

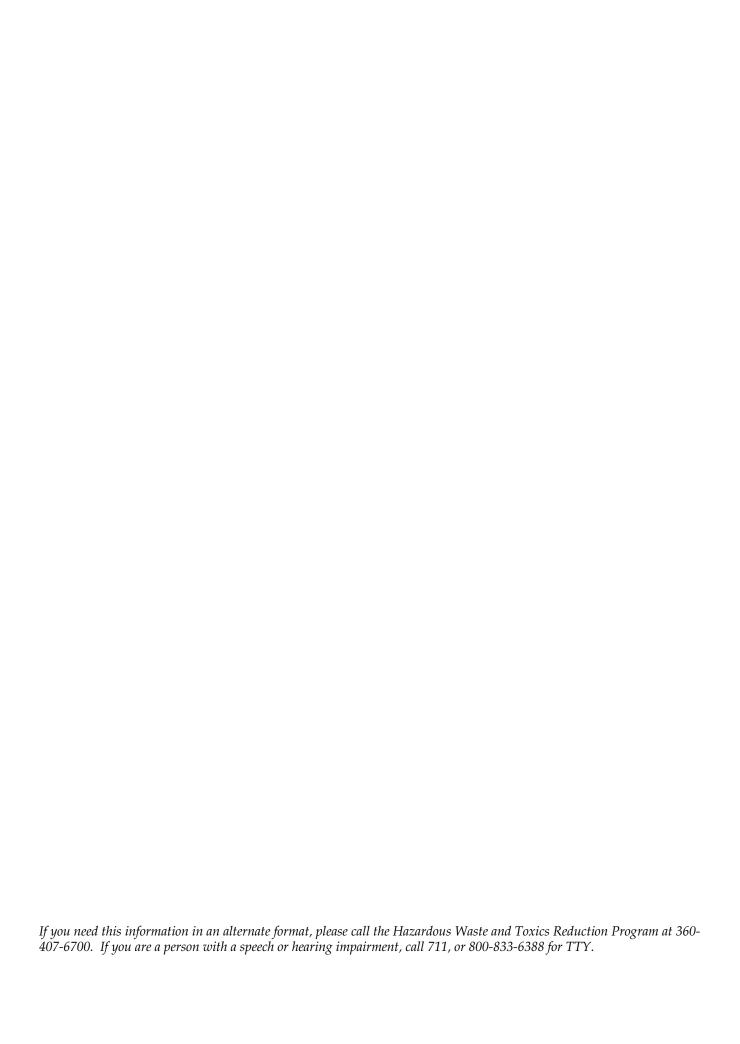
As required by the Washington State Administrative Procedures Act, Chapter 34.05 RCW:

A Concise Explanatory Statement And Responsiveness Summary

For the adoptions of Chapter 173-303 WAC, *Dangerous Waste Regulations*Proposed July 2004, Adopted November 2004, AO #03-10

Part B Differences Between Proposed and Final Rule

Washington State Department of Ecology Hazardous Waste and Toxics Reduction Program Publication Number 04-04-028b See also 04-04-028a, c, and d





A Concise Explanatory Statement And Responsiveness Summary

Part B
Differences Between Proposed and Final Rule

Washington State Department of Ecology Hazardous Waste and Toxics Reduction Program Publication Number 04-04-028b

Background

The Department of Ecology is authorized by the State Hazardous Waste Management Act (Chapter 70.105 RCW) to adopt rules regulating the management of hazardous waste. The purpose of the Hazardous Waste Management Act is to provide a comprehensive statewide framework for the regulation, control, and management of hazardous waste. Ecology's actions under this authority prevent land, air, and water pollution and conserve the natural, economic, and energy resources of the State.

Scheduled Adoption and Effective Dates

The amendments to the *Dangerous Waste Regulations* are scheduled for adoption on November 30, 2004. The amendments will be effective on January 1, 2005.

The Hazardous Waste Management Act also gives Ecology the authority to carry out the federal hazardous waste program in Washington. Further authority to carry out the Federal Resource Conservation and Recovery Act (RCRA) amendments is contained in the Model Toxics Control Act at RCW 70.105D(3)(d). Ecology is authorized under Federal regulations (40 CFR Part 271) by the U.S. Environmental Protection Agency (EPA) to administer and enforce the Federal RCRA program in Washington.

The *Dangerous Waste Regulations*, Chapter 173-303 WAC, implement the Hazardous Waste Management Act. These regulations establish requirements for generators, transporters, and facilities that manage dangerous waste in Washington. Ecology amends the *Dangerous Waste Regulations* every two to four years to update the regulations to improve waste management in Washington for all stakeholders affected by the regulation including the public, businesses, state governmental agencies, and officials at Ecology and EPA.

As a state authorized to implement the federal hazardous waste program, Ecology must periodically incorporate newer federal rules into the state's regulations. The majority of the rules being adopted as part of this rulemaking are federal rules that EPA promulgated through 2003. EPA has already been implementing most of these rules in Washington with the exception of the less stringent requirements, which do not go into effect until the state adopts them. Therefore, most of the federal rules are not new requirements to the regulated community since they have already been required to comply with them. Adoption of federal rules enables Ecology, rather than EPA, to implement these rules in Washington. The transition of responsibility for implementation from the federal program to the state program simplifies regulation of hazardous waste in Washington since the result is that the regulated community has one rather than two regulatory agencies to deal with. The rule amendments adopted during the current rulemaking incorporate newer federal requirements, improve some state requirements, and implement the Hazardous Waste Facilities Initiative, which extends closure planning and financial responsibility rules to recycling and used oil facilities. These amendments improve hazardous waste management while continuing to provide protection to human health and the environment.

Federal requirements being adopted include updates to export requirements, coordination between air emission permitting and hazardous waste permitting, universal waste rule for mercury-

containing equipment (although this has not yet been finalized by EPA), revisions to mixture and derived-from rules, and amendments to the corrective action management unit rule. State-specific changes include technical and editorial corrections, clarifications, and changes to improve the waste management system including: updated reporting form name changes, addition of NAIC codes to replace SIC codes, modifying permit-by-rule requirements, clarification of waste analysis plan requirements, and a change to fertilizer registration requirements so that the same testing information does not have to be submitted year after year if it does not change.

The most significant state-initiated rule change is a result of the Hazardous Waste Facility Initiative. This change extended hazardous waste closure and financial responsibility requirements to recyclers and used oil processors/re-refiners. In 2002, Ecology published a report to the Legislature that outlined problems and inadequacies with the current system for regulating, permitting, maintaining public information, and funding Ecology's oversight responsibilities for TSDs, recyclers and used oil processors (see http://www.ecy.wa.gov/biblio/0204028.html). Representatives from the waste management industry, large and small businesses, public interest and environmental organizations, and government (local, state and federal) were consulted during the process of identifying these problems and proposing solutions.

Summary of public involvement actions

Prior to official rulemaking, considerable work was done on the Hazardous Waste Facilities Initiative, including meeting with focus groups, to determine if rulemaking was an appropriate avenue and to ascertain the ideal regulatory approach. Much of the early work on this initiative and on other aspects of the rulemaking took place through meetings and phone conversations with stakeholders. A *Shoptalk* article (distribution approximately 25,000) was published several months prior to the pre-proposal notice to encourage stakeholders to subscribe to the electronic interested persons' list to receive periodic updates on the rulemaking.

At the beginning of the official rulemaking process, a letter was sent to Washington tribes inviting their participation in the rulemaking. Ecology filed a pre-proposal statement of inquiry (CR101) in the Washington State Register (WSR) on February 4, 2004 to announce upcoming rulemaking and invite preliminary public comments. As part of this early notification of upcoming rulemaking, comments were sought on options for the Hazardous Waste Facilities Initiative.

The next step was an informal draft of rule language. The draft rule language was made available for early review and comment. Electronic notification of availability of the early draft was sent to approximately 3000 people. The public comments that Ecology received on the early draft were incorporated into the proposed version of the rules which were filed with the Code Reviser's Office on July 6, 2004. Notification was made, again using both the Dangerous Waste Regulation list serve and Ecology's Rules list serve to interested parties. In addition, a *Shoptalk* article (distribution approximately 25,000) was published highlighting the proposed changes. The proposed rule and other related information were made available on Ecology's Rules web page as well as by paper copy.

Following formal proposal in the State Register, a simultaneous videoconference public hearing was held on the proposed amendments in Seattle, Tacoma, Yakima, and Spokane on August 10, 2004. A total of 15 people attended and public testimony was given by one person. The public comment period was scheduled to close on September 10, 2004 and was extended until September 24, 2004. The responsiveness summary portion of this document contains all of the comments that were submitted on the proposed amendments and Ecology's responses.

The complete publication for this Concise Explanatory Statement and Responsiveness Summary (publication #04-04-028) has been divided into sections to make downloading quicker and includes the following chapters:

Introduction and Background, 04-04-028a

Differences Between Proposed and Final Rule, 04-04-028b

Comments and Responses, 04-04-028c

Appendices, 04-04-028d

Differences Between Proposed and Final Rule

This portion of the Responsiveness Summary shows changes made to the rule language after it was proposed July 2004. These are the changes that will be adopted based on comments received on the proposed rule amendments, plus editorial corrections and clarifications. Rule language changes that will appear in the adopted rule are shown by using strikeout and underline.

1. WAC 173-303-040 Definitions

"Halogenated organic compounds" (HOC) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, or iodine which is/are bonded directly to a carbon atom. This definition does not apply to the federal land disposal restrictions of 40 CFR Part 268 which are incorporated by reference at WAC 173-303-140 (2)(a). Note: Additional information on HOCs may be found in *Chemical Testing Methods for Designating Dangerous Waste*, Ecology Publication #97-407, revised December 2004.

Rationale for change: The proposed changes to Chemical Testing Methods have been withdrawn.

2. WAC 173-303-040 Definitions

"Knowledge" means there is sufficient information about both the waste constituents and the process generating 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. Such information must include the chemical, physical, and/or biological characteristics of the waste. (For example, if all chemical constituents used in an industrial process generating a waste are known and the formation of the waste by-products from that industrial process are understood, that information may be sufficient without direct laboratory analysis to describe the waste for safe management under this chapter.)

Note:Knowledge as defined here is for the purpose of complying with WAC 173-303-070 (3)(c) and 173-303-300(2).

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).

Rationale for change: In response to comments, the proposed rule language has been changed to eliminate confusing or vague language and to provide greater clarity of Ecology's intent.

3. WAC 173-303-045(3) References to EPA's regulations

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

Rationale for change: This federal reference was modified for accuracy.

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4. WAC 173-303-070(2)(c)(i) Designation of dangerous waste

- (i) A hazardous 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 hazardous dangerous waste, if the waste no longer exhibits any characteristic of hazardous 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 <u>hazardous dangerous</u> 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 CFR Part 268, which is incorporated by reference at WAC 173-303-140(2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

Rationale for change: The specific subsections in WAC 173-303-081 and -082 for listed wastes were cited for clarity, the word "hazardous" was changed to "dangerous" for internal consistency with the state regulations, and the citation for incorporation of land disposal restrictions was added.

5. WAC 173-303-071(3)(g)(i) Treated Wood Waste Exclusion

- (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 <u>if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use</u>. In order to meet the exclusion, Intended end use means the wood product must have been previously used in typical treated wood applications (for example, fence posts, decking, poles, and timbers).

Rationale for change: Due to concerns regarding equivalency with the federal hazardous waste regulations for treated wood waste, the original language will be retained, with the proposed language serving as a clarification.

- 6. WAC 173-303-071(3)(oo) Hazardous secondary materials for zinc fertilizers (oo) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied:
- (i) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in WAC 173-303-016 (5)(c)(ii).
- (ii) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must:
- (A) Submit a one-time notice to the department that contains the name, address and EPA/state ID number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this subsection (3)(00).

- (B) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of nonearthen materials that provide structural support, and must have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound condition. Containers that are stored outdoors must be managed within storage areas that:
- (I) Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation; and
- (II) Provide for effective drainage and removal of leaks, spills and accumulated precipitation; and (III) Prevent run-on into the containment system.
- (C) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of this subsection (3)(00).
- (D) Maintain at the generator's or intermediate handler's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records must at a minimum contain the following information:
- (I) Name of the transporter and date of the shipment;
- (II) Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and
- (III) Type and quantity of excluded secondary material in each shipment.
- (iii) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must:
- (A) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in (oo)(ii)(B) of this subsection.
- (B) Submit a one-time notification to the department that, at a minimum, specifies the name, address and EPA/state ID number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this subsection (3)(00).
- (C) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.
- (D) Submit to the department an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process(es) from which they were generated.
- (iv) Nothing in this subsection preempts, overrides or otherwise negates the provision in WAC 173-303-070 (1) through (5), which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

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(v) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in (oo)(ii)(A) of this subsection, and that afterward will be used only to store hazardous secondary materials excluded under this paragraph, are not subject to the closure requirements of WAC 173-303-400 and 173-303-600 through 173-303-695.

Rationale for change: This proposed exclusion that would exempt hazardous secondary materials from the definition of solid waste when those materials are used to make zinc fertilizers will not be included in the final rule. Comments received on the proposed exclusion opposed it as being less protective of human health and the environment than existing state requirements. Ecology is unaware of any manufacturers of zinc fertilizer in the state that will be adversely affected by Washington not adopting the exclusion at this time. The lack of any comments from fertilizer manufacturers or generators with zinc secondary hazardous waste that supported the proposal was a factor in the decision to withdraw this proposed exemption. It may be considered during a future rulemaking.

7. WAC 173-303-071(3)(pp) Zinc fertilizers made from hazardous waste (pp) Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under (oo) of this subsection, provided that:

Rationale for change: The reference to proposed WAC 173-303-071(3)(00) was deleted from the final rule since WAC 173-303-071(3)(00) is not being adopted.

8. WAC 173-303-081(3) Discarded chemical products

(3) Dangerous waste numbers and mixtures. A waste which that has been designated as a discarded chemical product dangerous waste must be assigned the dangerous waste number or numbers listed in WAC 173-303-9903 next to the generic chemical or chemicals which that caused the waste to be designated. If a person mixes A mixture of a solid waste with a waste that would be designated as a discarded chemical product under this section, then the entire mixture must be designated. The mixture designation is the same as the designation for the discarded chemical product which that was mixed with the solid waste unless it has been excluded under WAC 173-303-070 (2)(c) or (d). For example, a mixture containing 2.2 lbs. (1 kg) of Aldrin (dangerous waste number P004, DW designation, QEL of 2.2 lbs.) and 22 lbs. (10 kg) of a solid waste, would be designated DW, and identified as acute hazardous waste. The mixture would have the dangerous waste number P004.

Rationale for change: The sentence regarding mixtures was reworded in response to a comment from EPA requesting consistency with federal hazardous waste regulation language. The phrase "or (d)" was deleted since it referred to a nonexistent citation. Other changes are editorial.

9. WAC 173-303-082(3) Dangerous waste sources

(3) Care should be taken in the proper designation of these wastes and of mixtures of these wastes and solid wastes. If a person mixes A mixture of a solid waste with a waste that would be designated as a dangerous waste source under this section, then the entire mixture is must be designated as a dangerous waste source unless it has been excluded under WAC 173-303-

070 (2)(c) or (d). The mixture has the same designation (DW), and the same dangerous waste number as the dangerous waste source which was mixed with the solid waste.

Rational for change: The sentence regarding mixtures was reworded in response to a comment from EPA requesting consistency with federal hazardous waste regulation language. The phrase "or (d)" was deleted since it referred to a nonexistent citation.

10. WAC 173-303-100(5)(b)(i) Dangerous waste criteria- book designation

- (b) Book designation procedure. A person may determine if a waste meets the toxicity criteria by following the book designation instructions as follows:
- (i) A person must determine the toxic category for each known constituent. The toxic category for each constituent may be determined from available data, or by obtaining data from including the NIOSH RTECS, and checking this data against the toxic category table, below. If data are available for more than one of the toxicity criteria test endpoints (fish, oral, inhalation, or dermal), then the data indicating severest toxicity must be used, and the most acutely toxic category must be assigned to the constituent. If the NIOSH RTECS or other data sources do not agree on the same category (for the same criteria test endpoint), then the category arrived at using the NIOSH RTECS will be used to determine the toxic category. If toxicity data for a constituent cannot be found in the NIOSH RTECS, or other source reasonably available to a person, then the toxic category need not be determined for that constituent.

Rationale for change: The term, "toxicity criteria," applies to the entire subsection on state toxicity, WAC 173-303-100(5). The proposed change to this subsection, (5)(b), used the term "toxicity criteria" inappropriately and has been replaced by the term "test endpoint." Also, a clarification was made to indicate that RTECS are part of the "available data."

11. WAC 173-303-100(6) Dangerous waste criteria- persistence

(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 <u>Publication</u> #97-407, revised December 2004.*

Rationale for change: The proposed changes to Chemical Testing Methods have been withdrawn.

12. WAC 173-303-110(3)(c) Sampling and testing methods

(c) Chemical Testing Methods for Designating Dangerous Waste, Department of Ecology Publication #97-407, revised December 2004 February 1998, describing methods for testing:

Rationale for change: The proposed changes to Chemical Testing Methods have been withdrawn.

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13. WAC 173-303-120(3) and (4) Recycled wastes

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

In addition to these requirements, owners and operators of facilities that receive recyclable materials from off-site, must prepare closure plans in accordance with are subject to WAC 173-303-610 (2) and (12) and to. These facilities are also subject to financial requirements of 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 in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670 (see WAC 173-303-510);
- (e) Reserved;
- (f) Spent lead-acid batteries that are being reclaimed (see WAC 173-303-520);
- (g) Recyclable materials from which precious metals are reclaimed (see WAC 173-303-525); and,
- (h) Spent antifreeze that is recycled on-site or sent to be recycled off-site (see WAC 173-303-522).
- (4) Those recycling processes not specifically discussed in subsections (2) and (3) of this section are generally subject to regulation only up to and including storage prior to recycling. For the purpose of this section, recyclable materials received from off-site will be considered stored unless they are moved into an active recycling process within 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.

Rationale for change: The language has been revised, and applicability of financial requirements has been clarified in WAC 173-303-610(1). Based on equivalency concerns with the federal rule, this subsection was revised to be a case-by-case determination by Ecology to allow up to 72 hours for staging of wastes prior to active recycling. The criteria Ecology will consider is also identified in the revised rule, including but not limited to: the types and volumes of wastes being recycled, operational factors of the recycling process(es), and the compliance history of the operator. Ecology will apply this provision through compliance letters or agreed orders with individual facility operators.

14. WAC 173-303-200(1)(b)(ii) and (iii)) Accumulating dangerous waste on-site (ii) The waste is placed in tanks and the generator complies with 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). <u>At WAC 173-303-640(4)(c)(i)</u> add "stress of installation" after "climatic conditions". (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

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requirements of this section.) Such a generator is exempt from the requirements of WAC 173-303-620 and 173-303-610, except for WAC 173-303-610 (2) and (5); and/or (iii) The waste is placed on drip pads and the generator complies with WAC 173-303-675 (at WAC 173-303-675(4)(a)(v) add "stress of installation" after "climatic conditions") and maintains the following records at the facility:

Rationale for change: Review of the proposed incorporation of the Performance Track rule revealed the need to add the phrase "stress of installation" to the tank and drip pad requirements for equivalence with the federal regulations for accumulation. This was necessary because the referenced standards in the federal rule are to interim status facility requirements which include this phrase, whereas final facility standards do not.

15. WAC 173-303-200(1)(e)(i) Accumulating wastes on-site

(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 <u>WAC 173-303-335</u> (Construction quality assurance program) and WAC 173-303-355 (SARA Title III coordination);

Rationale for change: The addition of this exception is an editorial clarification since WAC 173-303-335 does not apply to generators.

16. WAC 173-303-200(2)(a)(ii) Satellite accumulation

- (2) Satellite accumulation.
- (a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste per waste stream in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator:
- (i) Complies with WAC 173-303-630 (2), (4), (5) (a) and (b), (8)(a), and (9) (a) and (b); and
- (ii) Complies with subsection (1)(d), (e), and (f) of this section.

Rationale for change: Ecology is withdrawing the proposed change to WAC 173-303-200(2)(a)(ii) since the proposed change caused more confusion than clarification. Ecology will instead clarify its interpretation here, and will propose appropriate and clear changes in a future amendment.

Ecology's interpretation is that satellite accumulation areas are subject to generator requirements of WAC 173-303-200(1)(e) & (f) for LQGs and WAC 173-303-201 for MQGs. Ecology is authorized to implement federal hazardous waste regulations that are at least as stringent as, or more stringent than EPA's RCRA regulations. There are many instances where the State's Dangerous Waste Regulations and implementation are different than EPA's. Ecology staff research EPA interpretations, guidance and Federal Register Notices to gain an understanding of why a particular regulation was promulgated and how EPA is interpreting it.

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In doing so, some regulations are interpreted differently at the state level. This is the case with applying additional standards to areas where dangerous waste is managed and generated throughout a generator's site, which may include areas where waste is generated and then added to a satellite accumulation container. Ecology is not unique in its interpretation of the need for additional safety and environmental standards at satellite areas. Other states such as Colorado also apply these types of regulations to satellite areas. Additionally, most of the violations that are found during routine inspections of facilities are found at satellite areas. In part, there are many more satellite areas at facilities than 90-day accumulation areas, therefore more instances to find violations.

In reviewing the history of satellite accumulation standards, EPA added this unique opportunity to store waste *without a permit* on site to allow businesses the opportunity to accumulate 'slowly generated wastes' for a long period of time. The extra time allowance enables the generator to fill the drum, making it more economical to dispose of since TSDs would charge for a full drum even if it was only ¼ full at the end of 90 days. With this extra time in mind, a satellite drum could potentially be sitting in one location for a very long time without any safety measures to ensure it is in good shape. Many businesses use satellite accumulation areas as a way to reduce regulation during generation, to increase storage time, and to accumulate an economically viable shipment of waste. This results in many drums that are filling frequently and a lot of waste that is moving in and around satellite areas.

Ecology has historically interpreted, and currently interprets, the generator regulations of WAC 173-303-200(1) and -201 (for LQGs and MQGs respectively) to apply to the entire site. Ecology does not agree with some commenters that WAC 173-303-200(2) is a stand-alone section that encompasses all the requirements for a satellite area. Considerable changes to improve Ecology's interpretation of what constitutes a satellite area were made in 1993. Ecology defined and considered a satellite accumulation area as the footprint of the drum(s) of one waste stream (not to exceed 55 gallons). EPA does not define what a satellite area is in their regulations nor do they even use the term satellite accumulation in their regulations. In 1993, Ecology also listed container regulations that apply to a satellite area since the 'area' is defined as the footprint of the drum(s). WAC 173-303-630(2), (4), (5)(a) and (b), (8)(a), and (9)(a) and (b) are the container management standards listed for a satellite drum. Ecology also listed WAC 173-303-200(1)(d) to ensure that the words dangerous or hazardous waste were included on a satellite drum since –630(3) only covers the risk labeling requirements. The consistent listing of the labeling requirements was to help generators have one labeling standard for both satellite and 90 day accumulation drums. Other applicable sections for satellite accumulation drums were not specifically listed in section 200(2), such as compliance with designation (-170), counting (-070), and site-wide requirements for contingency planning, personnel training and general inspections in 200(1) and 201 for LQGs and MQGs respectively. The changes made in 1993 concentrated on clarifying what constitutes a satellite 'area' and the individual container management requirements that were needed. WAC 173-303-200(2)(c) was added to allow an inspector to require security signage, secondary containment or other container management standards listed in 200(1)(b) if the area was being managed improperly. WAC 173-303-200(1)(e) was not specifically called out during this time as Ecology had thought it was clear that this

was a site-wide requirement that would be implemented in all areas at the facility where dangerous waste was managed and generated.

Ecology believes that providing safety equipment for employees in areas where dangerous waste is generated or managed is common sense. If a satellite area were accumulating a flammable solvent, then it would make sense to provide a fire extinguisher and a spill kit nearby in the event of a fire or release of dangerous waste from the drum. It also makes sense to provide employees working in the area with evacuation routes and simple basic on-the-job training on how to safely manage the waste from the generation point into the drum. The contingency, training, and general inspection regulations are performance-based regulations that allow for maximum flexibility at facilities. Each facility is required to identify what type of training, inspections or emergency equipment is necessary for their particular business, situation, or area. Ecology does not set out specific requirements in these regulations but instead allows a business to set those standards and then verify that they are in place and working properly.

Since the 1993 amendment, Ecology has never been questioned nor challenged on this interpretation until very recently. Thus, the recent clarification was proposed to clarify Ecology's historical and current stance on application of these rules in satellite areas. Ecology agrees that the clarification was not explained as well as it could have been which led many businesses to feel as though extra plans and inspections were required specifically in these areas instead of in a site-wide plan that is already required.

17. WAC 173-303-200(4)(a)(iv)(A)(II) Accumulating dangerous wastes on-site (II) In tanks and the generator complies with the applicable requirements of 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). At WAC 173-303-640(4)(c)(i) add "stress of installation" after "climatic conditions"; and/or

Rationale for change: In order to be equivalent to the federal rule for generators with wastewater treatment sludge, the phrase "stress of installation" was added to the tank requirements because the referenced standards in the federal rule are to interim status facility requirements which include this phrase whereas the final facility status standards, which are referenced in the state rule, do not.

18. WAC 173-303-201(2)(e) Accumulating dangerous waste on-site

(e) The generator does not need to comply with 40 CFR Part 265.176 and 178 40 CFR Subparts AA, BB, and CC, which have been incorporated by reference at WAC 173-303-400(3)(a).

Rationale for change: The citation has been clarified.

19. WAC 173-303-220(1)(b) Generator reporting

(b) In addition, any generator who stores, treats, or disposes of dangerous waste on-site must

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comply with the annual reporting requirements of WAC 173-303-390, Facility reporting except for WAC 173-303-390 (2)(g) and (h).

Rationale for change: This proposed exception is being deleted to prevent a conflict with the federal hazardous waste regulations. It was proposed to clarify that Ecology was not proposing to adopt federal waste minimization requirements for generators at this time. Ecology did not adopt federal waste minimization rules for generators, however, adoption of the proposed exception could potentially cause an authorization issue for the waste minimization requirements that apply to facilities, which Ecology is adopting at this time.

20. WAC 173-303-300(2) General waste analysis

- (2) The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), before he they stores, treats, or disposes of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter. The analysis must include or consist of either existing published or documented data on the dangerous waste, or on analytical data_from waste generated from similar processes, or data obtained by testing, or a combination of these.
- (a) When a dangerous waste management facility uses information or an owner or operator relies on knowledge from the generator to complete a waste profile for a waste for waste designation or for this detailed analysis (commonly known as a waste profile) instead of direct analysis analytical testing of a sample, that information must be documented and must meet the definition of "knowledge" as defined in WAC 173-303-040. To confirm the sufficiency and reliability of the information or "knowledge" used for the waste profile, the facility must do one or more of the following, as applicable:
- (i) Be familiar with the generator's processes by conducting site visits, and reviewing sampling data and other information provided by the generator to ensure they are adequate for safe management of the waste;
- (ii) Ensure waste analysis contained in documented studies on the generator's waste is based on representative and appropriate sampling and test methods;
- (iii) Compare the generator's waste generating process to documented studies of similar waste generating processes to ensure the waste profile is accurate and current;
- (iv) Obtain other information as predetermined by the Department on a case-by-case basis to be equivalent.
- (b) As required in WAC 173-303-380 (1)(c), records must be retained containing specific information that show compliance with this subsection for adequate sufficient and reliable information on the waste whether the owner or operator conducts direct testing on the waste or relies on analytical testing of the waste or knowledge from the generator, or a combination of these.

Rationale for change: The proposed rule language was changed in response to comments to eliminate confusing or vague language and to provide greater clarity of Ecology's intent.

21. WAC 173-303-370 Manifest system

Delete proposed (4), and move (5) to become new (6)

- (4) Whenever a shipment of dangerous waste is initiated from a facility, the owner or operator of that facility must comply with the generator requirements of WAC 173-303-170 through 173-303-230.
- (5) Within three working days of the receipt of a shipment subject to 40 CFR part 262, subpart H (which is incorporated by reference at WAC 173-303-230(1)), the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460, and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(6)Within three working days of the receipt of a shipment subject to 40 CFR part 262, subpart H (which is incorporated by reference at WAC 173-303-230(1)), the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460, and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

Rationale for change: WAC 173-303-370 is being deleted since it duplicates an existing provision at WAC 173-303-280(1). Proposed subsection (5) was moved to become subsection (6) so as not to conflict with existing cross citations to this section.

22. WAC 173-303-400(3)(c)(ix) Interim status facility standards

(ix) "Subpart G - closure and post-closure." The third sentence in section 265.112(4)(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 such a unit only such units." In addition, the sixth sentence of section 265.112(4)(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 such a unit only such units." SThe first sentence of section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure, the owner or operator must submit to the department, by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

Rationale for change: A citation was corrected, and the precise sentences to which proposed changes were made have been identified. The proposal (and previously existing text) seemed

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to indicate that the modified sentences were replacing larger amounts of text in the federal regulation. The change clarifies that only certain sentences of the incorporated text were modified. The phrase "with such a unit" was changed to "with only such units" to maintain equivalence with the federal program since the original phrase made it appear that any facility that has a tank, container, or incinerator unit is subject to the 45 day rather than the 60 or 180 day time period even if the facility has a land disposal unit or a BIF.

23. WAC 173-303-505(1)(b)(iv) Special requirements for recyclable materials used in a manner constituting disposal

(1)(b)(iv) The prohibition levels for fertilizer using K061, in mg/l, are as follows: Arsenic, 5.0; Barium, 100.0; Cadmium, 1.0; Chromium (Total), 5.0; Lead, 5.0; Mercury, 0.20; Selenium, 5.7; and Silver, 5.0.

Rationale for change: This provision, which had been moved to (1)(b)(iv) with the proposed amendments, has been deleted and will not appear in the final rule since it conflicts with, and is less stringent than, the new requirements for zinc fertilizer being adopted. Prior to EPA's recent fertilizer rule, this state provision was more stringent than the federal regulations. However, with incorporation of the newer more stringent fertilizer requirements this provision must be removed since it is less stringent than the new applicable treatment standards.

24. WAC 173-303-515(9)(a)(i) Standards for the management of used oil

(i) Used oil and other materials managed under the standards for management <u>for of</u> used oil may be stored on-site without a permit for ninety days prior to entering an active recycling process. An active recycling process refers to a dynamic recycling operation that occurs within the recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities;

Rationale for change: Editorial correction.

25. WAC 173-303-573(4) Universal Waste Mercury-Containing Equipment

- (4) 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 that does not exhibit one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100 is not dangerous waste.
- (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.
- (d) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) are exempt from 40 CFR 268.7 and 268.50 (incorporated by reference at WAC 173-303-140(2)(a)) for mercury-containing equipment covered under this subsection.

Rationale for change: This addition was made for consistency with the proposed federal universal waste rule for mercury-containing equipment. It is necessary to include the information regarding the exemption from land disposal restrictions in the state rule since EPA has not yet finalized their rule and Ecology's incorporation by reference of federal land disposal restrictions does not include this provision at this time.

26. WAC 173-303-573(38) Universal waste importing

(38) Imports.

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this section, immediately after the waste enters the United States, as indicated below in paragraphs (a) through (c) of this subsection:

- (a) A universal waste transporter is subject to the universal waste transporter requirements of subsections (28) through (34) of this section.
- (b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subsections (6) through (27) of this section, as applicable.
- (c) An owner or operator of a destination facility is subject to the destination facility requirements of subsections (35) through (37) of this section.
- (d) Persons managing universal waste that is imported from an OECD country as specified at 40 CFR 262.58(a)(1), which is incorporated by reference at WAC 173-303-230(1), are subject to paragraphs (a) through (c) of this subsection, in addition to the requirements of 40 CFR part 262 subpart H, which is incorporated by reference at WAC 173-303-230(1).

Rationale for change: Ecology proposed adopting the export requirements of the April 12, 1996 rule: Imports and Exports of Hazardous Waste: Implementation of OECD Council Decision. These changes to the universal waste rule are required as part of the export rule for completeness. EPA implements these export requirements, but they are reflected in the state regulation for clarity and consistency.

27. WAC 173-303-610(1) Closure and post-closure

- (1) Applicability.
- (a)(i) Subsections (2) through (6) of this section, (which concern closure), apply to the owners and operators of all dangerous waste facilities.
- (ii) Subsections (2) and (12) of this section apply to the owners and operators who receive recyclable dangerous waste or used oil from off-site and place them in recycling units.
- (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

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as specified in WAC 173-303-650(6), 173-303-660(9), and 173-303-680(4), respectively; to containment buildings that are required under 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) to meet the requirements for landfills; and, unless otherwise authorized by the department, to the owners and operators of all facilities which, at closure, cannot meet the removal or decontamination limits specified in subsection (2)(b) of this section.

- (c) Owners and operators of off-site recycling facilities subject to WAC 173-303-120(3) or (4), and off-site used oil processors subject to regulation under WAC 173-303-515(9) are subject to:
- (i) WAC 173-303-610(2) Closure Performance Standard; and,
- (ii) WAC 173-303-610(12) Off-site Recycling and Used Oil Processor Closure Plans.
- (d) For the purposes of the closure and post-closure requirements, any portion of a facility which closes is subject to the applicable closure and post-closure standards even if the rest of the facility does not close and continues to operate.
- (d) (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.

Rationale for change: Applicability for closure requirements of recycling facilities and used oil processors has been moved to WAC 173-303-610(1)(c) for clarity.

28. WAC 173-303-610(3)(c)(i) Closure and post-closure

- (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 such a unit only such units.

Rationale for change: The phrase "with such a unit" was changed to "with only such units" to maintain equivalence with the federal program since the original phrase made it appear that any facility that has a tank, container, or incinerator unit is subject to the 45 day rather than the 60 or 180 day time period even if the facility has a land disposal unit or a BIF.

29. WAC 173-303-610(8)(d)(ii)(D)

(D) The owner/operator requests the director <u>to</u> apply alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d).

Rationale for change: Editorial correction.

30. WAC 173-303-610(12) Off-site recycling and used oil closure plans

- (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 (12)(b) of this section that will be resubmitted, the amended plan must be resubmitted within 90 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 the facility recycling units at any point during its active life. The closure plan must include at least:
- (i) An estimate of the maximum inventory of dangerous wastes or used oil ever on-site over the active life of the facility;
- (ii) Descriptions, schedules, and disposal or decontamination procedures in subsections (3), (4),
- (5), (6) of this section, except any provisions dealing with permits, permit applications, modifications or approvals. The term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit" in these subsections. Any references to permits or permit modifications in these subsections do not apply.
- (e) Obligation to amend. At least sixty days prior to a major change at an off-site recycling or used oil processor/rerefining facility, the owners/operator of that facility must submit an amended closure plan. A major change may include the addition of a recycling or recovery process that is subject to WAC 173-303-120 (3) or (4), any increase in the maximum inventory of dangerous waste or used oil described in the previously approved closure plan, the closure of an existing resource reclamation unit, or a change in ownership or operational control. The department must approve or deny, with justification, the revised closure plan. Refer to (12)(a) of this section when a closure plan is denied if the closure plan needs to be resubmitted. Alternatively, the owner or operator may challenge the denial pursuant to WAC 173-303-845.
- (f) Notification of closure. At least forty-five days prior to closure, an owner/operator must provide written notice to department of intent to close.
- (g) Relationship to closure plans for permitted facilities. A facility owner/operator that is subject to permitting and closure planning requirements for storage, treatment or disposal that is also required to prepare a closure plan for off-site recycling or used oil processing/rerefining, may satisfy the requirements of this subsection by combining all closure requirements in a single closure plan.

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Rationale for change: In response to comments, a process and time period for resubmitting closure plans that have been denied, and language regarding challenging the denial have been added to the final rule. Also, the scope of the closure plan was modified to be limited to recycling units rather than to the recycling facility.

31. WAC 173-303-620(1), (2), (3), (4), (6) and (8) Financial requirements

- (1) Applicability.
- (a) The requirements of subsections (3), (4), (7), (8), (9), and (10) of this section, apply to owners and operators of all dangerous waste facilities, except as provided otherwise in this section.
- (b) The requirements of subsections (5) and (6) of this section apply to owners and operators of:
- (i) Dangerous waste disposal facilities;
- (ii) Tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills;
- (iii) Miscellaneous units as specified in WAC 173-303-680(4);
- (iv) Waste piles and surface impoundments to the extent that WAC 173-303-650 and 173-303-
- 660, respectively, require that such facilities comply with this section; and
- (v) Containment buildings that are required under WAC 173-303-695 to meet the requirements for landfills.
- (c) States and the federal government are exempt from the requirements of this section. Operators of state or federally owned facilities are exempt from the requirements of this section, except subsections (3) and (5) of this section. Operators of facilities who are under contract with (but not owned by) the state or federal government must meet all of the requirements of this section.
- (d) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for financial assurance when he or she:
- (i) Applies alternative requirements for ground water monitoring, closure or post-closure under WAC 173-303-610 (1)(d) or 173-303-645 (1)(e); and
- (ii) Determines that it is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.
- (e) Except as provided in (1)(c) of this section, 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 resource reclamation unit may choose to consolidate those requirements into a single mechanism for submittal to the department.
- (2) Definitions. As used in this section, the following listed or referenced terms have the meanings given below:
- (a) "Closure plan" means the plan for closure prepared in accordance with the requirements of

WAC 173-303-610(3) , or for off-site recycling or used oil processing facilities prepared in accordance with WAC 173-303-610(12);

- (b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (3) of this section;
- (c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (5) of this section;
- (d) "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation;
- (e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of WAC 173-303-610 (7), (8), (9), and (10);
- (f) "Regional administrator" means the department;
- (g) "Hazardous waste" means dangerous waste; and
- (h) The additional terms listed and defined in 40 CFR 264.141 (f), (g), and (h) are incorporated by reference.
- (3) Cost estimate for facility closure.
- (a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in WAC 173-303-610 (2) through (6), and applicable closure requirements in WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4) and 173-303-695. The closure cost estimate:
- (i) Must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see WAC 173-303-610 (3)(a));
- (ii) Must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility;
- (iii) May not incorporate any salvage value that may be realized with the sale of dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure;
- (A) Except that, off-site recyclers subject to WAC 173-303-120(3) or (4), or off-site used oil processors subject 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 (5%) water by volume.; and
- (iv) May not incorporate a zero cost for dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), that might have economic value.
- (b) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan,

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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;
- (iv) (v) Closure insurance; or
- $\overline{\text{(vi)}}$ Financial test and corporate guarantee for closure.
- (b) In satisfying the requirements of financial assurance for facility closure in this subsection, the owner or operator must meet all the requirements for the mechanisms listed above as set forth in 40 CFR 264.143 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.
- (c) 40 CFR 264.143 is modified by the following requirements:
- (i) Partially funded trust funds of 264.143(a)(3) may not be accepted as a mechanism for a closure trust fund for TSDs. Owners and operators of existing recycling units that become subject to this section may establish a partially funded closure trust fund with a pay-in period of three <u>five</u> years. The fund must be fully funded no later than three <u>five</u> years (and the first, second, and third, fourth, and fifth payments due no later than one, two, and 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) Financial or insurance institutions may not be used that are owned solely, or held in majority

ownership, by the parent company of the TSD, off-site recycling or used oil processing facility seeking financial assurance;

- (iii) 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, Aa, A 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 the secondary beneficiary on an insurance policy;
- $(\forall \underline{iv})$ Facility owners/operators requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.
- (d) 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 resource reclamation recycling units. In addition to the requirements of 40 CFR 264.143, as amended by this subsection, the financial assurance must meet the following requirements:
- (i) For existing facilities choosing a surety bond guaranteeing payment, surety bond guaranteeing performance, letter of credit, insurance, financial test or corporate guarantee, 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 thirty-six sixty months of approval of the closure plan by the department (see (c)(i) of this subsection);
- (iii) For new facilities, <u>financial assurance must</u> be established and submitted to the department at least sixty days prior to the acceptance of the first shipment of wastes.
- (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) 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 (4)(a) of this section. This may include any alternative mechanism as may be established through action by the Washington State Legislature.
- (6) Financial assurance for post-closure monitoring and maintenance.
- (a) An owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure care plan. He must choose from the following options or combination of options:
- (i) Post-closure trust fund, except that the use of partially funded trust funds, as provided in 40 CFR 264.145(a), will not be allowed by the department;
- (ii) Surety bond guaranteeing payment into a post-closure trust fund;
- (iii) Surety bond guaranteeing performance of post-closure care;
- (iv) Post-closure letter of credit;
- (v) (iv) Post-closure insurance; however, financial or insurance institutions providing such insurance may not must have a current rating of financial strength of:
- (A) Be owned solely, or held in majority ownership, by the parent company of the TSD seeking financial assurance; and

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(B) Must have a current rating of financial strength of:

(I) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(II) (B) Aaa, Aa, A Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(HH) (C) A++, A+, A+, A+, A+, B++, B+ as rated by A.M. Best;

Financial test and corporate guarantee for post-closure care; or

- (vi) (v) Financial test and corporate guarantee for post-closure care, except that the criterion for minimum tangible net worth in 40 CFR 264.145(e) (f) must be in an amount of at least twenty million dollars.
- (b) In satisfying the requirements of financial assurance for facility post-closure care in this subsection, the owner or operator must meet all the requirements set forth in 40 CFR 264.145 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.
- (8) Liability requirements.
- (a) An owner or operator of a TSD facility, off-site recycling or used oil processing/rerefining facility, or a group of such facilities must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(a), which is incorporated by reference, with the following additional requirements:
- (i) Financial or insurance institutions may not be used that are owned solely, or held in majority ownership, by the parent company of the TSD, off-site recycling or used oil processing facility seeking financial assurance coverage;
- (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, Aa, A 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 ii) The department may file claims against liability insurance when contamination occurs as a result of releases or discharges of dangerous wastes or used oil from recycling units subject to regulation under this section to waters of the state as defined under chapter 90.48 RCW; (iv) facility owners/operators requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.

Rationale for change: A number of changes were made to these subsections in response to comments on the proposed amendments, including clarification of some requirements. In recognition of the cost burden associated with the proposed rule for providing financial assurance for closure, Ecology made the following revisions to the final rule:

- extended the trust fund pay-in period from 36 to 60 months (see WAC 173-303-620(4)(d)(ii);
- created an exclusion from the estimate of closure costs for recyclable materials that require incidental processing and are managed in clearly identifiable (dedicated) tanks or containers (see WAC 173-303-620(3)(a)(iii)(A)); and,

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■ created a provision that will allow an owner or operator to propose an alternative financial mechanism that is determined by Ecology to be equivalent to one of the required mechanisms (see WAC 173-303-620(4)(e)). This may include any mechanism that may be created by the Washington Legislature.

By creating this extension, possible exclusion, and provision for an alternative mechanism, Ecology believes that the costs for providing financial assurance for closure may be mitigated or reduced. At the same time, the Department also recognizes that the reduced costs to facility owners and operators may be offset by some additional financial risk to the public.

Based on review of the comments associated with captive insurance and ratings of insurance companies, the justification for proposing the changes, evaluation of potential impacts in Washington, and the desire to address financial mechanisms in a timely manner, these changes were made in the final rule:

- reinserting performance bonds as an acceptable mechanism for providing financial assurance for closure and post-closure at WAC 173-303-620(4)(a)(iii) and -620(6)(a)(iii);
- withdrawing the prohibition on captive insurance (proposed at WAC 173-303-620(4)(c)(ii), 620(6)(a)(iv)(A), -620(8)(a)(i)); and
- keeping the requirement that insurance companies must meet minimum ratings by Standard & Poors, Moody and Best, but revising those ratings to accept one lower tier of ratings.

A change was made to clarify that Ecology must be named as the secondary beneficiary in case the primary holder of the policy does not or cannot file claims on insurance for closure.

32. WAC 173-303-640(4)(i)(D) and (E)/ (iv) and (v) Tank systems

- (i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, must comply with the following:
- (A) (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.
- (B) (ii) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(A) (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.
- (C) (iii) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

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Note:

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

- (Θ) (<u>iv</u>) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with (h)(iv)(A) through (C) (i)(i) through (iii) of this subsection.
- (\underline{E}) (\underline{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 $\underline{(h)(iv)(A)}$ through (\underline{C}) (\underline{i}) (\underline{i}) through (\underline{iii}) of this subsection, the owner or operator must comply with the requirements of subsection (7) of this section.

Rationale for change: An incorrect reference to (h)(iv)(A) through (C) was found in two locations. In -640(4)(i)(D) and (E), the reference should be (i)(i) through (iii). The confusion was based on the letter "i" (eye) being confused with roman numeral "i" (one).

33. WAC 173-303-646 Corrective action

WAC 173-303-646 has been broken down into the following sections:

		Old citation
WAC 173-303-64610	Purpose and applicability	WAC 173-303-646(1)
WAC 173-303-64620	Requirements	WAC 173-303-646(2)
WAC 173-303-64630	Use of the Model Toxics Control Act	WAC 173-303-646(3)
WAC 173-303-64640	Grandfathered corrective action management units (CAMUs)	WAC 173-303-646(4) through (6)

Rationale for change: References to the subsections for grandfathered corrective action management units have been added.

34. WAC 173-303-64610 Corrective action management units

WAC 173-303-64610 Purpose and applicability. (1) The provisions of this section, and WAC 173-303-64620 and WAC 173-303-64630, establish requirements for corrective action for releases of dangerous wastes and dangerous constituents including releases from solid waste management units.

Rationale for change: References to WAC 173-303-64620 and -64630 were added for clarity.

35. WAC 173-303-64640 Grandfathered corrective action management units

(1)(a) In accordance with the requirements of this subsection section and WAC 173-303-64610 through -64630, the department may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of remediation waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Corrective action management unit means an area within a facility that is used only for managing remediation wastes for implementing corrective action or

- cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.
- (b) Designation of a CAMU will not in any way affect the department's existing authorities, including authority under chapter 70.105D RCW, to address clean-up levels, media-specific points of compliance, or other remedy selection decisions.
- (c) Designation of a CAMU will not in any way affect the timing or scope of review of any actions taken under the Model Toxics Control Act pursuant to WAC 173-303-64630 to fulfill the corrective action requirements of WAC 173-303-64620 or the corrective action requirements of WAC 173-303-645.
- (2) Designation of a corrective action management unit.
- (a) When designating a CAMU, the director will do so in accordance with the following:
- (i) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
- (ii) Waste management activities associated with the CAMU will not create unacceptable risks to humans or the environment resulting from exposure to dangerous wastes or dangerous constituents;
- (iii) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing remediation wastes is more protective than management of such wastes at contaminated areas of the facility;
- (iv) Areas within the CAMU where wastes remain in place after closure of the CAMU, will be managed and contained so as to minimize future releases of dangerous wastes and dangerous constituents to the extent practicable;
- (v) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;
- (vi) The CAMU will enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and (vii) The CAMU will, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.
- (b) When designating a CAMU, the director will specify requirements for the CAMU including the following:
- (i) The areal configuration of the CAMU;
- (ii) Requirements for remediation waste management within the CAMU including specification of applicable design, operation, and closure requirements;
- (iii) Requirements for ground water and vadose zone monitoring that are sufficient to:
- (A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in ground water from sources located within the CAMU; and
- (B) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.
- (iv) Requirements for closure that will minimize the need for further maintenance of the CAMU; and control, minimize, or eliminate to the extent necessary to protect human health and the

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environment, for areas where wastes remain in place, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to ground waters, to surface waters, or to the atmosphere and will include, as appropriate and deemed necessary by the director, the following:

- (A) Requirements for excavation, removal, treatment, and/or containment of wastes;
- (B) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and
- (C) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.
- (c) In establishing closure requirements for CAMUs under (b)(iv) of this subsection the director will consider the following factors:
- (i) CAMU characteristics;
- (ii) Volume of wastes which will remain in place after CAMU closure;
- (iii) Potential for releases from the CAMU;
- (iv) Physical and chemical characteristics of the waste;
- (v) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases in and/or from the CAMU; and
- (vi) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.
- (d) The director will, for areas of the CAMU in which wastes will remain in place after CAMU closure, specify post-closure requirements to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to ground waters, to surface waters, and to the atmosphere. Such post-closure requirements will include, as necessary to protect human health and the environment, monitoring and maintenance activities and the frequency with which such activities will be performed to ensure the integrity of any cap, final cover, or other containment system.
- (e) The owner/operator of a facility must provide sufficient information to enable the director to designate a CAMU in accordance with the criteria in sections WAC 173-303-64650, WAC 173-303-64660, and WAC 173-303-64670.
- (f) The director will document the rationale for designating CAMUs and will make such documentation available to the public.
- (g) Incorporation of the designation of and requirements for a CAMU into a existing permit must be approved by the director according to the procedures for agency initiated permit modifications under WAC 173-303-830(3), or according to the permit modification procedures of WAC 173-303-830(4).
- (3) Incorporation of a regulated unit within a CAMU.
- (a) The director may designate a regulated unit (as defined in WAC 173-303-040) as a CAMU, or may incorporate a regulated unit into a CAMU, if:
- (i) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610(4) or 40 CFR Part 265.113, which is incorporated by reference at WAC 173-303-400(3)(a); and
- (ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.

(b) The requirements of WAC 173-303-610, 173-303-620, 173-303-645, and the unit specific requirements of WAC 173-303-650 through 173-303-680 that applied to the regulated unit will continue to apply to the portion of the CAMU into which the regulated unit was incorporated.

Rationale for change: These subsections were retained in the final rule because they are required for grandfathered corrective action management units. The paragraphs were previously found at WAC 173-303-646(4) through (6) and were proposed to be deleted with the restructuring of corrective action management unit requirements. However, they will be retained in this location for a regulation that is equivalent to the federal rule. Language related to post-closure care at (2)(b)(iv) was added for equivalence with the federal rule. References to WAC 173-303-64610 through -64630 were added for clarity. Subsection was changed to "section" as an editorial correction.

36. WAC 173-303-64650(3) Corrective action management units

(3) In accordance with the requirements of this section, the applicable portions of WAC 173-303-64610 through -64630, and with WAC 173-303-64660, the department may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of CAMU-eligible waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Corrective action management unit means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

Rationale for change: The citations were added for clarity.

37. WAC 173-303-64650(3)(b) Corrective action management units

(b) The department may prohibit, where appropriate, the placement of waste in a CAMU where the department has or receives information that such wastes have not been managed in compliance with applicable land disposal treatment standards of 40 CFR part 268, which is incorporated by reference at WAC 173-303-140 (2)(a), or applicable unit design requirements of WAC 173-303-600 through WAC 173-303-695, or applicable unit design requirements of WAC 173-303-400, or that noncompliance with other applicable requirements of this chapter likely contributed to the release of the waste.

Rationale for change: The CAMU amendments apply to state-only dangerous wastes as well as federally regulated wastes. The final rule cites to land disposal restrictions for all dangerous wastes. The citations were added for clarity.

38. WAC 173-303-64650(3)(c)(iv) Corrective Action Management Units

(iv) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with WAC 173-303-140 $\underline{4}$ (b)(iii). Sorbents used to treat free liquids in CAMUs must meet the requirements of WAC 173-303-140 (4)(b)(iv).

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Rationale for change: The citation was corrected.

standards specified in (d)(iii) of this subsection.

39. WAC 173-303-64660(2)(c) Designation of a corrective action management unit (c) Whether the disposal and /or release of the waste occurred before or after the land disposal requirements of 40 CFR part 268, which are incorporated by reference at WAC 173-303-140(2)(a), or, if the waste is a state-only dangerous waste, the land disposal restrictions of WAC 173-303-140(2)(b), were in effect for the waste listing or, characteristic, or criterion.

Rationale for change: The CAMU amendments apply to state-only dangerous wastes as well as federally regulated wastes. The final rule cites to land disposal restrictions for all dangerous wastes.

40. WAC 173-303-64660(3)(c)(i) Designation of a corrective action management unit

(i) Unless the department approves alternative requirements under (c)(ii) of this subsection, CAMUs that consist of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this subsection, composite liner means a system consisting of two components; the upper component must consist of a

minimum 30-mil flexible membrane (FML) or (geomembrane), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;

Rationale for change: The rule language was clarified to show that flexible membrane liner and geomembrane are synonymous terms.

41. WAC 173-303-64660(3)(d) Designation of a corrective action management unit (d) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with subsection (4) of this section, CAMU-eligible wastes that, absent this subsection, would be subject to the treatment requirements of 40 CFR part 268, which are incorporated by reference at WAC 173-303-140(2)(a), and that the department determines contain principal hazardous constituents must be treated to the

Rationale for change: The CAMU amendments apply to state-only dangerous wastes as well as federally regulated wastes. The final rule cites to land disposal restrictions for all dangerous wastes.

42. WAC 173-303-64660(d)(ii) Designation of a corrective action management unit (ii) In determining which constituents are "principal hazardous constituents,: the department must consider all constituents which, absent this section, would be subject to the treatment requirements of 40 CFR part 268, which are incorporated by reference at WAC 173-303-140(2)(a).

Rationale for change: The CAMU amendments apply to state-only dangerous wastes as well as federally regulated wastes. The final rule cites to land disposal restrictions for all dangerous wastes.

43. WAC 173-303-64660(3)(e) Designation of a corrective action management unit (e) Except as provided in subsection (4) of this section, requirements for ground water and vadose zone monitoring and corrective action that are sufficient to:

Rationale for change: This change was made to ensure that the rule cannot be interpreted to allow <u>either</u> ground water or vadose zone monitoring. As written, it could have been interpreted as less stringent than the federal provision.

44. WAC 173-303-64660(3)(f) Designation of a corrective action management unit (3)(f) Except as provided in subsection (4) of this section, requirements for closure will minimize the need for further maintenance; and control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of dangerous wastes, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to ground waters, to surface waters, or to the atmosphere.

Rationale for change: This addition is for equivalence with the federal regulations. The statement already exists in relation specifically to post-closure, but to more closely adhere to the structure of the federal rule it is restated in this subsection.

45. WAC 173-303-64660(4)(a) Corrective Action Management Units

- (4) CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs must be designated in accordance with all of the requirements of this subsection, except as follows. (Note that staging piles requirements are incorporated by reference at WAC 173-303-64690.)
- (a) CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554(d)(1)(iii), (h), and (i) are subject to the requirements for staging piles at 40 CFR 264.554(d)(1)(i) and (ii), § 264.554(d)(2), § 264.554(e) and (f), and § 264.554(j) and (k) in lieu of the performance standards and requirements for CAMUs in this section at subsections (1) and (3)(c) through (f). The staging pile requirements of 40 CFR Part 264.554 are incorporated by reference at WAC 173-303-64690.
- (b) CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554(d)(1)(iii), (h), and (i), which are incorporated by reference:

Rationale for change: Wording to indicate incorporation of these federal citations has been clarified.

46. WAC 173-303-64670(1)(a) Incorporation of a regulated unit within a CAMU (1) The department may designate a regulated unit (as defined in WAC 173-303-040) as a

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CAMU, or may incorporate a regulated unit into a CAMU, if:

(a) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610(4) or 40 CFR Part 265.113, which is incorporated by reference at 173-303-400(3)(a); and

Rationale for change: The citations were clarified.

47. WAC 173-303-646910 (1), (2), (3), (6), & (7) CAMU- eligible waste

- (1) Disposal of CAMU-eligible wastes into permitted hazardous dangerous waste landfills. (1) The department may approve placement of CAMU-eligible wastes in hazardous dangerous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of RCRA 40 CFR part 268, which is incorporated by reference at WAC 173-303-140(2), if the conditions in (a) through (c) of this subsection are met:
- (a) The waste meets the definition of CAMU-eligible waste in WAC 173-303-64650 (3)(a) and (b).
- (b) The department identifies principal hazardous constituents in such waste, in accordance with WAC 173-303-64660 (3)(d)(i) and (ii), and requires that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:
- (i) The treatment standards under WAC 173-303-64660 (3)(d)(iv); or
- (ii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(A), (C), (D) or (E)(I); or
- (iii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(E)(II), where treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.
- (c) The landfill receiving the CAMU-eligible waste must have a RCRA hazardous dangerous waste permit, meet the requirements for new landfills in WAC 173-303-665, and be authorized to accept CAMU-eligible wastes; for the purposes of this requirement, "permit" does not include interim status.
- (2) The person seeking approval must provide sufficient information to enable the department to approve placement of CAMU-eligible waste in accordance with subsection (1) of this section. Information required by WAC 173-303-64660 (2)(a) through (c) for CAMU applications must be provided, unless not reasonably available.
- (3) The department must provide public notice and a reasonable opportunity for public comment before approving CAMU-eligible waste for placement in an off-site permitted hazardous dangerous waste landfill, consistent with the requirements for CAMU approval at WAC 173-303-64660(6). The approval must be specific to a single remediation.
- (6) Generators of CAMU-eligible wastes sent off site to a hazardous dangerous waste landfill under this subsection must comply with the requirements of 40 CFR 268.7(a)(4), which is incorporated by reference at WAC 173-303-140(2); off-site facilities treating CAMU-eligible wastes to comply with this section must comply with the requirements of Sec. 268.7(b)(4), which is incorporated by reference at WAC 173-303-140(2), except that the certification must be with respect to the treatment requirements of subsection (1)(b) of this section.
- (7) For the purposes of this subsection only, the "design of the CAMU" in WAC 173-303-64660 (3)(d)(v)(E) means design of the permitted Subtitle C dangerous waste landfill.

Rationale for change: For internal consistency, the word "hazardous" was changed to "dangerous" for landfills and permits. The CAMU amendments apply to state-only dangerous wastes as well as federally regulated wastes. The final rule cites to land disposal restrictions for all dangerous wastes.

48. WAC 173-303-670(1)(b)(ii) Incinerators

(1)(b)(ii) The MACT standards do not replace the closure requirements of WAC 173-303-610 or the applicable requirements of WAC 173-303-280 through 173-303-400395, 173-303-645, 173-303-610, 173-303-620, 173-303-691, 173-303-692, and 173-303-902.

Rationale for change: The reference was changed since this provision applies to final status facilities. WAC 173-303-400 applies to Interim Status facilities.

49. WAC 173-303-670(1)(b)(iv) Incinerators

(iv) The following requirements remain in effect for startup, shutdown, and malfunction events if you elect to comply with 40 CFR 270.235(a)(1)(i), which is incorporated by reference, to minimize emissions of toxic compounds from these events:

Rationale for change: This addition clarifies that the provision cited in the federal regulations has been incorporate by reference into the state regulations.

50. WAC 173-303-802(5)(a) Permits by rule

(5)(a) The owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit that treats state-only dangerous wastes generated on or off site or federally regulated hazardous waste generated on site, or a wastewater treatment unit that treats dangerous wastes generated on or off site, will have a permit by rule, subject to limitations in (b) and (c) of this subsection, if they:

Rationale for change: This change was made in the final rule to clarify that elementary neutralization and totally enclosed treatment facilities may not treat federally regulated hazardous wastes that were generated off-site. The change applies only to wastewater treatment units as explained in the proposed amendment.

51. WAC 173-303-802(5)(a)(iv)(l) Permits by rule

(I) WAC 173-303-380(1)(d), operating record, and WAC 173-303-380(1)(a) when the owner or operator of a wastewater treatment unit is treating federally regulated wastewaters generated off-site;

Rationale for change: This recordkeeping requirement was added to the final expanded permit-by-rule requirement for owners and operators of wastewater treatment units treating federally regulated hazardous wastes generated off-site. The information required in WAC 173-303-380(1)(a) will be important to track the source and volumes of wastewater received and treated at a facility and is needed to prepare the annual report required in the permit-by-rule provisions (WAC 173-303-802(5)(a)(iii)(J)).

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52. WAC 173-303-805(1)(b) Interim status permits.

(1)(b) Any person who owns or operates an "existing dangerous <u>waste</u> TSD facility" or a facility in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act or RCRA that renders the facility subject to the requirement to have a dangerous waste permit will have interim status and will be treated as having been issued a permit to the extent he or she has:

Rationale for change: Editorial correction.

53. WAC 173-303-830(4)(j)(i) MACT standards

- (j) Combustion facility changes to meet 40 CFR part 63 MACT standards. (Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63, you must get an air permit from ecology or the local air authority.) The following procedures apply to hazardous waste combustion facility permit modifications requested under Appendix I of this section, section L.9.
- (i) Facility owners or operators must have complied with the Notification of Intent to Comply requirements of 40 CFR 63.1210 that were in effect prior to May 14, 2001 October 11, 2000 (see 40 CFR Part 63 revised as of July 1, 2000) in order to request a permit modification under this section.

Rationale for change: The date was corrected for consistency with the federal rule being incorporated.

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

Rationale for change: The federal citation was clarified.

- 55. WAC 173-303-960 Special powers and authorities of the department. (1)
 Applicability. This section applies to departmental powers and authorities when taking actions against activities that may present an imminent and substantial endangerment to health or the environment.
- (2) Notwithstanding any other provision of this chapter, upon receipt of evidence or with due cause the department may direct the attorney general to bring actions for injunctive, declaratory, or other relief to enforce any requirement of this chapter, or to bring suit to immediately restrain or obtain such other relief as may be necessary against any person contributing to the handling, storage, treatment, transportation, recycling, or disposal of any dangerous waste or solid waste that may present an imminent and substantial endangerment to health or the environment. believes that the handling, storage, treatment, transportation, recycling, or disposal of any dangerous waste or solid waste may present a significant threat to health or the environment, the department may:
- (a) Authorize an agency inspector to enter at reasonable times establishments regulated under this chapter for the purposes of inspection, monitoring, and sampling; and
- (b) Direct the attorney general to bring suit on behalf of the state to immediately restrain any

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person contributing to such handling, storage, treatment, transportation, recycling, or disposal to immediately stop such handling, storage, treatment, transportation, recycling, or disposal or to take such other action as may be necessary.

Rationale for change: In the final rule, Ecology is following the advice of the Attorney General's Office to revise both subsections -960(1) and (2). Ecology is striking the language regarding authority to conduct inspections because this authority already exists in RCW 70.105.130. The language of this section was revised to maintain consistency with RCW 70.105.120 while also retaining the term "imminent and substantial endangerment". By keeping the term "imminent and substantial endangerment in this section, we trust that the courts will apply the legal tests that apply to Ecology for proving the need for action, and that the courts will be guided by decisions of courts in other similar circumstances in Washington and other states.