeding, the permittee must comply with all conditions of the existing permit until a new final permit is reissued. If cause does not exist under this subsection, the director will not modify or revoke and reissue the permit, except on request of the permittee. If a permit modification is requested by the permittee, the director will approve or deny the request according to the procedures of subsection (4) of this section. Otherwise, a draft permit must be prepared and public review provided in accordance with WAC 173-303-840.

(a) Causes for modification. The following are causes for modification, but not revocation and reissuance, of permits; the following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees:

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(ii) Information. Permits may be modified during their terms if the director receives information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance;

(iii) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through adoption of new or amended standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy;

(v) Notwithstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the director under 173-303-806 (11)(d), the director will modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in this chapter.

(b) Causes for modification or revocation and reissuance. The following are causes to modify, or alternatively, revoke and reissue a permit:

(i) Cause exists for termination under WAC 173-303-830(5) for final facility permits, and the director determines that modification or revocation and reissuance is appropriate; or

(ii) The director has received notification of a proposed transfer of the permit.

(c) Reserve.

(4) Permit modification at the request of the permittee.

(a) Class 1 modifications.

(i) Except as provided in (a)(ii) of this subsection, the permittee may put into effect Class 1 modifications listed in Appendix I of this section under the following conditions:

(A) The permittee must notify the director concerning the modification by certified mail or other means that establish proof of ((~~delivery~~)) receipt (including applicable electronic means) within seven calendar days after the change is put into effect. This notice must specify the changes being made to permit conditions or supporting documents referenced by the permit and must explain why they are necessary. Along with the notice, the permittee must provide the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(B) The permittee must send a notice of the modification to all persons on the facility mailing list, maintained by the director in accordance with WAC 173-303-840 (3)(e)(i)(D), and the appropriate units of state and local government, as specified in WAC 173-303-840 (3)(e)(i)(E). This notification must be made within ninety calendar days after the change is put into effect. For the Class 1 modifications that require prior director approval, the notification must be made within ninety calendar days after the director approves the request.

(C) Any person may request the director to review, and the director may for cause reject, any Class 1 modification. The director must inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee must comply with the original permit conditions.

(ii) Class 1 permit modifications identified in Appendix I by [1]1 may be made only with the prior written approval of the director.

(iii) For a Class 1 permit modification, the permittee may elect to follow the procedures in (b) of this subsection for Class 2 modifications instead of the Class 1 procedures. The permittee must inform the director of this decision in the notice required in (b)(i) of this subsection.

(b) Class 2 modifications.

(i) For Class 2 modifications, listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 2 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(E) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, in accordance with (b)(v) of this subsection, and the name and address of a departmental contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting held in accordance with (b)(iv) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (b)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the public notice.

(vi)(A) No later than ninety days after receipt of the notification request, the director must:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request;

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3;

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days; or

(V) Notify the permittee that he or she will decide on the request within the next thirty days.

(B) If the director notifies the permittee of a thirty-day extension for a decision, the director must, no later than one hundred twenty days after receipt of the modification request:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request; or

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3.

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days.

(C) If the director fails to make one of the decisions specified in (b)(vi)(B) of this subsection by the one hundred twentieth day after receipt of the modification request, the permittee is automatically authorized to conduct the activities described in the modification request for up to one hundred eighty days, without formal departmental action. The authorized activities must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 C.F.R. Part 265 (as referenced by WAC 173-303-400). If the director approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provided for in (b)(vi)(A), (B), or (C) of this subsection, such action cancels the temporary or automatic authorization.

(D)(I) In the case of an automatic authorization under (b)(vi)(C) of this subsection, or a temporary authorization under (b)(vi)(A)(IV) or (B)(IV) of this subsection, if the director has not made a final approval or denial of the modification request by the date fifty days prior to the end of the temporary or automatic authorization, the permittee must within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that:

(AA) The permittee has been authorized temporarily to conduct the activities described in the permit modification request; and

(BB) Unless the director acts to give final approval or denial of the request by the end of the authorization period, the permittee will receive authorization to conduct such activities for the life of the permit.

(II) If the owner/operator fails to notify the public by the date specified in (b)(vi)(D)(I) of this subsection, the effective date of the permanent authorization will be deferred until fifty days after the owner/operator notifies the public.

(E) Except as provided in (b)(vi)(G) of this subsection, if the director does not finally approve or deny a modification request before the end of the automatic or temporary authorization period or reclassify the modification as a Class 3, the permittee is authorized to conduct the activities described in the permit modification request for the life of the permit unless modified later under subsection (3) or (4) of this section. The activities authorized under this subsection (b)(vi)(E) must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 C.F.R. Part 265 (as referenced by WAC 173-303-400).

(F) In making a decision to approve or deny a modification request, including a decision to issue a temporary authorization or to reclassify a modification as a Class 3, the director must consider all

written comments submitted during the public comment period and must respond in writing to all significant comments in his or her decision.

(G) With the written consent of the permittee, the director may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

(vii) The director may deny or change the terms of a Class 2 permit modification request under (b)(i) through (iii) of this subsection for the following reasons:

(A) The modification request is incomplete;

(B) The requested modification does not comply with the appropriate requirements of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680 or other applicable requirements; or

(C) The conditions of the modification fail to protect human health and the environment.

(viii) The permittee may perform any construction associated with a Class 2 permit modification request beginning sixty days after the submission of the request unless the director establishes a later date for commencing construction and informs the permittee in writing before day sixty.

(c) Class 3 modifications.

(i) For Class 3 modifications listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 3 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(D) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, and a name and address of an agency contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting on the modification request, in accordance with (c)(4) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (c)(ii) of this subsection and no later than fifteen days before the close of

the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided at least sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the notice.

(vi) After the conclusion of the sixty-day comment period, the director must grant or deny the permit modification request according to the permit modification procedures of WAC 173-303-840. In addition, the director must consider and respond to all significant written comments received during the sixty-day comment period.

(d) Other modifications.

(i) In the case of modifications not explicitly listed in Appendix I of this section, the permittee may submit a Class 3 modification request to the department, or he or she may request a determination by the director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, he or she must provide the department with the necessary information to support the requested classification.

(ii) The director will make the determination described in (d)(i) of this subsection as promptly as practicable. In determining the appropriate class for a specific modification, the director will consider the similarity of the modification to other modifications codified in Appendix I and the following criteria:

(A) Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the director may require prior approval.

(B) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to:

(I) Common variations in the types and quantities of the wastes managed under the facility permit;

(II) Technological advancements; and

(III) Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

(C) Class 3 modifications substantially alter the facility or its operation.

(e) Temporary authorizations.

(i) Upon request of the permittee, the director may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection. Temporary authorizations must have a term of not more than one hundred eighty days.

(ii)(A) The permittee may request a temporary authorization for:

(I) Any Class 2 modification meeting the criteria in (e)(iii)(B) of this subsection; and

(II) Any Class 3 modification that meets the criteria in (e)(iii)(B)(I) or (II) of this subsection; or that meets the criteria in (e)(iii)(B)(III) through (V) of this subsection and provides improved management or treatment of a dangerous waste already listed in the facility permit.

(B) The temporary authorization request must include:

(I) A description of the activities to be conducted under the temporary authorization;

(II) An explanation of why the temporary authorization is necessary; and

(III) Sufficient information to ensure compliance with the standards in WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(C) The permittee must send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the director and to appropriate units of state and local governments as specified in WAC 173-303-840 (3)(e)(i)(D). This notification must be made within seven days of submission of the authorization request.

(iii) The director will approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the director must find:

(A) The authorized activities are in compliance with the standards of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(B) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(I) To facilitate timely implementation of closure or corrective action activities;

(II) To allow treatment or storage in tanks, containers, or in containment buildings in accordance with 40 C.F.R. Part 268;

(III) To prevent disruption of ongoing waste management activities;

(IV) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(V) To facilitate other changes to protect human health and the environment.

(iv) A temporary authorization may be reissued for one additional term of up to one hundred eighty days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

(A) The reissued temporary authorization constitutes the director's decision on a Class 2 permit modification in accordance with (b)(vi)(A)(IV) or (B)(IV) of this subsection; or

(B) The director determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of (c) of this subsection are conducted.

(f) Public notice and appeals of permit modification decisions.

(i) The director will notify persons on the facility mailing list and appropriate units of state and local government within ten days of any decision under this section to grant or deny a Class 2 or 3 permit modification request. The director will also notify such persons within ten days after an automatic authorization for a Class 2 modification goes into effect under (b)(vi)(C) or (E) of this subsection.

(ii) The director's decision to grant or deny a Class 2 or 3 permit modification request under this section may be appealed under the permit appeal procedures of WAC 173-303-845.

(iii) An automatic authorization that goes into effect under (b)(vi)(C) or (E) of this subsection may be appealed under the permit appeal procedures of WAC 173-303-845; however, the permittee may contin-

ue 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 C.F.R. 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 C.F.R. Part 265 for groundwater monitoring and financial responsibility (as referenced in WAC 173-303-400) on the date twelve months after the effective date of the rule identifying or listing the waste as dangerous, or regulating the unit as a dangerous waste management unit. If the owner or operator fails to certify compliance with all these requirements, he or she will lose authority to operate under this section.

(ii) New wastes or units added to a facility's permit under this subsection do not constitute expansions for the purpose of the twenty-five percent capacity expansion limit for Class 2 modifications.

(h) Military dangerous waste munitions treatment and disposal. The permittee is authorized to continue to accept waste military munitions notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if:

(i) The facility was in existence as a dangerous waste facility, and the facility was already permitted to handle the waste military munitions, on the date when the waste military munitions became subject to dangerous waste regulatory requirements;

(ii) On or before the date when the waste military munitions become subject to dangerous waste regulatory requirements, the permittee submits a Class 1 modification request to remove or amend the permit provision restricting the receipt of off-site waste munitions; and

(iii) The permittee submits a complete Class 2 modification request within one hundred eighty days of the date when the waste military munitions became subject to dangerous waste regulatory requirements.

(i) Permit modification list. The director must maintain a list of all approved permit modifications and must publish a notice once a year in a statewide newspaper that an updated list is available for review.

(j) *Combustion facility changes to meet 40 C.F.R. part 63 MACT standards*. (Note that 40 C.F.R. part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63,

you must get an air permit from ecology or the local air authority.) The following procedures apply to hazardous waste combustion facility permit modifications requested under Appendix I of this section, section L.9.

(i) Facility owners or operators must have complied with the Notification of Intent to Comply requirements of 40 C.F.R. 63.1210 that were in effect prior to October 11, 2000 (see 40 C.F.R. Part 63 sections 63.1200 - 63.1499 revised as of July 1, 2000) in order to request a permit modification under this section for the purpose of technology changes needed to meet the standards under 40 C.F.R. 63.1203, 63.1204, and 63.1205.

(ii) Facility owners or operators must comply with the Notification of Intent to Comply (NIC) requirements of 40 C.F.R. 63.1210(b) and 63.1212(a) before a permit modification can be requested under this subsection for the purpose of technology changes needed to meet the 40 C.F.R. 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221 standards promulgated on October 12, 2005.

(iii) If the department does not approve or deny the request within ninety days of receiving it, the request will be deemed approved. The director may extend this ninety-day deadline one time for up to thirty days by notifying the facility owner or operator.

(k) Waiver of dangerous waste permit conditions in support of transition to the 40 C.F.R. part 63 MACT standards. (Note that 40 C.F.R. part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63, you must get an air permit from ecology or the local air authority.)

(i) You may request to have specific Hazardous Waste Management Act and dangerous waste regulation operating and emissions limits waived by submitting a Class 1 permit modification request under Appendix I of this section, section L(10). You must:

(A) Identify the specific dangerous waste permit operating and emissions limits which you are requesting to waive;

(B) Provide an explanation of why the changes are necessary in order to minimize or eliminate conflicts between the dangerous waste permit and MACT compliance; and

(C) Discuss how the revised provisions will be sufficiently protective.

(D) The department will approve or deny the request within thirty days of receipt of the request. The department may, at its discretion, extend this thirty-day deadline one time for up to thirty days by notifying the facility owner or operator.

(ii) To request this modification in conjunction with MACT performance testing where permit limits may only be waived during actual test events and pretesting, as defined under 40 C.F.R. 63.1207 (h)(2)(i) and (ii), for an aggregate time not to exceed seven hundred twenty hours of operation (renewable at the discretion of the department) you must:

(A) Submit your modification request to the director at the same time you submit your test plans to the department; and

(B) The department may elect to approve or deny the request contingent upon approval of the test plans.

APPENDIX I

Modifications	Class
A. General Permit Provisions	
1. Administrative and informational changes . .	1

Modifications	Class
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
8. Changes to remove permit conditions that are no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the facility)	[1]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

Modifications	Class
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. Groundwater Protection	
1. Changes to wells:	
a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted groundwater 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 groundwater 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 groundwater quality between upgradient and downgradient wells has occurred, with prior approval of the director	[1]1
4. Changes in point of compliance	2
5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):	
a. As specified in the groundwater 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)(h), 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)(g)(iv) and (10)	3
b. Changes to a compliance monitoring program as required by WAC 173-303-645 (10)(j), unless otherwise specified in this appendix	2
8. Corrective action program:	

Modifications	Class
a. Addition of a corrective action program as required by WAC 173-303-645 (10)(h)(ii) and (11)	3
b. Changes to a corrective action program as required by WAC 173-303-645 (11)(h), unless otherwise specified in this appendix	2
D. Closure	
1. Changes to the closure plan:	
a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the director	[1]1
b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the director	[1]1
c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the director	[1]1
d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the director	[1]1
e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix	2
f. Extension of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive nondangerous wastes after final receipt of dangerous wastes under WAC 173-303-610 (4)(d) and (e)	2
2. Creation of a new landfill unit as part of closure	3
3. Addition of the following new units to be used temporarily for closure activities:	
a. Surface impoundments	3
b. Incinerators	3
c. Waste piles that do not comply with WAC 173-303-660 (1)(c)	3
d. Waste piles that comply with WAC 173-303-660 (1)(c)	2
e. Tanks or containers (other than specified below)	2
f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the director	[1]1
g. Staging piles	2
E. Post-Closure	
1. Changes in name, address, or phone number of contact in post-closure plan	1
2. Extension of post-closure care period	2
3. Reduction in the post-closure care period . .	3
4. Changes to the expected year of final closure, where other permit conditions are not changed	1

Modifications	Class
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 C.F.R. 268.8 (a)(2)(ii), with prior approval of the director. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1
Note: The RCRA section reference above, 40 C.F.R. 268.8(a)(2)(ii), is no longer in the RCRA regulations. It was removed on April 8, 1996 (61 FR 15599).	
2.	
a. Modification of a container unit without increasing the capacity of the unit	2
b. Addition of a roof to a container unit without alteration of the containment system	1
3. Storage of different wastes in containers:	
a. That require additional or different management practices from those authorized in the permit, except as provided in F(4) below	3
b. That do not require additional or different management practices from those authorized in the permit	2
Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.	
4. Storage or treatment of different wastes in containers:	
a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 C.F.R. 268.8 (a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1

Modifications	Class
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
Note: The RCRA section reference above, 40 C.F.R. 268.8(a)(2)(ii), is no longer in the RCRA regulations. It was removed on April 8, 1996 (61 FR 15599).	
G. Tanks	
1.	
a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G (1)(c), G (1)(d), and G (1)(e) below	3
b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G (1)(d) and G (1)(e) below	2
c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation	2
d. After prior approval of the director, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation	[1]1
e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 C.F.R. 268.8 (a)(2)(ii), with prior approval of the director. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1
Note: The RCRA section reference above, 40 C.F.R. 268.8(a)(2)(ii), is no longer in the RCRA regulations. It was removed on April 8, 1996 (61 FR 15599).	
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.	

Modifications	Class
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 C.F.R. 268.8 (a)(2)(ii). The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1
Note: The RCRA section reference above, 40 C.F.R. 268.8(a)(2)(ii), is no longer in the RCRA regulations. It was removed on April 8, 1996 (61 FR 15599).	
(((~~d~~))) 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

Modifications	Class
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 C.F.R. 268.8 (a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 C.F.R. 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
Note: The RCRA section reference above, 40 C.F.R. 268.8(a)(2)(ii), is no longer in the RCRA regulations. It was removed on April 8, 1996 (61 FR 15599).	
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 C.F.R. 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]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

Modifications	Class
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, runoff control, or final cover system	3
4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, runoff 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 C.F.R. 268.8 (a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 C.F.R. 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 C.F.R. 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]1
8. Changes in response action plan:	

Modifications	Class
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 runoff 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

Modifications	Class
13. Changes in sampling, analysis, or statistical procedure	2
14. Changes in land treatment demonstration program prior to or during the demonstration	2
15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the director's prior approval has been received	2
16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the director	2
17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration	3
18. Changes in vegetative cover requirements for closure	2
L. Incinerators, Boilers, and Industrial Furnaces	
1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3
2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	2
3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove $HC1/C1_2$, 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 director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3

Modifications	Class
4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The director may require a new trial burn to demonstrate compliance with the regulatory performance standards	2
5. Operating requirements:	
a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3
b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls	3
c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit	2
6. Burning different wastes:	
a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means . .	3
b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit	2
Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.	
7. Shakedown and trial burn:	
a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn . . .	2
b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the director	[1]1

Modifications	Class
c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the director	[1]1
d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the director	[1]1
8. Substitution of an alternate type of nondangerous fuel that is not specified in the permit	1
9. Technology changes needed to meet standards under 40 C.F.R. part 63 (subpart EEE-National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), that are incorporated by reference at WAC 173-400-075 (5)(a) provided the procedures of WAC 173-303-830 (4)(j) are followed.	[1]1
10. Changes to dangerous waste permit provisions needed to support transition to 40 C.F.R. part 63 (Subpart EEE-National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors) provided the procedures of (4)(k) of this section are followed.	[1]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 173-303-64640, 173-303-64650, 173-303-64660, and 173-303-64670	3
2. Approval of a temporary unit or time extension for a temporary unit pursuant to WAC 173-303-64680	2

Modifications	Class
3. Approval of a staging pile or staging pile operating term extension	2
4. Modification to incorporate a corrective action order issued pursuant to MTCA	3
5. Modification or amendment of a corrective action order issued pursuant to MTCA when the MTCA public participation requirements are met and order has already been incorporated by reference into the permit.	1
O. Burden Reduction	
1. Development of one contingency plan based on Integrated Contingency Plan Guidance pursuant to WAC 173-303-350(2) . .	1
2. Changes to detection and compliance monitoring program pursuant to WAC 173-303-645 (9)(d), (g)(ii) and (iii), and 173-303-645 (10)(f) and (g) . .	1

[1]Class 1 modifications requiring prior Agency approval

(5) Permit termination. The director will follow the applicable procedures in WAC 173-303-840, procedures for decision making, in terminating any permit. The following are causes for terminating a permit during its term or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers public health or the environment and can only be regulated to acceptable levels by permit modification or termination.

AMENDATORY SECTION (Amending WSR 04-24-065, filed 11/30/04, effective 1/1/05)

WAC 173-303-841 Integration with maximum achievable control technology (MACT) standards. 40 C.F.R. 270.235, Options for incinerators ((~~and~~)) , cement ((~~and~~)) kilns, lightweight aggregate kilns, solid fuel boilers, liquid fuel boilers and hydrochloric acid production furnaces to minimize emissions from startup, shutdown, and malfunction events, is incorporated by reference. The incorporated provision is 40 C.F.R. Part 270 Subpart I, Integration with maximum achievable control technology (MACT) standards.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-9903 Discarded chemical products list.

Discarded Chemical Products List

"P" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for acute toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Dangerous Waste Number.

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicard sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indo1-5-yl methylcarbamate ester (1:1)
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl- 1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P189	55285-14-8	Carbosulfan
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta, 6beta,6aalpha,7beta, 7aalpha)-
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

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	[1]534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy] phenyl]-
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P001	((~~1~~)) [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%
P001	((~~1~~)) [1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P002	591-08-2	Acetamide, -(aminothioxomethyl)-
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P003	107-02-8	2-Propenal
P004	309-00-2	Aldrin

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
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)-
P005	107-18-6	Allyl alcohol
P005	107-18-6	2-Propen-1-ol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P008	504-24-5	4-Aminopyridine
P008	504-24-5	4-Pyridinamine
P009	131-74-8	Ammonium picrate (R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	7778-39-4	Arsenic acid H3 AsO4
P011	1303-28-2	Arsenic oxide As2 O5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic oxide As2 O3
P012	1327-53-3	Arsenic trioxide
P013	542-62-1	Barium cyanide
P014	108-98-5	Benzenethiol
P014	108-98-5	Thiophenol
P015	7440-41-7	Beryllium powder
P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis[chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN)2
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride
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
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6- dinitrophenol
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-28-6	Arsonous dichloride, phenyl-
P036	696-28-6	Dichlorophenylarsine

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P037	60-57-1	Dieldrin
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)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl amino)-2-oxoethyl] ester
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl]oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine,alpha,alpha-dimethyl-
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	534-52-1	4,6-Dinitro-o-cresol, & salts
P047	534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide[(H2 N)C(S)]2 NH
P050	115-29-7	Endosulfan
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
P051	((~~1~~)) 172-20-8	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
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P054	151-56-4	Aziridine
P054	151-56-4	Ethyleneimine
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P058	62-74-8	Fluoroacetic acid, sodium salt
P059	76-44-8	Heptachlor
P059	76-44-8	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
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)-
P060	465-73-6	Isodrin
P062	757-58-4	Hexaethyl tetraphosphate
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P064	624-83-9	Methane, isocyanato-
P064	624-83-9	Methyl isocyanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P065	628-86-4	Mercury fulminate (R,T)
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P066	16752-77-5	Methomyl
P067	75-55-8	Aziridine, 2-methyl-
P067	75-55-8	1,2-Propylenimine
P068	60-34-4	Hydrazine, methyl-
P068	60-34-4	Methyl hydrazine
P069	75-86-5	2-Methyllactonitrile
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P070	116-06-3	Aldicarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P071	298-00-0	Methyl parathion
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl)ester
P072	86-88-4	alpha-Naphthylthiourea
P072	86-88-4	Thiourea, 1-naphthalenyl-
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	54-11-5	Nicotine, & salts
P075	((~~1~~)) [1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P076	10102-43-9	Nitric oxide
P076	10102-43-9	Nitrogen oxide NO
P077	100-01-6	Benzenamine, 4-nitro-
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P078	10102-44-0	Nitrogen oxide NO2
P081	55-63-0	Nitroglycerine (R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P082	62-75-9	Methanamine, -methyl-N-nitroso-
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P084	4549-40-0	Vinylamine, -methyl-N-nitroso-
P085	152-16-9	Diphosphoramide, octamethyl-
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	Endothall
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P089	56-38-2	Parathion
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl)ester
P092	62-38-4	Mercury, (acetato-O)phenyl-
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P093	103-85-5	Thiourea, phenyl-
P094	298-02-2	Phorate
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl]ester
P095	75-44-5	Carbonic dichloride
P095	75-44-5	Phosgene
P096	7803-51-2	Hydrogen phosphide
P096	7803-51-2	Phosphine
P097	52-85-7	Famphur
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]O,O-dimethyl ester
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Argentate(1-), bis(cyano-C)-,potassium
P099	506-61-6	Potassium silver cyanide
P101	107-12-0	Ethyl cyanide
P101	107-12-0	Propanenitrile
P102	107-19-7	Propargyl alcohol
P102	107-19-7	2-Propyn-1-ol
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\ 157-24-9~~)) [1]57-24-9	Strychnidin-10-one, & salts
P108	((~~\1\ 157-24-9~~)) [1]57-24-9	Strychnine, & salts
P109	3689-24-5	Tetraethyldithiopyrophosphate
P109	3689-24-5	Thiodiphosphoric acid,tetraethyl ester
P110	78-00-2	Plumbane, tetraethyl-
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Diphosphoric acid, tetraethylester
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Methane, tetranitro-(R)
P112	509-14-8	Tetranitromethane (R)
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl2 O3
P114	12039-52-0	Selenious acid,dithallium(1+) salt
P114	12039-52-0	((~~Tetraethyldithiopyrophosphate~~)) Thallium(I) selenite
P115	7446-18-6	((~~Thiodiphosphoric acid,tetraethyl ester~~)) Sulfuric acid, dithallium(1+) salt
P115	7446-18-6	((~~Plumbane, tetraethyl-~~)) Thallium(I) sulfate
P116	79-19-6	((~~Tetraethyl lead~~)) Hydrazinecarbothioamide
P116	79-19-6	Thiosemicarbazide
P118	75-70-7	Methanethiol, trichloro-

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Ammonium vanadate
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V2O5
P120	1314-62-1	Vanadium pentoxide
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN)2
P122	1314-84-7	Zinc phosphide Zn3 P2, when present at concentrations greater than 10% (R,T)
P123	8001-35-2	Toxaphene
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,methylcarbamate
P127	1563-66-2	Carbofuran
P128	((~~315-8-4~~)) 315-18-4	Mexacarbate
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate(ester)
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime
P185	26419-73-8	Tirpate
P188	57-64-7	Benzoic acid, 2-hydroxy-,compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P188	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid,[(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P189	55285-14-8	Carbosulfan
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P190	1129-41-5	Metolcarb
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P191	644-64-4	Dimetilan
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P192	119-38-0	Isolan
P194	23135-22-0	Ethanimidthioic acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-, methylester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese,bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganesedimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-,methylcarbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methylcarbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-,methyl carbamate
P203	1646-88-4	Aldicarb sulfone
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl]oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester),(3aS-cis)-
P205	137-30-4	Zinc, bis (dimethylcarbamodithioato-S,S')-,
P205	137-30-4	Ziram

FOOTNOTE: [1] CAS Number given for parent compound only.

"U" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Dangerous Waste Number.

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	[1]94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,[1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (((~~I,T~~))) (I)
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-

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
((~~U202~~	~~[1]81-07-2~~	~~1,2-Benzisothiazol-3(2H)-one,1,1-dioxide, & salts~~))
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-ylester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-,ethyl ester
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gammaisomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine,hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl-

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]]bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino) -N-hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid,salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
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)

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester (I,T)
U373	122-42-9	Propham
U411	114-26-1	Propoxur
U387	52888-80-9	Prosulfocarb
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
((~~U202~~	~~[1]81-07-2~~	~~Saccharin, & salts~~))
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl

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

Alphabetical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
((~~U227~~)) U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl)phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
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

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U001	75-07-0	Acetaldehyde (I)
U001	75-07-0	Ethanal (I)
U002	67-64-1	Acetone (I)
U002	67-64-1	2-Propanone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U004	98-86-2	Ethanone, 1-phenyl-
U005	53-96-3	Acetamide, -9H-fluoren-2-yl-
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U007	79-06-1	Acrylamide
U007	79-06-1	2-Propenamide
U008	79-10-7	Acrylic acid (I)
U008	79-10-7	2-Propenoic acid (I)
U009	107-13-1	Acrylonitrile
U009	107-13-1	2-Propenenitrile
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)]-
U010	50-07-7	Mitomycin C
U011	61-82-5	Amitrole
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U012	62-53-3	Aniline (I,T)
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Auramine
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U015	115-02-6	Azaserine
U015	115-02-6	L-Serine, diazoacetate(ester)
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U017	98-87-3	Benzene, (dichloromethyl)-
U018	56-55-3	Benz[a]anthracene
U019	71-43-2	Benzenesulfonic acid chloride(C,R)
U020	98-09-9	Benzenesulfonyl chloride(C,R)
U021	92-87-5	Benzidine
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U022	50-32-8	Benzo[a]pyrene
U023	98-07-7	Benzene, (trichloromethyl)-
U023	98-07-7	Benzotrichloride (C,R,T)
U024	111-91-1	Dichloromethoxy ethane
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	111-44-4	Dichloroethyl ether
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U026	494-03-1	Chlornaphazin
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U027	108-60-1	Dichloroisopropyl ether
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester
U028	117-81-7	Diethylhexyl phthalate
U029	74-83-9	Methane, bromo-
U029	74-83-9	Methyl bromide
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U030	101-55-3	4-Bromophenyl phenyl ether
U031	71-36-3	1-Butanol (I)
U031	71-36-3	n-Butyl alcohol (I)
U032	13765-19-0	Calcium chromate
U032	13765-19-0	Chromic acid H2 CrO4, calcium salt
U033	353-50-4	Carbonic difluoride
U033	353-50-4	Carbon oxyfluoride (R,T)
U034	75-87-6	Acetaldehyde, trichloro-
U034	75-87-6	Chloral

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
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-
U037	108-90-7	Benzene, chloro-
U037	108-90-7	Chlorobenzene
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U041	106-89-8	Epichlorohydrin
U041	106-89-8	Oxirane, (chloromethyl)-
U042	110-75-8	2-Chloroethyl vinyl ether
U042	110-75-8	Ethene, (2-chloroethoxy)-
U043	75-01-4	Ethene, chloro-
U043	75-01-4	Vinyl chloride
U044	67-66-3	Chloroform
U044	67-66-3	Methane, trichloro-
U045	74-87-3	Methane, chloro- (I,T)
U045	74-87-3	Methyl chloride (I,T)
U046	107-30-2	Chloromethyl methyl ether
U046	107-30-2	Methane, chloromethoxy-
U047	91-58-7	beta-Chloronaphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U048	95-57-8	o-Chlorophenol
U048	95-57-8	Phenol, 2-chloro-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U050	218-01-9	Chrysene
U051	.....	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U052	1319-77-3	Phenol, methyl-
U053	4170-30-3	2-Butenal
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Benzene, (1-methylethyl)-(I)
U055	98-82-8	Cumene (I)
U056	110-82-7	Benzene, hexahydro-(I)
U056	110-82-7	Cyclohexane (I)
U057	108-94-1	Cyclohexanone (I)
U058	50-18-0	Cyclophosphamide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U059	20830-81-3	Daunomycin
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)-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U060	72-54-8	DDD
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U061	50-29-3	DDT

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Benzo[rst]pentaphene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U067	106-93-4	Ethane, 1,2-dibromo-
U067	106-93-4	Ethylene dibromide
U068	74-95-3	Methane, dibromo-
U068	74-95-3	Methylene bromide
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	Benzene, 1,2-dichloro-
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	Benzene, 1,3-dichloro-
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	Benzene, 1,4-dichloro-
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	2-Butene, 1,4-dichloro-(I,T)
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U075	75-71-8	Methane, dichlorodifluoro-
U076	75-34-3	Ethane, 1,1-dichloro-
U076	75-34-3	Ethylidene dichloride
U077	107-06-2	Ethane, 1,2-dichloro-
U077	107-06-2	Ethylene dichloride
U078	75-35-4	1,1-Dichloroethylene
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	1,2-Dichloroethylene
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U080	75-09-2	Methane, dichloro-
U080	75-09-2	Methylene chloride
U081	120-83-2	2,4-Dichlorophenol
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	2,6-Dichlorophenol
U082	87-65-0	Phenol, 2,6-dichloro-
U083	78-87-5	Propane, 1,2-dichloro-
U083	78-87-5	Propylene dichloride
U084	542-75-6	1,3-Dichloropropene
U084	542-75-6	1-Propene, 1,3-dichloro-
U085	1464-53-5	2,2'-Bioxirane
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U086	1615-80-1	N,N'-Diethylhydrazine
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U087	3288-58-2	O,O-Diethyl S-methyldithiophosphate
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U090	94-58-6	Dihydrosafrole
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U092	124-40-3	Methanamine, -methyl-(I)
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U097	79-44-7	Carbamic chloride, dimethyl-
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U101	105-67-9	2,4-Dimethylphenol
U101	105-67-9	Phenol, 2,4-dimethyl-
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U103	77-78-1	Sulfuric acid, dimethyl ester
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Diethyleneoxide
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U110	142-84-7	Dipropylamine (I)
U110	142-84-7	1-Propanamine, N-propyl-(I)
U111	621-64-7	Di-n-propylnitrosamine
U111	621-64-7	1-Propanamine, N-nitroso-N- propyl-
U112	141-78-6	Acetic acid ethyl ester (I)
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U114	((~~1~~)) [1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U114	((~~1~~)) [1]111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U115	75-21-8	Ethylene oxide (I,T)

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U115	75-21-8	Oxirane (I,T)
U116	96-45-7	Ethylenethiourea
U116	96-45-7	2-Imidazolidinethione
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U117	60-29-7	Ethyl ether (I)
U118	97-63-2	Ethyl methacrylate
U118	97-63-2	2-Propenoic acid, 2-methyl-,ethyl ester
U119	62-50-0	Ethyl methanesulfonate
U119	62-50-0	Methanesulfonic acid, ethyl ester
U120	206-44-0	Fluoranthene
U121	75-69-4	Methane, trichlorofluoro-
U121	75-69-4	Trichloromonofluoromethane
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U124	110-00-9	Furfuran (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U125	98-01-1	Furfural (I)
U126	765-34-4	Glycidylaldehyde
U126	765-34-4	Oxiranecarboxyaldehyde
U127	118-74-1	Benzene, hexachloro-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U128	87-68-3	Hexachlorobutadiene
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha, 5alpha,6beta)-
U129	58-89-9	Lindane
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Ethane, hexachloro-
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U133	302-01-2	Hydrazine (R,T)
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 H2S
U136	75-60-5	Arsinic acid, dimethyl-
U136	75-60-5	Cacodylic acid
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U138	74-88-4	Methane, iodo-
U138	74-88-4	Methyl iodide
U140	78-83-1	Isobutyl alcohol (I,T)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
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-

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
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]]-
U143	303-34-4	Lasiocarpine
U144	301-04-2	Acetic acid, lead(2+) salt
U144	301-04-2	Lead acetate
U145	7446-27-7	Lead phosphate
U145	7446-27-7	Phosphoric acid, lead(2+)salt (2:3)
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U146	1335-32-6	Lead subacetate
U147	108-31-6	2,5-Furandione
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U149	109-77-3	Malononitrile
U149	109-77-3	Propanedinitrile
U150	148-82-3	Melphalan
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U153	74-93-1	Methanethiol (I,T)
U153	74-93-1	Thiomethanol (I,T)
U154	67-56-1	Methanol (I)
U154	67-56-1	Methyl alcohol (I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U155	91-80-5	Methapyrilene
U156	79-22-1	Carbonochloridic acid, methylester (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U159	78-93-3	2-Butanone (I,T)
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U161	108-10-1	Methyl isobutyl ketone (I)
U161	108-10-1	4-Methyl-2-pentanone (I)
U161	108-10-1	Pentanol, 4-methyl-
U162	80-62-6	Methyl methacrylate (I,T)
U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester (I,T)
U163	70-25-7	Guanidine, -methyl-N'-nitro-N-nitroso-
U163	70-25-7	MNNG
U164	56-04-2	Methylthiouracil
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U165	91-20-3	Naphthalene
U166	130-15-4	1,4-Naphthalenedione
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	1-Naphthalenamine

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	2-Naphthalenamine
U168	91-59-8	beta-Naphthylamine
U169	98-95-3	Benzene, nitro-
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U170	100-02-7	Phenol, 4-nitro-
U171	79-46-9	2-Nitropropane (I,T)
U171	79-46-9	Propane, 2-nitro- (I,T)
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	Ethanol, 2,2'- (nitrosoimino)bis-
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	Ethanamine, -ethyl-N-nitroso-
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	N-Nitroso-N-methylurea
U177	684-93-5	Urea, N-methyl-N-nitroso-
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U179	100-75-4	Piperidine, 1-nitroso-
U180	930-55-2	N-Nitrosopyrrolidine
U180	930-55-2	Pyrrolidine, 1-nitroso-
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U181	99-55-8	5-Nitro-o-toluidine
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U182	123-63-7	Paraldehyde
U183	608-93-5	Benzene, pentachloro-
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Ethane, pentachloro-
U184	76-01-7	Pentachloroethane
U185	82-68-8	Benzene, pentachloronitro-
U185	82-68-8	Pentachloronitrobenzene (PCNB)
U186	504-60-9	1-Methylbutadiene (I)
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Acetamide, -(4-ethoxyphenyl)-
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U189	1314-80-3	Phosphorus sulfide (R)
U189	1314-80-3	Sulfur phosphide (R)
U190	85-44-9	1,3-Isobenzofurandione
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U191	109-06-8	Pyridine, 2-methyl-
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U192	23950-58-5	Pronamide
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U193	1120-71-4	1,3-Propane sultone
U194	107-10-8	1-Propanamine (I,T)
U194	107-10-8	n-Propylamine (I,T)
U196	110-86-1	Pyridine

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U197	106-51-4	p-Benzoquinone
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U200	50-55-5	Reserpine
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methylester, (3beta,16beta,17alpha, 18beta,20alpha)-
U201	108-46-3	1,3-Benzenediol
U201	108-46-3	Resorcinol
((~~U202~~	~~181-07-2~~	~~1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts~~
~~U202~~	~~181-07-2~~	~~Saccharin, & salts~~))
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
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 SeS2 (R,T)
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]-
U206	18883-66-4	Streptozotocin
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Ethene, tetrachloro-
U210	127-18-4	Tetrachloroethylene
U211	56-23-5	Carbon tetrachloride
U211	56-23-5	Methane, tetrachloro-
U213	109-99-9	Furan, tetrahydro-(I)
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Acetic acid, thallium(1+)salt
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
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	Nitric acid, thallium(1+) salt
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Ethanethioamide
U218	62-55-5	Thioacetamide
U219	62-56-6	Thiourea
U220	108-88-3	Benzene, methyl-
U220	108-88-3	Toluene
U221	25376-45-8	Benzenediamine, ar-methyl-
U221	25376-45-8	Toluenediamine
U222	636-21-5	Benzenamine, 2-methyl-,hydrochloride
U222	636-21-5	o-Toluidine hydrochloride
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-(R,T)
U223	26471-62-5	Toluene diisocyanate (R,T)
U225	75-25-2	Bromoform
U225	75-25-2	Methane, tribromo-

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U226	71-55-6	Ethane, 1,1,1-trichloro-
U226	71-55-6	Methyl chloroform
U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	Ethane, 1,1,2-trichloro-
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Ethene, trichloro-
U228	79-01-6	Trichloroethylene
U234	99-35-4	Benzene, 1,3,5-trinitro-
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	2,7-Naphthalenedisulfonicacid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U236	72-57-1	Trypan blue
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U237	66-75-1	Uracil mustard
U238	51-79-6	Carbamic acid, ethyl ester
U238	51-79-6	Ethyl carbamate (urethane)
U239	1330-20-7	Benzene, dimethyl- (I((~~,T~~)))
U239	1330-20-7	Xylene (I)
U240	((~~\1\~~)) 1_94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U240	((~~\1\~~)) 1_94-75-7	2,4-D, salts & esters
U243	1888-71-7	Hexachloropropene
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U244	137-26-8	Thioperoxydicarbonic diamide [(H2N)C(S)]2 S2, tetramethyl-
U244	137-26-8	Thiram
U246	506-68-3	Cyanogen bromide (CN)Br
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U247	72-43-5	Methoxychlor
U248	((~~\1\~~)) 1_81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U248	((~~\1\~~)) 1_81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U249	1314-84-7	Zinc phosphide Zn3 P2, when present at concentrations of 10% or less
U271	17804-35-2	Benomyl
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methylester
U278	22781-23-3	Bendiocarb
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine
U359	110-80-5	Ethanol, 2-ethoxy-

Numerical List

Dangerous Waste No.	Chemical Abstracts No.	Substance
U359	110-80-5	Ethylene glycol monoethylether
U364	22961-82-6	Bendiocarb phenol
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563-38-8	Carbofuran phenol
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methylester
U372	10605-21-7	Carbendazim
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U373	122-42-9	Propham
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U387	52888-80-9	Prosulfocarb
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U389	2303-17-5	Triallate
U394	30558-43-1	A2213
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	5952-26-1	Diethylene glycol, dicarbamate
U395	5952-26-1	Ethanol, 2,2'-oxybis-,dicarbamate
U404	121-44-8	Ethanamine, N,N-diethyl-
U404	121-44-8	Triethylamine
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-,dimethyl ester
U409	23564-05-8	Thiophanate-methyl
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U410	59669-26-0	Thiodicarb
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U411	114-26-1	Propoxur
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
See F027	87-86-5	Pentachlorophenol
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-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
See F027	93-72-1	Silvex (2,4,5-TP)
See F027	93-76-5	2,4,5-T
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol

FOOTNOTE: [1]CAS Number given for parent compound only.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

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

(1) Dangerous Waste No.	Sources
	Nonspecific Sources
Generic:	
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2 trichloroethane; all spent solvent mixtures/ blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

F003	The following spent nonhalogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/ blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)
F004	The following spent nonhalogenated solvents: Cresols and cresylic acid, nitrobenzene; all spent solvent mixtures/ blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F005	The following spent nonhalogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/ blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. (T)
F007	Spent cyanide plating bath solutions from electroplating operations. (R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R,T)

F012	Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process. (T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (See footnote 1, below.) (H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. (See footnote 1, below.) (H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. (See footnote 1, below.) (H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (See footnote 1, below.) (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in this section.) (T)

F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions. (See footnote 1, below.) (H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (See footnote 1, below.) (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.) (H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027. (T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with WAC 173-303-083 or potentially cross-contaminated wastes that are otherwise currently regulated as dangerous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)

F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: Oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling ((~~waters~~)) wastewaters, sludges generated in aggressive biological treatment units as defined in footnote 2, below (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under WAC 173-303-071 (3)(cc)(i), if those residuals are to be disposed of. (See footnote 2, below.) (T)

F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: Induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in footnote 2, below (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (See footnote 2, below.) (T)
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)

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

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-dimethylhydrazine (UDMH) from carboxylic acid ((~~hydrazines~~)) hydrazides. (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)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K159	Organics from the treatment of thiocarbamate wastes. (T)

K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (R,T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) They are disposed of in a hazardous waste or nonhazardous landfill licensed or permitted by the state or federal government; (ii) They are not otherwise placed on the land prior to final disposal; and (iii) The generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off site landfill. Respondents in any action brought to enforce the requirements of the Hazardous Waste Management Act or dangerous waste regulations must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. (T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. (T)

((~~[K181]~~)) K181	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (3) of this section that are equal to or greater than the corresponding subsection (3) of this section levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) Disposed in a municipal solid waste landfill unit subject to the design criteria in 40 C.F.R. 258.40; (ii) Disposed in a dangerous waste landfill unit subject to either WAC 173-303-665(2) or 40 C.F.R. 265.301 (incorporated by reference at WAC 173-303-400 (3)(a)); (iii) Disposed in other municipal solid waste landfill units that meet the design criteria in 40 C.F.R. 258.40, WAC 173-303-665(2) or 40 C.F.R. 265.301 (incorporated by reference at WAC 173-303-400 (3)(a)); or (iv) Treated in a combustion unit that is permitted under the Hazardous Waste Management Act and the dangerous waste regulations, or an on-site combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in subsection (2)((~~(a)~~)) of this section. Subsection (4) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as dangerous under WAC 173-303-090 (5) through (8), 173-303-100 (5) through (6), 173-303-9903, and 173-303-9904 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. (T)
Explosives:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives. (R)
K045	Spent carbon from the treatment of wastewater containing explosives. (R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of 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)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). (E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). (T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. (T)

Petroleum Refining:

K048	Dissolved air flotation (DAF) float from the petroleum refining industry. (T)
K049	Slop oil emulsion solids from the petroleum refining industry. (T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)
K051	API separator sludge from the petroleum refining industry. (T)
K052	Tank bottoms (leaded) from the petroleum refining industry. (T)
K169	Crude oil storage tank sediment from petroleum refining operations. (T)
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. (T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)

Iron and Steel:

K061	Emission control dust/sludge from the primary production of steel in electric furnaces. (T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (NAICS codes 331111 and 332111). (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 Aluminum:

K088	Spent potliners from primary aluminum reduction. (T)

Secondary Lead:

K069	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action affecting this stay, EPA will publish a notice of the action in the *Federal Register*. (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)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recover of coke by-products produced from coal.
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

K147	Tar storage tank residues from coal tar refining.
K148	Residues from coal tar distillation, including but not limited to, still bottoms.

Footnotes

1	For wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027 the quantity exclusion limit is 2.2 lbs. (1 kg) per month or per batch.
2	Listing Specific Definitions:
a	For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.
b(i)	For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: Activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employs a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a dangerous waste by the Toxicity Characteristic.
(ii)	Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other on-site records, documents and data sufficient to prove that: (A) The unit is an aggressive biological treatment unit as defined in this subsection; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually treated in the aggressive biological treatment unit.
c(i)	For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.
(ii)	For the purposes of the F038 listing,
(A)	Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and
(B)	Floats are considered to be generated at the moment they are formed in the top of the unit.

State Sources

WPCB 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.)

(2) *Listing Specific Definitions*: For the purposes of the K181 listing, dyes and/or pigments production is defined to include manufacture of the following product classes: Dyes, pigments, or FDA certified colors that are classified as azo, triarylmethane, perylene or anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products.

Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes and/or pigments manufacturing site, such as wastes from the off site use, formulation, and packaging of dyes and/or pigments, are not included in the K181 listing.

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

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

(4) *Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181*. The procedures described in (a) through (c) and (e) of this subsection establish when nonwastewaters from the production of dyes/pigments would not be hazardous (these procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in subsection (1) - the K181 listing - of this section). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in subsection (1) of this section, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator must maintain documentation as described in (d) of this subsection.

(a) *Determination based on no K181 constituents*. Generators that have knowledge (for example, knowledge of constituents in wastes based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed) that their wastes contain none of the K181 constituents (*see* subsection (3) of this section) can use their knowledge to determine that their waste is not K181. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

(b) *Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents*. If the total annual quantity of dyes and/or pigment nonwastewaters generated is 1,000 metric tons or less, the generator can use knowledge of the wastes (for example, knowledge of constituents in wastes based on prior analytical data and/or information about raw materials used, production processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of ((~~this~~)) subsection (3) of this section. To make this determination, the generator must:

(i) Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.

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

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

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

(A) The quantity of dyes and/or pigment nonwastewaters generated.

(B) The relevant process information used.

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

(c) *Determination for generated quantities greater than 1,000 MT/yr for wastes that contain K181 constituents*. If the total annual quantity of dyes and/or pigment nonwastewaters generated is greater than 1,000 metric tons, the generator must perform all of the steps described in ((~~paragraphs (d)(3)(i) - (d)(3)(xi)~~)) (c)(i) through (xi) of this subsection in order to make a determination that its waste is not K181.

(i) Determine which K181 constituents (see ((~~(c) of this~~)) subsection (3) of this section) are reasonably expected to be present in the wastes based on knowledge of the wastes (for example, based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed).

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

(iii) Develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan must include:

(A) A discussion of the number of samples needed to characterize the wastes fully;

(B) The planned sample collection method to obtain representative waste samples;

(C) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes;

(D) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods.

(iv) Collect and analyze samples in accordance with the waste sampling and analysis plan.

(A) The sampling and analysis must be unbiased, precise, and representative of the wastes;

(B) The analytical measurements must be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of subsection (3) of this section.

(v) Record the analytical results.

(vi) Record the waste quantity represented by the sampling and analysis results.

(vii) Calculate constituent-specific mass loadings (product of concentrations and waste quantity).

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

(ix) Determine whether the mass of any of the K181 constituents listed in subsection (3) of this section generated between January 1 and December 31 of any year is below the K181 listing levels.

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

(A) The sampling and analysis plan.

(B) The sampling and analysis results (including QA/QC data).

(C) The quantity of dyes and/or pigment nonwastewaters generated.

(D) The calculations performed to determine annual mass loadings.

(xi) Nonhazardous waste determinations must be conducted annually to verify that the wastes remain nonhazardous.

(A) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

(B) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

(C) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change must be retained.

(d) *Recordkeeping for the landfill disposal and combustion exemptions.* For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator must maintain on-site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.

(e) *Waste holding and handling.* During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the Hazardous Waste Management Act and the dangerous waste regulation requirements during the interim period, the generator could be subject to an enforcement action for improper management.

AMENDATORY SECTION (Amending WSR 09-14-105, filed 6/30/09, effective 7/31/09)

WAC 173-303-9905 Dangerous waste constituents list.

A2213 (Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester)
Acetic Acid,2,4,5-trichlorophenoxy-, salts and esters (2,4,5-T, salts and esters)
Acetonitrile [Ethanenitrile]
Acetophenone (Ethanone, 1-phenyl)
-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetemide,N-9H- fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide,N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldicarb sulfone (Propanal, 2-methyl-2-(methylsulfonyl) -, O-[(methylamino) carbonyl] oxime)
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,-hexahydro-endo,exo- 1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Allyl chloride (1-Propane, 3-chloro)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8- (hydroxymethyl) -8a-methoxy-5-methyl- carbamate azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8

4-Aminopyridine(4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
o-Anisidine (2-methoxyaniline)(Benzenamine, 2-Methoxy-)
Antimony and compounds, N.O.S.*
Aramite (Sulfurous acid 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester)Arsenic and compounds, N.O.S.*
Barban (Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester)
Barium and compounds, N.O.S.*
Barium cyanide
Bendiocarb (1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate)
Bendiocarb phenol (1,3-Benzodioxol-4-ol, 2,2-dimethyl-,)
Benomyl (Carbamic acid, [1- [(butylamino) carbonyl]-1H-benzimidazol-2-yl] -, methyl ester)
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, 2-amino-1-methyl (o-Toluidine)
Benzene, 4-amino-1-methyl (p-Toluidine)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethoil (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo(k)fluoranthene
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl-)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium powder
Beryllium compounds, N.O.S.*
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester)
Bis(pentamethylene)-thiuram tetrasulfide (Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-)
Butylate (Carbamothioic acid, bis(2 methylpropyl)-, S-ethyl ester)
Cadmium and compounds, N.O.S.*

Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbamic Acid, ethyl ester
Carbaryl (1-Naphthalenol methylcarbamate)
Carbendazim (Carbamic acid, 1H-benzimidazol-2-yl, methyl ester)
Carbofuran (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate)
Carbofuran phenol (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-)
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Carbosulfan (Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.*
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.*
P-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester)
2-Chloro-1,3-butadiene
p-Chloro-m-cresol (Phenol, 4-Chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, beta-chloro-)
2-Chlorophenol (Phenol, o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropene
3-Chloropropionitrile (Propanenitrile, 3-chloro-)Chromium and compounds, N.O.S.*
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tar creosote
Copper cyanide
Copper dimethyldithiocarbamate (Copper, bis(dimethylcarbamodithioato-S,S')-,)
Creosote
p-Cresidine (2-Methoxy-5-methylbenzenamine)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
m-Cumenyl methylcarbamate (Phenol, 3-(methylethyl)-, methyl carbamate)
Cyanides (soluble salts and complexes), N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)

Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
Cycloate (Carbamothioic acid, cyclohexylethyl-, S-ethyl ester)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, [bis(2-chloroethyl)amino]-tetrahydro-, 2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
Dazomet (2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(p chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)
Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)
Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
1,2-Dibromoethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S.* (Benzene, dichloro-, N.O.S.*)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene, 1,4-Butene, 1,4-dichloro-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
1,2-Dichloroethane (Ethylene dichloride)
trans-1,2-Dichloroethene (1,2-Dichloroethylene)
Dichloroethylene, N.O.S.* (Ethene, dichloro-, N.O.S.*)
1,1-Dichloroethylene (Ethene, 1,1-dichloro-)
Dichloromethane (Methylene chloride)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro)
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)
Dichlorophenylarsine (Phenyl dichloroarsine)
Dichloropropane, N.O.S.* (Propane, dichloro-, N.O.S.*)
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S.* (Propanol, dichloro-, N.O.S.*)
Dichloropropene, N.O.S.* (Propene, dichloro-, N.O.S.*)
1,3-Dichloropropene, (1-Propene, 1,3-dichloro-)
Dieldrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo, exo-1,4:5,8-Dimethanonaphthalene)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N'-Diethylhydrazine (Hydrazine, 1,2-diethyl)

O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester
O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyraxinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylene glycol, dicarbamate (Ethanol, 2,2'-oxybis-, dicarbamate)
Diethylstilbesterol (4,4'-Stilbenediol, alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-
dimethyl S-[2-(methylamino)-2-oxoethyl] ester
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'diamine, 3-3'dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
2,4-Dimethylaniline (2,4-xylidine) (Benzenamine,2,4-dimethyl-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbonyl]oxime (Thiofanox)
alpha,alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic, acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dimetilan (Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester)
Dinitrobenzene, N.O.S.* (Benzene, dinitro-, N.O.S.*
4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benezene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene,1-methyl-2,6-dinitro-)
Dinoseb (Phenol, 2-(1-methylpropyl)-4,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarbozylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethylene oxide)
Diphenylamine (Benzenamine, N-Phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylmitrosamine (N-Nitroso-di-n-propylamine)
Disulfiram (Thioperoxydicarbonic diamide, tetraethyl)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)

Dithiobiuret (Thioimidodicarbonic diamide [$(H_2N)C(S)]_2NH$)
EPTC (Carbamothioic acid, dipropyl-, S-ethyl ester)
Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)
Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene, and metabolites)
Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethyl ziram (Zinc, bis(diethylcarbamodithioato- S,S')-)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters.
Ethylene glycol monoethyl ether (2-Ethoxyethanol)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethylmethacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Ferbam (Iron, tris(dimethylcarbamodithioato- S,S')-)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene, oxide)
Formetanate hydrochloride (Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride)
Formic acid (Methanoic acid)
Formparanate (Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]-)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.*
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta and gamma isomers)
Heptachlorodibenzofurans
Heptachlorodibenzo-p-dioxins
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocylopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachlorodibenzo-p-dioxins
Hexachlorodibenzofurans
Hexachloroethane (Ethane, hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,endo-dimethanonphthalene (Hexachlorohexahydro-endo,endo-dimethanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))
Hexachloropropene (Propene, hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine (Diamine)
Hydrocyanic acid (Hydrogen cyanide)
Hydrofluoric acid (Hydrogen fluoride)

Hydrogen sulfide (Sulfur hydride)
Hydroxydimethylarsine oxide (Cacodylic acid)
Indeno(1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)
3-Iodo-2-propynyl n-butylcarbamate (Carbamic acid, butyl-, 3-iodo-2- propynyl ester)
Iodomethane (Methyl iodide)
Isocyanic acid, methyl ester (Methyl isocyanate)Isobutyl alcohol (1-Propanol, 2-methyl-)
Isolan (Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalene-2-one)
Lasiocarpine (2-Butanoic acid, 2-methyl-,7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester)
Lead and compounds, N.O.S.*
Lead acetate (Acetic acid, lead salt)
Lead phosphate (Phosphoric acid, lead salt)
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Manganese dimethyldithiocarbamate (Manganese, bis(dimethylcarbamodithioato-S,S')-,)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)
Mercury Fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.*
Metam sodium (Carbamodithioic acid, methyl-, monosodium salt)
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
Methiocarb (Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate)
Metholonyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-,methyl ester
Methoxychior (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-)
2-Methylaziridine (1,2-Propylenimine)
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis-(2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitros-N-methyl-N'nitro-)
Methyl parathion (O,O-dimethyl O-(4-nitrophenyl) phosphorothioate)
Methylthiouracil (4-1H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Metolcarb (Carbamic acid, methyl-, 3-methylphenyl ester)

Mexacarbate (Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester))
Molinate (1H-Azepine-1-carbothioic acid,hexahydro-, S-ethyl ester)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.*
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (nickel (II) cyanide)
Nicotine and salts, Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-) Nitrobenzene
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-
N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydrochloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
2-Nitropropane (Propane 2-nitro)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)
Nitrosamine, N.O.S.*
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-Ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
N-Nitrosopyrrolidine (pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososacrosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octachlorodibenzo-p-dioxin (OCDD) 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
Octachlorodibenzofuran (OCDF) 1,2,3,4,6,7,8,9-Octachlorodibenzofuran
Octamethylpyrophosphoramide (Diphosphoraminde, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Ocabicyclo[2.2.1]heptane-2,3-dicarbonxylic acid (Endothal)
Oxamyl (Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trinethyl-)

Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
Pebulate (Carbamothioic acid, butylethyl-, S- propyl ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Perchloromethyl mercaptan (Methanesulferryl chloride, trichloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
1,2-Phenylenediamine (1,2-Benzenediamine)
1,3-Phenylenediamine (1,3-Benzenediamine)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.* (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.*
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
Physostigmine (Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), (3aS-cis)-)
Physostigmine salicylate (Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) —1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1).)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl, potassium salt)
Potassium n-hydroxymethyl-n-methyl- dithiocarbamate (Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt)
Potassium n-methyldithiocarbamate (Carbamodithioic acid, methyl-monopotassium salt)
Potassium pentachlorophenate (Pentachlorophenol, potassium salt)
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Promecarb (Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propanesultone (1,2-Oxathiolane, 2,2-dioxide)
Propham (Carbamic acid, phenyl-, 1-methylethyl ester)
Propionic acid, 2-(2,4,5-trichlorophenoxy), salts and esters (2,4,5-TP,Silvex, salts and esters)
Propoxur (Phenol, 2-(1-methylethoxy)-, methylcarbamate)
n-Propylamine (1-Propane)
Propylthiouracil (2,3 dihydro-6-propyl-2 thioxo-4(1H)-pyrimidinone)
2-Propyn-1-ol (Propargyl alcohol)
Prosulfocarb (Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester)
Pyridine

Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenxoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
((~~Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)~~))
Safrol (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)
Selenium and compounds, N.O.S.*
Selenium sulfide (Sulfur selenide)
Selenium, tetrakis (dimethyl-dithiocarbamate) (Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Sodium dibutyldithiocarbamate (Carbamodithioic acid, dibutyl, sodium salt)
Sodium diethyldithiocarbamate (Carbamodithioic acid, diethyl-, sodium salt)
Sodium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl-, sodium salt)
Sodium pentachlorophenate (Pentachlorophenol, sodium salt)
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strychnine and salts (Strychnidin-10-one, and salts)
Sulfallate (Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester)
Tetrabutylthiuram disulfide (Thioperoxydicarbonic diamide, tetrabutyl)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenzofurans
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*)
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachlorethylene (Ethene, 1,1,2,2-tetrachloro-)[1]
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol,2,3,4,6-tetrachloro-)
2,3,4,6-Tetrachlorophenol, potassium salt
2,3,4,6-Tetrachlorophenol, sodium salt
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
Tetramethylthiuram monosulfide (Bis(dimethylthiocarbamoyl) sulfide)
Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.*
Thallic oxide (Thallium (III) oxide)
Thallium (1) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)

Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiodicarb (Ethanimidothioic acid, N,N'-[thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester.)
Thiophanate-methyl (Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-, dimethyl ester)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthioucarbamoyl) disulfide)
Tirpate (1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.)
Toluene (Benzene, methyl-)
Toluenediamine, N.O.S. (Toluene, 2,5-diamine-)
2,4-Toluenediamine
2,6-Toluenediamine
3,4-Toluenediamine
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 2,4- and 2,6-diisocyanato-methyl-)
Toxaphene (Camphene, octachloro-)
Triallate (Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester)
Tribromomethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethene (Trichloroethylene)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T, salts and esters) (Acetic acid, 2,4,5-trichlorophenoxy-, salts and esters)
2,4,5-Trichlorophenoxypropionic acid (Porpionoic acid, 2-(2,4,5-trichlorophenoxyl), salts and esters (2,4,5-TP, Silvex, salts and esters))
Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
Triethylamine (Ethanamine, N,N-diethyl-)
sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-aziridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate)
Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt)
Undecamethylenediamine, N,N'-bis-(2-chloro-benzyl)-,dihydrochloride N,N'-Undecamethyl-enebis(2-chlorobenzylamine, dihydrochloride)
Uracil mustard (Uracil 5-[bis(2-chlorethyl)amino]-)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vernolate (Carbamothioic acid, dipropyl-,S-propyl ester)
Vinyl chloride (Ethane, chloro-)

Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%)
Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%)
Warfarin salts, when present at concentrations less than 0.3%
Warfarin salts, when present at concentrations greater than 0.3%
Zinc cyanide
Zinc phosphide
Ziram (Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-)

*The abbreviation N.O.S. signifies those members of the general class "not otherwise specified" by name in this listing.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 173-303-084	Reserved.
WAC 173-303-101	Reserved.
WAC 173-303-103	Reserved.
WAC 173-303-121	Reserved.
WAC 173-303-130	Containment and control of infectious wastes.
WAC 173-303-430	Reserved.
WAC 173-303-440	Reserved.
WAC 173-303-550	Reserved.
WAC 173-303-560	Reserved.
WAC 173-303-575	Reserved.
WAC 173-303-820	Reserved.
WAC 173-303-825	Reserved.
WAC 173-303-905	Response to requests for public records.
WAC 173-303-9902	Reserved.
WAC 173-303-9907	Reserved.