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

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

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Introduction and
Summary of Public Involvement Actions

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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.

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.

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 ~~hazardous~~ dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.
(B) Wastes excluded under this section are subject to 40 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 if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use. ~~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)(oo).~~

~~(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)(oo).~~
~~(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)(oo).~~
~~(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.~~

~~(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)(oo) was deleted from the final rule since WAC 173-303-071(3)(oo) is not being adopted.

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

(3) Dangerous waste numbers and mixtures. A waste ~~which~~ <u>that</u> 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~~ <u>that</u> caused the waste to be designated. ~~If a person mixes~~ <u>A mixture of</u> 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~~ <u>that</u> 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~~ <u>A mixture of</u> a solid waste with a waste that would be designated as a dangerous waste source under this section~~, then the entire mixture is~~ <u>must</u>

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* Publication #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.

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). At WAC 173-303-640(4)(c)(i) 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 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 WAC 173-303-335 (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. 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 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 store~~s~~, treat~~s~~, or dispose~~s~~ 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." ~~S~~The first sentence of section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure, the owner or operator must submit to the department, by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

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 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 ~~for~~ <u>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 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 to 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.

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, ~~T~~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, 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

~~(v)~~ (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~~ five years. The fund must be fully funded no later than ~~three~~ five 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;
~~(iv)~~ (iii) Ecology must be named as ~~the~~ secondary beneficiary on an insurance policy;
(~~v~~ 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);
~~(iv)~~ (iii) For new facilities, financial assurance must be established and submitted to the department at least sixty days prior to the acceptance of the first shipment of wastes.
(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~~
~~(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
~~(III)~~ (C) 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,
- 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.

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.

(~~D~~) (iv) 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.
(~~E~~) (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 ~~(h)(iv)(A) through (C)~~ (i)(i) through (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 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 4 (b)(iii). Sorbents used to treat free liquids in CAMUs must meet the requirements of WAC 173-303-140 (4)(b)(iv).

Rationale for change: The citation was corrected.

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 $1x10^{-7}$ cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;

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

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~~/or~~ 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 either 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 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-~~400~~395, 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)(I) 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)).

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

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

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 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.

Comments and Responses

This section includes all summarized comments that were submitted on the proposed rule amendments and Ecology's responses.

General

Comment 1: A commenter requested an extension to the public comment period.

Response: *The end of the comment period was extended from September 10, 2004 to September 24, 2004, making the comment period nine weeks long from the date of publication in the State Register, and eleven weeks from electronic notification to interested persons.*

Comment 2: The commenter expressed appreciation for consideration of their comments on the earlier draft of the amendments.

Response: *Comment noted.*

Comment 3: At the public hearing, the commenter requested a copy of the Responsiveness Summary and wanted clarification that the Responsiveness Summary doesn't mean the preamble.

Response: *A copy of the Responsiveness Summary will be sent to the commenter. It contains responses to all comments received on the proposed amendments to the* Dangerous Waste Regulations *and shows the rule language changes that were made to the final rule.*

Comment 4: After reading the Small Business Economic Impact Statement (SBEIS) it has become blatantly clear that the proposed rule has an extremely negative impact on small businesses. First; the financial responsibility requirement WAC 173-303-120 will impose $3,657 in costs per employee on small businesses opposed to $89 per employee for larger businesses. Secondly, the expanded requirement for marking packages of dangerous waste WAC 173-303-190 (5)(b) will cost small business owners $5.89 per employee and large business owners $3.92 per employee. Again, a greatly disproportionate cost for small business owners. Finally, proposed WAC 173-303-515 (13) testing of used oil is expected to cost small business owners $0.48 per employee and large businesses $0.31 per employee

If the intended goal of these rules is to eliminate small businesses from this area of business, these proposed rules work towards that means. I encourage the department to seriously reconsider adopting these rules unless significant modifications are made to lessen the negative impact. One possible solution to explore for the financial responsibility rule is utilizing the PLIA program as another option for small firms to meet this requirement.

Response: *The analysis for the Small Business Economic Impact Statement (SBEIS) shows that not all dangerous waste related industries will be impacted by the proposed rule revision. For those that are impacted, some rules have proportional impacts between large and small business, and some will result in cost saving. Areas of the proposal where costs were reduced (cost savings) for existing requirements or lowered for proposed changes include the following:*

- *The universal waste rule for mercury-containing equipment, which reduces costs for generators with mercury wastes. The mercury rule amendments reduce substantive requirements.*
- *The Mercury rule amendment will indirectly reduce record keeping and reporting.*
- *Substantive requirements for post-closure plans (-610(8)) and financial responsibility (-620(6)) were not applied to recyclers and used oil processors.*
- *Closure funding can be phased in over a five year period following Ecology approval of closure plans. This was extended from 3 years in the proposed rule to 5 years in the final rule.*
- *Companies will have up to 72 rather than 24 hours to temporarily hold wastes prior to recycling so that they will not be considered "stored" and subject to hazardous waste permitting.*
- *Ecology will consider the economic impact of hazardous waste fines on small businesses as a mitigating factor in its compliance assurance policy (HWTR Policy 3-1, revised January 2004). The basic process of establishing penalties involves: 1) Determining that a penalty is the appropriate response; 2) Classifying the violations that become the basis of a penalty as major, moderate or minor; 3) Establishing the penalty amount for each violation; 4) Applying mitigating factors (these include degree of threat to human health or the environment, history of compliance, and small business incentives).*
- *The Permit by Rule amendments will create cost savings for some companies and new earnings for others.*
- *Ecology will provide guidelines, model closure plans, and on-site assistance on closure plans, closure cost estimating, and coordination on pollution liability coverage and financial assurance for closure.*

With respect to the requirement to mark packages, the survey conducted by Ecology showed a cost to small businesses of $5.89 per employee. However, this type of marking is already being done by most generators since it was related to the 2000 rulemaking that changed requirements for transportation and marking of wastes. Outreach done on the previous rule included information on this, as well as the other marking requirements. The marking amendment that was included in this proposal was inadvertently omitted from the proposed regulation in 2000, but since it was understood by much of the regulated community and being complied with, the cost estimate from the survey of how much it will cost to comply will not necessarily translate into an actual new cost for many small businesses. Ecology field staff have noted that marking has been occurring since the 2000 rule revision when the transportation changes were made.

WAC 173-303-010

Comment 5: The commenter supports inclusion of the note clarifying use of the terms public health and human health.

Response: *Comment noted.*

Comment 6: Ecology should clarify in the introduction provisions or definitions section that "public health" and "human health" are used synonymously in the *Dangerous Waste Regulations.*

Response: *Section -010 of the* Dangerous Waste Regulations *is considered the introductory provision to Chapter 173-303 WAC. In section -010(1) a note was proposed that those two terms are to be used interchangeably since there have been questions in the past as to whether or not public health applied to all humans or only if they were part of the public. The term "interchangeably" was selected over "synonymously" to make it clear that, for the purpose of the* Dangerous Waste Regulations *those two terms mean the same thing.*

WAC 173-303-040
Definitions

Knowledge (Also see response to comments under WAC 173-303-300)

Comment 7: Delete the word "reliably" from the new definition for "Knowledge." Reliably is a somewhat ambiguous term that can be a point of confusion to generators, TSDF's and regulators alike.

Comment 8: The note following the definition indicates that the definition is to be used for compliance with both the generator and TSD facility regulations. Ecology noted in the preamble that the purpose of the definition is to "clarify requirements for confirming and documenting information from a generator on a waste profile for a waste stream." However, Ecology is seeking a change that will broadly impact generators.

Comment 9: The proposed definition of knowledge is vague and ambiguous because the word 'sufficient' has different meanings under different circumstances. The concept of sufficient knowledge is not a concept that can be generalized and placed into the regulation. The determination of sufficient information for a waste can mean multiple meanings for a given waste. The proposed definition should be withdrawn in order to retain the level of flexibility currently allowed, and to avoid additional confusion about the term 'sufficient'.

Comment 10: The proposed definition of knowledge does not provide a meaningful example. Any guidance Ecology provides to illustrate a point should show a definitive answer towards the standard. Ecology's choice of the words "may be sufficient" does the regulated community and Ecology inspectors no good. The example cited by Ecology is an example of knowledge that exceeds any minimum requirements to ensure proper management of the waste.

Comment 11:The proposed definition of knowledge is defining a term contrary to application of the English language. Without the proposed definition of knowledge, the word knowledge would be interpreted to be the broadest universe of information about a waste. EPA then uses and defines the terms 'process knowledge' and 'acceptable knowledge.' Both of these terms would constitute a subset of the universe of knowledge. By the way Ecology is proposing to define knowledge, just the opposite will occur. The universe of 'knowledge' would now be a subset of 'process knowledge', and may be closer to EPA's definition of 'acceptable knowledge.' Ecology needs to avoid defining the term knowledge.

***Response (to comments 7 through 11)**: The proposed rule language has been changed for the final rule to eliminate confusing or vague language and to provide greater clarity of Ecology's intent. The definition will appear in the final rule as follows to improve meaning and clarity:*

"Knowledge" means ~~there is~~ sufficient information about ~~both the waste constituents and the process generating a waste~~ 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).

WAC 173-303-070

Comment 12: The commenter supports adoption of the federal mixture and derived from rule as a rule that makes practical sense and prevents over-regulation or over-management of wastes that are not hazardous, and saves money for small businesses. Another commenter stated their support for state adoption of a more stringent version of this rule that discourages dilution of waste, and support for not adopting other related less stringent provisions.

***Response:** Comments noted.*

Comment 13: Ecology should add mixtures of a solid waste and hazardous waste to the exclusion (WAC 173-303-070(2)(c)) because not all circumstances of dilution are impermissible under EPA's program and Ecology has adopted EPA's dilution prohibition at 40 CFR 268.3 found in the LDR program.

***Response:** Ecology agrees that not all dilution is impermissible under EPA's program and that Ecology allows dilution, as does EPA, under LDRs. However, EPA's "mixture rules" are considered less stringent than the existing state dangerous waste regulations and were evaluated with consideration for*

waste designation and not LDR standards. The proposed mixture rules are a way to delist a listed dangerous waste. Ecology has always prohibited mixing solid waste with a dangerous waste to dilute any characteristics and criteria a dangerous waste may exhibit as part of designation and on-site management. Listed wastes are identified by EPA based on a number of factors, one being whether or not the waste exhibits certain criteria. If a solid waste is a legitimate treatment agent for a listed waste to remove its dangerous waste properties, then the person treating the waste has the opportunity to show that the solid waste is an effective substitute through section -017. Ecology has not added the solid waste allowance as suggested by the commenter.

Comment 14: Ecology should delete the tie in between the exclusion and the state criteria in section -100. The proposed exclusion should not be dependent on whether the waste still displays any of the criteria.

Response: *Ecology will retain the tie in to state criteria as described above. By retaining the state criteria consideration, the generator will be less likely to incorrectly designate and mismanage their waste. In other words, when the generator compares their listed waste against the dangerous waste characteristics it would be a common mistake to stop the designation process and manage their waste as solid waste when in fact it could designate as a state toxic or persistent dangerous waste. By retaining the tie in to state criteria, the generator is not being subjected to any additional designation requirements than they were subject to prior to this change. Listed wastes are listed by EPA for a number of reasons, one being whether or not they exhibit certain criteria. Since the mixture rule is a type of delisting, it is appropriate to evaluate listed dangerous waste for criteria properties. Finally, in the formal delisting process, the generator is required to test for dangerous waste criteria.*

Comment 15: Ecology should modify the text of the mixtures proposal relating to "any characteristic" to the characteristic for which the waste is listed. The condition being placed on the exclusion related to "any characteristic" is inconsistent with the federal mixture rule exclusion and will unnecessary limit the application of the exclusion.

Response: *The text in WAC 173-303-070(2)(c)(i) and (ii) is identical in this respect to the federal rule at 40 CFR 261.3 (g)(1) and (g)(2)(ii) and (g)(3).*

Comment 16: It appears that the word "hazardous" should be replaced with "dangerous" in a few places to be consistent with terminology.

Response: *The replacements will be made in the final rule.*

Comment 17: The sentence appearing on Ecology's web page with the proposed rule states: "Federal waste codes should be assigned to any federally regulated hazardous wastes that are not excluded at the state level." Ecology's first part of the statement is true, but the second part about 'excluded at the state level' has nothing to do with a federally regulated hazardous waste.

In EPA's program, if a hazardous waste meets the requirements for the ignitable, corrosive, reactive mixture rule exclusion, then the hazardous waste is no longer recognized as a hazardous waste in EPA's program (but still subject to applicable land disposal restriction

requirements). Even in Washington state, an EPA delegated state program, WAC 173-303 provisions do not change the way EPA looks at a hazardous waste. So if WAC 173-303 does not exclude the same universe that EPA excludes, a listed waste code is still required as part of a proper waste designation. This waste is a state-only dangerous waste by definition (See -040). Since Ecology has not identified/promulgated a state-only waste code for the difference in the universe of wastes excluded, a waste designator must use the federal waste code to denote a state-only dangerous waste.

The additional criteria restrictions placed on the exclusion by Ecology will still create a state-only waste and will not accomplish making the regulations consistent with the federal program. A state-only waste will still result because the federal exclusion will still allow the listed waste code to be dropped from a proper waste designation and the state rules will still retain the listed waste code, causing a state-only dangerous waste.

Response: *Ecology was intending to state that a waste that originally became designated due to a federal characteristic that is not subsequently excluded under state regulation retains the designation originally assigned to it, and retains the original waste code. Ecology did not mean to imply that its rule caused EPA to look at their program differently. Ecology agrees that the commenter is correct where they surmise in the last paragraph that waste not excluded under WAC 173-303-070(2)(c), since the state did not adopt the federal exclusion for mixing a solid and hazardous waste, will result in a state-only dangerous waste that will require a federal waste code.*

WAC 173-303-071

Comment 18: Ecology needs to change the TSCA citation in section -071(3)(k)(iii) to be consistent with the language in section -071(3)(k)(ii). This proposed change has nothing to do with Ecology's intent of the exclusion. Ecology can not extend their regulatory authority beyond what is provided to them by statute [RCW 70.105.105].

Response: *Ecology's intent with the PCB exclusion is not to exclude this persistent dangerous waste from the dangerous waste stream so it can be disposed as a solid waste, but rather to keep in place some safeguards. The change suggested by the commenter was not part of the proposed rule amendments. Any change will have to be looked at as part of a future rulemaking as Ecology has not had the resources to thoroughly review the implications of the 1998 mega rule amendments to TSCA. The current TSCA citation referenced in -071(3)(k)(iii) would prevent persistent PCB dangerous waste from being excluded from the dangerous waste regulations and disposed of in a solid waste landfill under the TSCA PCB "mega rule." Ecology has determined that it would not be appropriate to exempt a PCB dangerous waste from dangerous waste regulation so it can be land disposed in a solid waste landfill.*

Comment 19: The commenter supports adoption of the zinc fertilizer exemptions and noted that they will ease compliance and result in cost savings for small business owners.

Response: *Comment noted.*

Comment 20: Two commenters opposed adoption of the federal rule language that would exempt hazardous secondary materials from the definition of solid waste when those materials are used to make zinc fertilizers. This opposition is based on the perspective that the proposed language is less stringent (and therefore less protective of human health and the environment) than existing state requirements. In addition, the commenters noted that because the proposed federal rule language is less stringent than existing state requirements Ecology is not required to adopt it to maintain authorization of the federal hazardous waste management program.

Response: *Ecology withdrew the exclusion for zinc secondary hazardous material at WAC 173-303-071(3)(oo) and it does not appear in the final rule. The proposed exemption language was less stringent than the existing state rule and it is true that Ecology is not required to adopt this exclusion. Ecology is unaware of any manufacturers of zinc fertilizer in the state that will be adversely affected by Washington choosing to not adopt language that would exempt hazardous secondary materials from the definition of solid waste when those materials are used to make zinc fertilizers. The lack of any comments from fertilizer manufacturers or generators with zinc secondary hazardous waste in favor of the proposal was also a factor in the decision to withdraw the proposed exemption. This exclusion may be considered for adoption during a future rulemaking.*

Comment 21: Two commenters opposed the adoption of the federal rule language that would exempt zinc fertilizers from the definition of solid waste when they are made from hazardous wastes or hazardous secondary materials. However, both commenters were in favor of retaining the proposed contaminant limits for metals and dioxins that would apply to zinc fertilizers made from hazardous wastes or hazardous secondary materials. The exemption of these zinc fertilizers would be less stringent than existing state requirements, but the addition of contaminant limits for such zinc fertilizers is more stringent than existing state requirements.

Response: *Ecology retained the exclusion at WAC 173-303-071(3)(pp) with respect to fertilizers made from zinc hazardous wastes, but deleted the portion of the language that pertained to zinc hazardous secondary materials in the proposed (oo) that was not adopted. Zinc fertilizers will be subject to the more stringent contaminant limits that are part of the exclusion.*

WAC 173-303-081

Comment 22: The proposed change in WAC 173-303-081(3) references an exclusion in -070(2)(d). No such section exists or is proposed. The citation "or (d)" should be deleted.

Response: *The recommended change will be made in the final rule.*

Comment 23: The language in the second sentence of WAC 173-303-081(3) is different than the federal mixture rule language at 40 CFR 261.3(a)(2)(iii) and (iv). The state rule should be revised to ensure that it is consistent with and equivalent to the federal rule.

Response: EPA's mixture and derived from rule were incorporated as part of this rulemaking. This change for consistency with respect to mixtures will be made in the final rule. The rule language change does not impact the meaning of the paragraph.

WAC 173-303-082

Comment 24: The proposed change in WAC 173-303-082(3) references an exclusion in -070(2)(d). No such section exists or is proposed. The citation "or (d)" should be deleted.

Response: *The recommended change will be made in the final rule.*

Comment 25: The language in the second sentence of WAC 173-303-082(3) is different than the federal mixture rule language at 40 CFR 261.3(a)(2)(iii) and (iv). The state rule should be revised to ensure that it is consistent with and equivalent to the federal rule.

Response: *EPA's mixture and derived from rule were incorporated as part of this rulemaking. This change for consistency with respect to mixtures will be made in the final rule. The rule language change does not impact the meaning of the paragraph.*

WAC 173-303-090

Comment 26: The commenter supports the deletion of the reference to 49 CFR 173.128 for the ignitability waste designation because it makes the waste designation consistent with the federal program and eliminates state-only dangerous waste designation for organic peroxides. A corresponding change needs to made in *Chemical Testing Methods for Designation Dangerous Waste*, publication #97-407. (20, 21)

Response: *Comment noted. Corresponding changes were to be included in the revised* Chemical Testing Methods*; however, all proposed changes to* Chemical Testing Methods *were withdrawn. See the related response below for comments on* Chemical Testing Methods*.*

Comment 27: Ecology needs to propose a change pertaining to the designation of Division 1.5 reactive waste. Under –090(7)(a)(viii), Ecology needs to remove the reference to Division 1.5 as reactive waste in order to be consistent with the federal rules. Because the *Chemical Testing Methods for Designating Dangerous Waste* (publication #97-407) document is being amended due to halogenated organic compounds, Ecology needs to put the effort into confirming the accuracy of this comment and make the appropriate change. The change should also be made to update the document *Chemical Testing Methods for Designating Dangerous Waste* (publication #97-407) to delete reference to Division 1.5 since this document is open for change as part of this rulemaking. The commenter understands that Ecology has inadvertently created a new class of state-only dangerous waste by adding Division 1.5 to the reactive provisions.

Response: *Division 1.5 was not proposed for removal as a reactive waste since Ecology believes that these wastes should be regulated as Dangerous Wastes and is considering adding Classes 1.4 and 1.6 to WAC 173-303-090(7)(a)(viii). Although EPA has not revised 40 CFR 262.23(a)(8) to change its reference from Class A and Class B explosives to Class 1.1 through to 1.6, Ecology staff has recommended that all hazard classes of explosives should be referenced in WAC 173-303-90(7)(a)(viii) and designated as a D003. It is our understanding the Department of Defense currently designates all Class 1.1 through 1.6 explosives as D003.*

The commenter is correct that Division 1.5 waste is currently considered state-only wastes since the federal regulations do not cite it. Class 1.5 wastes should be assigned the waste code D003, the same as other reactive wastes.

WAC 173-303-100

Comment 28: WAC 173-303-100(5)(b)(ii) uses a formula in which the hazards are additive for fish bioassay, rat inhalation, and rabbit dermal toxicities. Ecology should provide clear evidence that using the additive method is sound and reasonable. A preferable approach is to rate the components of a mixture and add only each toxicity criteria, rather than adding the highest hazards from across the different toxicity groups.

In addition, please change the calculated formula to eliminate the conservative factor that can increase the toxicity quotient up to 10 times and replace it with one that calculates the total effective toxicity. The change would remove common household products used in industrial settings such as hand lotions.

WAC 173-303-100(5)(b) provides a method for book designation. Based on inhalation toxicity data, wastes could be designated as DW or EHW. The waste could be in a physical state which would not result in an inhalation hazard. Ecology should exempt waste from being DW or EHW if designation is based solely on toxicity data via a specific route of exposure (inhalation data) and the physical state does not exhibit the hazard or exposure pathway.

Response: *The additive method for estimating acute toxicity is the most common approach to assessing chemical interactions. Furthermore, additivity is the preferred default assumption, since it is neutral, relative to more complex interactions (e.g., synergy or antagonism). Although combining toxicity data from four test endpoints (i.e., fish LC50, oral rat LD50, inhalation rat LC50, dermal rabbit LD50) is hypothetical, it represents a conservative model, consistent with the book designation intent. If more realism is desired, the generator always has the option to perform a bioassay, in lieu of book designating waste.*

It is acknowledged that because toxic categories span an order of magnitude, chemicals may exhibit up to a 10-fold difference in acute toxicity within the same category. For example, a chemical at the upper end of Toxic Category D (e.g., oral rat LD50=5000 mg/kg) will be treated identically, relative to a chemical at the lower end of the same category (oral rat LD50=500 mg/kg), despite the difference in toxicity. Nonetheless, the simplicity gained with the use of toxic categories is an overriding objective, consistent with the book designation intent.

It would be non-conservative to exclude certain exposure pathways, based on the physical state of the waste. For example, the physical state of the waste may change (e.g., due to heating or pulverizing), so that a pathway (e.g., inhalation) becomes possible under a new set of conditions. In addition, it would be technically difficult to establish effective criteria to exclude pathways, based on physical state of the waste. Again, the book designation method is designed to be both simple and conservative.

Comment 29: Ecology has proposed to add a clarification phrase "…(for the same criteria)…" on book designations for the state-only waste designation step of 'toxicity criteria'. Unfortunately, this clarification creates confusion for the waste designator because the word "criteria" means something different than the word 'category' in the book designation process. In the preceding sentence to the one being modified, the phrase 'toxicity criteria (fish, oral, inhalation, or dermal)' is used, thereby defining this term as the four column elements in the Toxic Category Table. The new phrase is being added to the word 'category' which is defined as either an "X, A, B, C, or D" from the rows of the Toxic Category Table. The parenthetical, as proposed, does not seem to provide the clarity Ecology was attempting to achieve.

From the explanation for this proposal, it appears Ecology wants a two step toxic category evaluation process. In order to arrive at the overall toxic category for a constituent, it appears Ecology wants first a toxic category assigned to each of the four toxic criteria (fish, oral, inhalation, or dermal) and then second, the resulting toxic categories compared for which one is most severe for the overall toxic category for the constituent. The toxicity data from more than one toxicity source is compared (apples to apples) within each of the four toxicity criteria (fish, oral, inhalation, or dermal) in the first step. If so, Ecology should consider modifying the rule language (suggested language was provided).

Response: *Ecology agrees that "toxicity criteria" is ambiguously used. The proper usage is as a descriptor for the entire subsection on state toxicity, i.e., WAC 173-303-100(5). "Test endpoints" is a more appropriate term than "toxicity criteria" to refer to fish LC50, oral rat LD50, inhalation rat LC50, and dermal rabbit LD50. Therefore, within section WAC 173-303-100(5)(b)(i), "toxicity criteria" will be replaced with "test endpoints." Regarding "toxic category," this term is clear and is shown as "X, A, B, C, D" in the Toxic Category Table.*

Furthermore, the parenthetical revision, "(for the same criteria)," will be replaced with "(for the same test endpoint)." This insertion constrains data comparisons which are used to specify the toxic category. That is, "(for the same test endpoint)" refers to LC50 or LD50 data from one of four acute bioassays, including fish, oral rat, inhalation rat, or dermal rabbit tests. This revision clearly underscores that data sources specifying the toxic category are to be compared only within the same test endpoint.

Comment 30: A comment also needs to be made regarding the interpretation of required toxicity sources based on the second sentence of -100(5)(b)(i) which states: *The toxic category for each constituent may be determined from available data, or by obtaining data from the NIOSH RTECS and checking this data against the toxic category table, below*. Taken literally, this provision allows the waste designator to select their data source without restriction or caveat. The only limitation appears to be a duty to ensure that any 'available data' used must not be less stringent than NIOSH RTECS. If a generator chooses the last part of this sentence for a book designation, the waste designator only needs to consult NIOSH RTECS to be in compliance based on the permissive use of the word 'may' and the construct of the sentence. Only if the waste designator chooses the "available data" option does the additional toxicity sources come into play. If Ecology's position is that toxicity data sources other than NIOSH RTECS must always be consulted for a book designation, then Ecology's position is not supported by existing regulation or the changes being proposed in this amendment.

Prior to the 1995 amendments, the regulations listed two toxicity sources, the NIOSH RTECS and EPA's spill table. The required toxicity data sources were clear and unambiguous. Since the major overhaul in 1995, the toxicity data source requirements have been vague. Two pieces of information have since been offered by Ecology. The first is in the *Responsiveness Summary Amendments to the Dangerous Waste Regulations, Chapter 173-303 WAC*, Publication #95-423, October 1993, in response to comment 132 where 'available data' meant: "…include but are not limited to: Material Safety Data Sheets (MSDS), laboratory analysis of the generator's waste or a similar waste, and published data. Ecology will provide examples in guidance documents rather than defining them in the regulation to avoid precluding the use of the data source." Since generators usually do not test their waste, and if they test, bioassay results take precedence over a book designation, there appears to be no need to cite the laboratory data as a toxicity source. The second piece of information is contained in the *Chemical Testing Methods for Designating Dangerous Waste* (publication #97-407), Footnote 27 where Ecology also identifies the Hazardous Substances Data Base as a toxicity source. Therefore, the commenter is proposing that Ecology eliminate the ambiguous nature of the required toxicity sources to complete a book designation and propose to amend the second sentence of -100(5)(b)(i) as part of the next rule amendment.

Response: *Ecology does not wish to limit data sources (for example, to only RTECS, Hazardous Substances Data Bank, and Material Safety Data Sheets). By specifying "available data," a wide range of data sources can potentially be employed. In order to enhance the clarity of the second sentence of subsection WAC 173-303-100(5)(b)(i), "or by obtaining data from" will be replaced by "including" to more clearly indicate that RTECS are part of the "available data." In addition, a specified constraint is that data indicating the severest toxicity must be used to determine the toxic category, except that RTECS takes precedence when data conflict within the same test endpoint (that is, for data from one of four acute bioassays, including fish, oral rat, inhalation rat, or dermal rabbit tests).*

WAC 173-303-104

Comment 31: The commenter expressed appreciation for locating the waste codes unique to Washington together in this section.

Response: *Comment noted.*

WAC 173-303-200

Comment 32: The commenter expressed appreciation for the "expeditious adoption" of the Performance Track Rule (WAC 173-303-200(5)).

Response: *Comment noted.*

Comment 33: The commenter supports the adoption of the National Environmental Performance Track rule, and states that utilizing the rule at their facility will increase environmental benefits and cost savings.

***Response**: Ecology appreciates the support for the Performance Track Program, and agrees the Program will lead to enhanced environmental performance at member facilities.*

Satellite Accumulation Areas

The proposed amendment to satellite accumulation area requirements has been withdrawn and will not appear in the final rule. An explanation follows comments 34 through 78. Since the proposed amendment was withdrawn, the comments were not individually responded to.

Comment 34: The addition of significant new requirements to satellite accumulation is unwarranted. Ecology's contention that this change is merely a clarification, and inferences that Ecology has always expected satellite accumulation to comply with inspection and contingency planning requirements, are not consistent with current Ecology or EPA policy.

Comment 35: We have seen Ecology propose to add these requirements to certain satellite areas (in the past), but always in the context of the authority granted in -200(2)(c); that is, Ecology determines that the characteristics of certain satellite accumulation situations pose a threat to human health and the environment, thus requiring more stringent requirements of 90-day accumulation to be implemented. Ecology has always had the authority to impose these more stringent requirements when merited in isolated/unique cases, without requiring them of all generators statewide.

Comment 36: The addition of contingency planning requirement for locations that do not currently require it is of questionable value. Many of these requirements were designed for dedicated hazardous waste management areas and are not good matches to small locations having one or a few satellite accumulation areas. Note that the required submittal of these plans to emergency response agencies will give these agencies significantly more paperwork to cope with.

Comment 37: Although Ecology states that the amendment is to clarify that contingency planning and general facility inspections apply to satellite accumulation, the reference to 200(1)(e) also mandates personnel training. This step adds yet more complexity for generators, as the scope of personnel to be trained is unclear and potentially very broad. Access to 90-day areas is usually more restricted than access to satellite areas due to multiple operators and shifts at facilities, along with the requirement that a satellite area must be located "at or near" the point of generation. The definition of "facility personnel" given in -300 is likely to apply to many more staff, including staff whose role does not include hazardous waste management activities, when the rule is applies to satellite accumulations areas by reference to -200(1)(e).

Comment 38: The sections of -320 referenced in 200(1)(e) generally require an inspection plan and schedule and prompt response to problems identified. However, an inspection frequency is not specified. The proposal could result in different generators specifying widely variable inspection frequencies, depending on their individual needs evaluation. In turn this situation

would result in inconsistency and potential enforcement concerns based on an individual inspector evaluating the given facility's inspection frequency.

Comment 39: At the public hearing on August 10, 2004, Ecology's comments indicated that the proposed rule on satellite accumulation areas is consistent with previous EPA direction regarding satellite areas. However, EPA has consistently held that personnel training, weekly inspections and contingency plan requirements are unnecessary and inapplicable to satellite accumulation areas. Ecology has not explained in the proposal how it has determined that more stringent regulation of satellite accumulation is necessary to protect human health or the environment, or why it believes satellite accumulation poses a threat sufficient to justify the addition of these additional requirements.

Comment 40: Since satellite accumulation must take place at or near any point of generation and the commenter currently operates approximately 800 satellite accumulation areas, the added expense of training, inspection, and contingency planning for these areas is substantial. The cost of performing weekly inspections alone would be approximately $500,000 per year. We cannot see an environmental benefit commensurate to the cost of this proposal.

Comment 41: These proposals were added since the pre-proposal and should be more carefully analyzed for impact on the regulated community before Ecology considers final adoption of this proposed change.

Comment 42: We do not object to the addition of the reference to -200(1)(f) for compliance with Land Disposal Restrictions.

Comment 43: The Washington Department of Corrections opposes Ecology's proposed changes in WAC 173-303-200(2)(a)(ii).

Comment 44: Ecology indicated that the change in WAC 173-303-200(2)(a)(ii) is simply a clarification. In fact, it is a significant expansion of authority and clearly not a case of increased stringency. EPA exempts satellite accumulation areas from most of the requirements that apply to 90-day storage areas and permitted TSD facilities.

Comment 45: The commenter submitted a table from McCoy's RCRA Unraveled, 2004 Edition to show the federal differences between requirements for satellite accumulation areas and 90-day areas in the RCRA regulations. The commenter submitted a note from the discussion from McCoy's RCRA Unraveled as to what the federal hazardous waste program considers a satellite accumulation area to be.

Comment 46: The inclusion of the proposed additional requirements for satellite accumulation areas represents a significant increase in the level of effort on the part of the generator for a negligible gain in environmental protection.

Comment 47: If satellite accumulation areas must be included in contingency plans, how would a facility deal with a "one-shot" satellite accumulation area?

Comment 48: A satellite accumulation area is typically a container of 55 gallons or less. The quantity of material is small and the corresponding risk to the environment and human health from a satellite accumulation area is also small. Imposing the proposed requirements does not make sense. Ecology already has the ability to impose such requirements at facilities where satellite accumulation area operating history indicates a need for tighter management. Imposing these requirements on all satellite accumulation areas will be burdensome to the generator, and will not result in improved environmental protection.

Comment 49: This proposed change is not trivial for many large quantity generators. Ecology asserts that it has interpreted this subsection and implemented it as if inspections and contingency plans were required for satellite accumulation areas. The commenter asserts that Ecology has not attempted consistent application or enforcement of this provision.

Comment 50: This change will have an impact on Ecology inspectors. Ecology's workload will increase substantially as a direct result of this proposed rule change.

Comment 51: We should be looking for ways to achieve environmental protection more cost effectively. This rule change would lay a heavier compliance and enforcement burden on both generators and regulators.

Comment 52: The change proposed for satellite accumulation areas is unnecessary and could add to confusion regarding generator requirements instead of making them clearer. Sections –320 and -350 are requirements applicable to a facility. The requirements they define are not limited in scope to accumulation container areas. In all likelihood an LQG will accumulate waste on site in both 90 day dated containers and in satellite containers; it is unlikely that an LQG will only have satellite containers on site. As such they will be subject to –320 and -350 throughout the facility.

Comment 53: This change adds to the confusion regarding what is required in a contingency plan. It implies that waste accumulation containers or the "footprint" they occupy are somehow specified in a contingency plan. They are not.

Comment 54: WSU does not agree that the proposed amendment to WAC 173-303-200(2)(a)(ii) is a clarification. It is a proposal for several substantial changes to the waste generator satellite accumulation area standards.

Comment 55: The proposed changes to satellite accumulation would require generators of small quantities of waste at satellite areas to comply with WAC 173-303-320 though -360.

Comment 56: The proposed changes to satellite accumulation areas would be significant, complex, and cumbersome at WSU where there are more than 1,500 satellite accumulation areas. The change would take an excessive amount of valuable resources away from other environmental health and safety programs. Satellite accumulation areas require a certain level of attention, but in no way merit the dedication for personnel and resources called for in this proposed amendment.

Comment 57: WAC 173-303-320 is unclear as to the frequency and elements required for inspections.

Comment 58: The commenter submitted a number of cost estimates for complying with the proposed amendment (inspections, training, including hazardous waste handling duties in job descriptions of existing employees).

Comment 59: Is the required level of training the same as that required for 90-day areas?

Comment 60: The quantity of wastes allowed within a satellite accumulation area is unlikely to cause significant harm to the environment, by design. EPA has held consistently that personnel training, weekly inspections and contingency plan requirement are unnecessary and inapplicable to satellite accumulation areas. Ecology has not explained in the proposal how it has determined that more stringent regulation of satellite accumulation is necessary to protect human health or the environment or why it believes satellite accumulation poses a threat sufficient to justify the addition of these requirements.

Comment 61: WSU faculty and staff are highly educated and trained in safe chemical handling methods. Imposition of new, redundant training and documentation requirements will not benefit the environment nor will it encourage compliance.

Comment 62: It is redundant, wasteful, and unmanageable for Ecology to require individual contingency plans for each satellite accumulation area if a facility already has and maintains a facility wide contingency plan, emergency response plan and spill prevention control and countermeasures plan.

Comment 63: WSU is concerned that the proposed rule could be construed as requiring inappropriate supplies and equipment to be provided at each satellite accumulation area. Not only will this create an unmanageable financial burden, but these items do not have unlimited shelf lives. It is unclear if lists of such equipment will be required only in the general plan or if they must be present at each satellite accumulation area (-350(3)(e)).

Comment 64: The proposed change is described as a clarification of existing rule interpretation. Since the change would impose new requirements on satellite accumulation, this strikes us as a mischaracterization of Ecology's stated intent. Any reasonable

interpretation must conclude that those requirements (personnel training, contingency planning, and general inspection) do not presently apply to satellite accumulation. Ecology guidance Publication # 94-120 itemized the satellite accumulation provisions and made no mention of the requirements that are now proposed for insertion. Ecology has not provided a good explanation why the additional requirements should now be imposed. The existing regulation is sufficient.

Comment 65: Ecology should review relevant EPA guidance as to how it implements federal satellite accumulation area provisions.

Comment 66: If the satellite accumulation provision been included in the earlier draft, Ecology would have received ample input to help determine if an amendment is warranted.

Comment 67: Ecology's proposed change to satellite accumulation was not in the pre-proposal draft nor was it identified on the Focus Sheet for the proposed amendments. The change is being advertised as a clarification, but in reality, it constitutes a significant impact to the regulated community.

Comment 68: The addition of the land disposal restriction (LDR) requirement is supported by USDOE.

Comment 69: The proposed rule is inconsistent with past Ecology rulemaking activities**.** The SAA rules were placed into the regulations during the 1993 amendments. Prior to this rule, subsection (2) did not exist in section -200. Ecology response to comments document *Responsiveness Summary Amendments to the Dangerous Waste Regulations Chapter 173-303-WAC*, publication 93-92, October 1993 contains the insight to show separation between -200(1) and -200(2). Ecology's 1993 amendments adding this provision did not propose or mention the requirements currently being clarified. On page 46, response to comment 166 it states: "The satellite areas are the only accumulation areas that do you require a date until 55 gallons of a waste is generator/accumulation." Since the accumulation date requirements are located in -200(1), this statement shows intent to keep -200(2) and -200(1) separate. On page 48, comment 175 suggested a terminology change in order to clarify that secure SAAs are not considered designated accumulation areas which must meet the requirements of -200(1). On page 111, rationale for change, Ecology acknowledges this separation by stating: "In the definition of satellite accumulation area, commenters stated that it would be helpful to insert 'less than 90-day' in the in the first sentence after 'designated' and before 'accumulation area' to clarify that secure satellite accumulation areas are not considered designated accumulation areas, which must meet the requirements of WAC 173-303-200(1)." Ecology made a change in the final rule to accommodate the commenters concern.

There were also no statements in the 1993 rule or the *Responsiveness Summary Amendments to the Dangerous Waste Regulations Chapter 173-303-WAC*, publication 93-92, indicating Ecology was being more stringent than EPA's requirements. The regulated community was led to

believe Ecology was establishing requirements for SAAs consistent with EPA's program as a result of the 1993 rulemaking.

The addition of these significant new requirements to satellite accumulation is unwarranted. Ecology's contention that this change is merely a "clarification" and inferences that Ecology has always expected satellite accumulation to comply with inspection and contingency planning requirements are not consistent with current Ecology or EPA policy.

Comment 70: The proposed rule is inconsistent with Ecology's SAA Technical Information Memorandum (TIM) (Publication 94-120, Satellite Accumulation)**.** After the 1993 rulemaking, Ecology has maintained comprehensive, user-friendly guidance for SAA management in the TIM, with the most recent revision of the TIM occurring January 2003. The TIM has never mentioned or referenced the requirements Ecology is proposing to add into -200(2)(a)(ii). The SAA requirements are clearly identified on pages 1-2 of the TIM. The omissions of the -300 through -360 standards in this list demonstrate that it is not past or current Ecology policy to expect generators to comply with the requirements proposed to be added, unless the case-by-case provision in -200(2)(c) are applied.

Ecology claims in the proposed rule explanation "This is not consistent with the way this regulation has been interpreted or implemented in the past by Ecology." If this statement is true, why has the TIM not been updated to reflect this? The regulated community has not been informed of this policy statement. In order for Ecology to claim that their interpretation exists, the regulated community must be notified through the appropriate channels.

Comment 71: The proposed rule is inconsistent with EPA guidance. EPA has published guidance in this area demonstrating that Ecology's proposal is not consistent with federal requirements. At the public hearing held on August 10, 2004, Ecology made statements indicating that the proposed action is consistent with previous EPA direction regarding SAAs. However, the opposite is actually true. EPA determined when adopting the satellite accumulation rule in 1984, and has held consistently since, that personnel training, weekly inspections and contingency plan requirements are unnecessary and inapplicable to SAAs (see 49 FR 49568 at 49570 on December 20, 1984). Since that time, EPA has addressed these requirements on more than one occasion (see RCRA Online, Faxback 11373, 11317, 14418, and 14703). EPA has determined that accumulation of up to 55 gallons of non-acutely hazardous waste in a satellite area is "reasonable and safe and does not pose a threat to human health or the environment" (49 FR 49569). Ecology has not explained in the proposal the basis for their position, nor how Ecology has determined more stringent regulation of satellite accumulation is necessary to protect human health or the environment, or why it believes satellite accumulation poses a threat sufficient to justify the addition of these additional requirements. Ecology needs to delete the addition of these requirements to SAAs.

Comment 72: The proposed rule is inconsistent with nationally recognized expert interpretations. There is a firm who is recognized nationally for their understanding or EPA's

RCRA regulations. USDOE pays to bring this training to the Hanford Facility once every few years. USDOE is also aware of many Ecology employees attending the training classes offered by this firm. One of their reference materials, "McCoy's RCRA Unraveled, 2003 Edition," compares SAA requirements to 90-day requirements in Table 6-2, *Federal Requirements for Satellite Accumulation Units to 90-day containers*. Of interest are the inspection, training, and contingency plan requirement entries for SAAs. The table shows that these aspects clearly do not apply to SAAs. Ecology needs to delete the addition of these requirements to SAAs. (20, 21)

Comment 73: The proposed rule is inconsistent with the case-by-case requirements of -200(2)(c). Any interpretation that -200(1) requirements automatically apply to SAAs is beyond logic because there would be no reason to have -200(2)(c). The -200(2)(c) provision would not be needed in the regulations if the -200(1) requirements apply to SAAs. SAA requirements are determined through the requirements in -200(2), and do not extend into -200(1) unless specifically referenced by -200(2). -200(2)(c) is invoked by Ecology on a case-by-case basis on compliance inspections when Ecology determines that the management practices of certain satellite accumulation situations pose a threat to human health and the environment, thus requiring more stringent requirements of 90-day accumulation areas to be applied. Ecology has always had the authority to impose these more stringent requirements when merited in isolated/unique cases, without requiring them of all generators statewide.

Comment 74: The proposed rule is inconsistent with the information posted on Ecology web page and in the preamble. This inconsistency only serves to confuse the regulated community on the scope of the proposed changes to -200(2)(c). The sentence appearing on Ecology's web page and on page 155 of the preamble states: "WAC 173-303-200(2)(a) is being amended to clarify that contingency planning and general facility inspections are required for satellite accumulation." The proposed rule change adding "(e)" actually also brings into play the training requirements (-330) and preparedness and prevention requirements (-340), in addition to the contingency planning and general facility inspections. A reading of -200(1)(e) references the requirements of -330 through -360 and most of -320. Ecology has only identified half of the changes actually being proposed in their explanatory text. For this reason alone, Ecology should delete the proposed addition of "(e)" to -200(2)(c) because Ecology failed to accurately reflect the rule to be presented.

Comment 75: The proposed rule is a significant cost impact to Hanford Facility activities. At the Hanford Facility under two of the three field offices (the Richland Operations Office and the Office of Science) plus a laboratory under USDOEs Office of River Protection field office, there are approximately 1,100 satellite accumulation areas. The added expense of the proposed requirements would be substantial. The added cost of performing weekly inspections would be approximately $800,000 per year (8-man-years), based on 15 minutes per week to inspect each area and document these inspections in accordance with -320(2)(d) (included as part of the reference from -200(1)(e) proposed for addition). Since the -320 requirement also requires inspection be performed daily when in use and subject to spills, this cost estimate is multiplied by the number of times per week an SAA needs to be inspected.

Applying the training requirements will require the amendment of many training plans or the issuance of new training plans and will require inspection training to those who are not subject to these training requirements now. Contingency planning requirements would also be a large additional cost based on the need to create and maintain the documentation as well as address the equipment that must be procured to meet the -340 preparedness and prevention requirements. We cannot foresee an environmental benefit commensurate to the cost of this proposal.

The addition of preparedness and prevention, contingency planning, and emergency procedure requirements for locations that do not currently require it is of questionable value as well. These requirements were designed for dedicated hazardous waste management areas (TSD facilities) in 1980 and were then subsequently applied to 90-day accumulation areas. These regulations are not a good match to small locations having one or a few satellite accumulation areas. Note that the required submittal of contingency plans to emergency response agencies [-350(4)(b)] will give these agencies significantly more paperwork to cope with.

Although Ecology states in the preamble (page 155) that the amendment is to "clarify" that contingency planning and general facility inspections apply to satellite accumulation, the reference to -200(1)(e) also mandates personnel training. This step adds yet more complexity for generators, as the scope of personnel to be trained is unclear and potentially very broad. Access to 90-day accumulation areas is usually more restricted than access to SAAs due to multiple operators and shifts at facilities, along with the requirement that an SAA must be located "at or near" the point of generation. The definition of "facility personnel" given in -330 is likely to apply to many more staff, including staff whose role does not include hazardous waste management activities, when the rule is applied to satellite accumulation areas by reference to -200(1)(e).

Another issue regarding inspections is raised by the reference to -200(1)(e) and the fact that the inspection requirement is vague. The sections of -320 referenced in -200(1)(e) generally require an inspection schedule and appropriate responses to problems identified. However, an inspection frequency is not specified other than the daily inspection requirement for areas subject to spills when in use. The weekly inspection frequency is addressed for 90-day accumulation areas in -200(1)(b)(i) by referencing -630(6) for containers. The proposal could result in different generators specifying widely variable inspection frequencies, depending on their individual needs evaluation. In turn this situation would result in inconsistency and potential enforcement concerns based on an individual inspector evaluating the given SAA inspection frequency.

Due to these significant impacts, an unclear proposal about training requirements and vague expectations on inspection frequencies, this proposal needs to be withdrawn.

Comment 76: This proposal meets the threshold for triggering a review under the Regulatory Fairness Act (RCW 19.85) to be part of the small business economic impact analysis. Review of the document posted on Ecology's web page and the text on WSR 04-14 appearing on pages 156-159 reveals no discussion on this subject. Because these changes "impose more than a

minor cost on twenty percent of the businesses in all industries, or ten percent of the businesses in any one industry" (Reference: WSR opening statements on the Regulatory Fairness Act of RWC 19.85), Ecology is required to include the SAA changes as part of the Small Business Economic Impact Statement. The WRS opening remarks also indicate when a Small Business Economic Impact Statement is not required. The SAA proposal does not meet at any the five criteria identified.

Because Ecology did not include the SAA proposed change in the Small Business Economic Impact Statement, the proposal to add contingency, inspection, and the unadvertised training requirements, and preparedness and prevention requirements to SAAs needs to be withdrawn.

Comment 77: In addition to the proposed addition of "(e)", Ecology has also proposed to add "(f)" to -200(2)(a)(i). This proposal is supported by USDOE. The new reference provides a clear tie in between SAAs and treatment-by-generator requirements under EPA's land disposal restriction program. The addition of "(f)" is consistent with an email message from Tom Cusack dated May 25, 2000.

Comment 78: The University of Washington requests that Ecology postpone any action relating to satellite accumulation areas until after the completion of the USEPA Colleges and Universities Sector project. One of the work groups, The Regulatory Innovation Work Group is working to address the most significant regulatory barriers to sector-wide environmental performance. They are currently working on developing a strategy to address RCRA/Lab waste issues specific to the Sector.

Response: *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. 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) with the same 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.

WAC 173-303-300

Waste Analysis Plan

Comment 79:The commenter supports the intent of the proposed change to WAC 173-303-300(2)(a) and (b) and the proposed definition for "knowledge."

Response: *Comment noted.*

Comment 80: Changing the word 'may' to 'must' in WAC 173-303-300(2) is inappropriate**.** This is a significant change because now what was once a permissive word now has been changed to a mandatory word. There is no explanation by Ecology for such a drastic change. The next problematic change is adding the word 'either' thereby creating an interpretation problem with sentence structure when the words 'or' and 'and' also exist following the word 'either.' The next change, adding the phrase 'analytical data from' now precludes other knowledge from similar processes being used by limiting the universe of usable information to testing data. Other information can no longer be used. The final change is deleting the phrase 'if necessary' and substituting the phrase 'or a combination of these.' This change has now taken a discretionary term aimed at testing requirements and replacing it with a term that denotes more information needs to be retained. These changes to -300(2) are unrealistic; they are not supported by this proposed rule, nor the explanatory text that accompanies the proposed rule, and need to be deleted. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Response: *See response to comments 80 through 83, and response to comments 94 through 98 below.*

Comment 81: The use of the word 'analysis' in the regulations has a complex meaning and does not mean waste testing. The use of the word 'analysis' in the regulations means both 'sampling and laboratory analysis' as well as 'applying acceptable knowledge.' Use of the word analysis is more akin to a verb like a 'technical or engineering analysis' which is an action evaluating the available knowledge. In EPA's 1994 Waste Analysis Guidance in Section 1.5 How can you meet the waste analysis requirements for your facility? it states: "Wherever feasible, the preferred method to meet the waste analysis requirements is to conduct sampling and laboratory analysis because it is more accurate and defensible than other options. … However, generators and TSDFs also can meet waste analysis requirements by applying acceptable knowledge." Even in the margin to the side of this text the question is asked "What are your waste analysis options under RCRA?", and the answer is sampling and analysis plus

acceptable knowledge. It is clear from this information that the word 'analysis' in the TSD regulations is a complex term. This is further supported by the two sentences in -300(1). The first sentence uses the phrase 'confirm his knowledge' and the second sentence used the phrase 'of this analysis' referring back to the confirmation process. Further in Section 1.5 of EPA's 1994 Waste Analysis Guidance, the term acceptable knowledge is then defined to include process knowledge, waste analysis data, and facility records of analysis performed before the effective date of RCRA. The last portion has little or no meaning any more in the RCRA regulations, so it is the first two components of the definition that are used as guidance today. The term waste analysis data is defined as "… obtained from facilities which send wastes off site for treatment, storage, or disposal (e.g., generators)." Even the term 'waste analysis data' does not specifically denote a waste testing requirement. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Comment 82: It is a good idea to reference -380(1)(c) for recordkeeping requirements, but the extra explanatory text needs to be deleted on what the records need to consist of. Ecology is proposing to add the following text as the new -300(2)(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 information on the waste whether the owner or operator conducts direct testing on the waste or relies on knowledge from the generator." FH agrees that referencing the recordkeeping requirements helps ensures the reader is informed of the -380(1)(c) requirements. We do not agree that the language after the word subsection should be retained. The extra language now introduces yet another new term 'adequate information' to the regulations. This new text needs to be avoided so that yet another term is thrown into the already complex waste analysis mix of terms. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Comment 83: The commenter requests that Ecology maintain a performance based stance on "knowledge." Waste is generated during a specific process/function. The process owner is aware of the chemical content that goes into the process and then what comes out of the unit as waste generated. This same process owner is the most accurate source of information for specifying the components and their concentration in a given waste unit. This approach is very reliable and can be formally documented through engineering and process flow diagrams. The process owner can determine the chemical content of a unit of waste based on what was introduced into the system. The process owner understands the process and the chemistry of the reaction and is the determiner whether the chemicals used in the process might result in a regulated hazardous waste. The process owner is able to report this information to a waste disposal/destruction facility operator through the waste profiling mechanism. Referencing written procedures, activity logs, and instrument-monitoring data recorders/logs are non-analytical ways to make a validation.

Response to comments 80 though 83: *The proposed rule has been changed to eliminate confusing or vague language and to provide greater clarity of Ecology's intent and to respond to the preceding*

comments. The proposed rule language was changed and will appear in the final rule as follows to improve meaning and clarity:

WAC 173-303-300 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 an owner or operator ~~dangerous waste management facility uses information or~~ 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~~ relies on analytical testing of the waste or knowledge from the generator, or a combination of these.

Comment 84:The proposed definition of "knowledge" is unnecessarily prescriptive and is inconsistent with the existing requirements in -070(3)(c)(ii) and -300(2). The three standards are not identical or consistent, and overlaying the proposed definition exacerbates the inconsistency.

Comment 85:The proposal appears to be inconsistent with the book designation procedures of WAC 173-303-100(5)(b).

Comment 86: The proposed definition of knowledge is inconsistent with knowledge requirements for designating the toxicity criteria. We note that this proposal appears to be inconsistent with the book designation procedures of -100(5)(b) and the language contained

in -100(5)(a). This widely used designation process does not provide the level of 'knowledge,' as defined, necessary to substitute for direct testing of the waste. The weight percent used in completing the equivalence concentration calculation is often obtained from upper bound numbers from a Material Safety Data Sheet (MSDS), which are conservatively selected by the company when they prepare the MSDS.

Comment 87: This proposal appears to be inconsistent with the book designation procedures of WAC 173-303-100(5)(b). This widely used procedure does not appear to provide the level of 'knowledge,' as proposed to be defined, necessary to substitute for direct testing of the waste. The confirmation procedures of proposed -300(2)(a)(i)-(iii) also do not match up to information derived by generators according to the book designation process. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

***Response to comments 84 though 87**: Ecology disagrees that the rule amendment is inconsistent with book designation procedures, or that the use of Material Safety Data Sheets (MSDS) are precluded from use by the new regulations.*

WAC 173-303-100(5)(i) specifically allows "available data" or information from the NIOSH RTECS data base to be used for book designation of toxicity. Since NIOSH RTECS data are studies of toxicity, and since the reference is specifically called out as acceptable in the regulations, the information can be used to meet the knowledge definition in the new rule. Ecology has consistently held that the use of MSDS for book designation can be misleading since such information represents a product before use rather than after. Some hazardous components of the product may not be divulged because of proprietary information. There are no standard requirements for MSDS and therefore the reliability of the information can be called into question. However, MSDS can be a helpful component in a body of information that helps inform book designation.

Comment 88:The proposal appears to be inconsistent with the book designation procedures of WAC 173-303-100(5)(b), This widely used procedure does not appear to provide the level of knowledge, as defined, necessary to substitute for direct testing of the waste.

Comment 89:Ecology's proposal to add further requirements to waste analysis planning is unnecessary and not always consistent with Federal guidance, as claimed. Ecology proposed to delete use of published data on waste from similar processes without explanation. However existing federal regulations 265.13(a)(2) allow for published data on waste from similar processes to be utilized as acceptable knowledge. Use of published data or studies on such similar processes is also defined as acceptable knowledge at p. 1-11 of the DPA guidance document.

Comment 90:Ecology's proposal to require facilities to confirm all waste profiles using specified methods is also beyond existing requirements and inconsistent with the Waste analysis Guidance. 1) The placement of the requirement in -300(2) results in its application to waste shipments not expected to be subject to the Waste Analysis Guidance. 2) The preamble

state that the verification processes cited are consistent with existing requirements in commercial dangerous waste management facilities. If true, there is no need for the proposal. 3) The preamble states that it is directed at waste profiles for waste streams, implying waste acceptance at commercial TSD facilities. However most of the impact is on generators and onsite TSD facilities.

Comment 91: This proposal by Ecology will add new requirements, contrary to the statement found in the explanatory text (preamble) on Ecology's web page: "The rule amendment elaborates on that requirement but doesn't impose new requirements." In Ecology's explanation of proposed changes in the Small Business Economic Impact Statement, section 2.1 text indicates that the impact of this rule change is 'negligible.' FH comments on the definition of 'knowledge' and the proposed waste analysis changes in -300(2) will show Ecology's conclusion on this matter is faulty. Ecology needs to withdraw the proposed definition of knowledge and rely on the Chemical Testing Methods for Designating Dangerous Waste (publication #97-407) for any additional explanations of knowledge regarding sufficiency for generators. Perhaps Ecology should consider using the term 'acceptable knowledge,' a term the EPA uses in its guidance. Ecology needs to avoid defining the term 'knowledge' based on how EPA uses the term 'process knowledge' and 'acceptable knowledge' in their guidance. If review of the information in the Chemical Testing Methods for Designating Dangerous Waste (publication #97-407) does not match Ecology's expectation, then Ecology should re-propose a new package to the regulated community with changes being made in that document.

Comment 92: Conditions are not part of Ecology permits as Ecology has claimed. Ecology stated in the text on their webpage that "proposed changes are consistent with … current final permits at commercial dangerous waste management facilities on the subject of waste analysis and the use of generator knowledge." Current final permits and draft permits that have been posted on Ecology's website do not indicate that the proposed rule language is being utilized in those permits, particularly the requirements proposed at -300(2)(a)(i) through (iii). We question the value of including these requirements in the regulations when they are not part of current final permits, as indicated in the discussion on Ecology's webpage. Are these conditions in draft permits? Is Ecology having a difficult time issuing permits because these conditions are not in the regulations? What are the permits Ecology has placed these conditions into? The conditions are also not part of FH's Hanford Facility RCRA Permit which has been in place since 1994 and is up for renewal. Because waste designation knowledge and TSD waste analysis policy/guidance have a long history and the cost of testing mixed waste is enormous, these principles are very important to waste management at the Hanford Facility.

Comment 93: Ecology's proposal to add further requirements to waste analysis planning is unnecessary and not always consistent with Federal guidance, as claimed. Existing Federal regulations [40 CFR 264.13(a)(2)] allow for published data on waste from similar processes to be utilized as acceptable knowledge. Use of published data or studies on such similar processes is also defined as acceptable knowledge at pg. 1-11 of EPA's 1994 Waste Analysis Guidance. Ecology proposes to delete use of published data on waste from similar processes

without explanation. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Response to comments 88 through 93*: The requirements reflected in the amended rules are well established from existing permit language, waste analysis plans, fact sheets, and guidance. The requirements are not new, inconsistent with, or more stringent than existing permits, guidance, and rules.*

Existing permit language is consistent with this rule amendment. Current dangerous waste permits have required either testing as a means of gathering information needed to manage a waste safely, or information provided by the generator with the understanding that knowledge is documented in the operating record of the facility. These requirements can be found in the text of the permits issued by Ecology, and within the waste analysis plans that are attachments incorporated by reference at the beginning of each permit. (For examples see "Permit For the Storage of Dangerous Waste" issued to Sol-Pro, Inc., and issued to Philip BEI.) Further guidance to facilities on the appropriate implementation of waste analysis plans and use of generator knowledge was provided in the Fact Sheets issued with the referenced permits at the time of public notice. The Central Waste Complex waste analysis plan for the Hanford Facility also states that the knowledge of a generator's waste must be sufficient to manage it safely.

Existing guidance is consistent with the intent and result of this new rule. The requirements, now reflected in the regulation amendment, were based on EPA's "Waste Analysis At Facilities That Generate, Treat, Store, and Dispose of Hazardous Wastes, A Guidance Manual," (OSWER 9938.4-03, April 1994) and is consistent with discussion of knowledge found in Ecology's "Chemical Testing Methods for Designating Dangerous Waste," Publication #97-407, February 1998. Ecology is responding to interested parties who prefer the agency to place guidance into rule when it is possible and practical. In this case, Ecology has determined it is necessary to be clear to both generators and TSDFs by incorporating into rule established expectations when knowledge is relied upon for waste characterization and safe management.

Existing rules are consistent with this new rule. Generators have long been allowed to use knowledge of their own processes to comply with requirements to designate their waste. This allowance is currently reflected in existing rules (See WAC 173-303-070(3)(c)(ii)). Generators have always been required to keep records containing the data or other information used to make a waste designation determination. The requirement to base waste characterization on established, well-documented knowledge is therefore not a new requirement.

Ecology has determined that the rule amendments are consistent with established regulations, guidance, and expectations of compliance for generators and TSDFs. By providing a definition of knowledge the agency is clarifying existing expectations.

Comment 94: It is reasonable for generators to describe the basis of their "knowledge" and provide that basis to the TSDF. It is not reasonable to require the TSDF to conduct the research or to ensure the sample data is representative and the appropriate test methods were used. Short of observing all samples being taken, the TSDFs will have to rely upon a certified

statement from the sampler that the samples were representative, or upon a certified statement from the laboratory, or a certified statement from author of the study. The generator is required to use representative sampling and approved methods of analysis. A certification by the generator that all information is true and accurate should be sufficient. Generators provide that statement when they sign the TSDFs waste stream description.

Comment 95: Rather than clarify waste designation, the real intent of the rule change is to assure that TSDs acquire sufficient documented information to support waste management decisions. Ecology has not provided any evidence that the current language is inadequate and that wastes are being mismanaged because of it. Clarity is not enhanced by the proposal. The proposed definition of knowledge has to do with the sufficiency of information about the waste, yet the proposed insertion to WAC 173-303-300(2)(a) addresses the use of "information or knowledge" to characterize the waste. Since Ecology has not identified a problem with the existing language, we request that the proposed changes be deleted.

Comment 96: In lieu of the approach proposed, we suggest that any perceived statewide deficiency in generator designation of waste be addressed during case-by-case compliance inspections and any perceived deficiency in TSD waste analysis plans be addressed in the context of those individual waste analysis plans and permits. Ecology should not be trying to align the regulations with guidance. If there are problems Ecology wishes to address, Ecology should hold workshops or other outreach programs to inform the regulated community. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Comment 97: There are a wide variety of industrial, commercial, and governmental waste management considerations, including the mixed waste considerations for FH's waste within Washington State. If Ecology needs to address specific issues at specific TSD facilities, Ecology needs to use their omnibus authority under -800(8) to address these issues in individual permits. Without an explanation of the issues Ecology is facing at whatever TSD facilities issues are occurring at, it is very difficult for the regulated community to respond. Ecology posted no information about the problems and concerns or the issues they are facing, either on Ecology's web page or part of the preamble in WSR 04-14.

Comment 98: Amending the WAC will not necessarily bring the state's permitted TSD facilities into alignment with the proposed amendment, as their permit requirements act as a shield against WAC changes until those changes are adopted into their permits [see -810(8)(a)].

Response to comments 94 through 98*: There have been compliance problems at generator sites and TSDFs that point to a need for clarity for both facility operators and generators that use "knowledge" as the basis for waste management decisions. These problems support the need for regulatory consistency and clarity.*

Over the years Ecology has consistently applied the concepts behind the new rules as regulation interpretation of WAC 173-303-070(3)(c)(ii) when reviewing designations by generators. This is reflected in decisions made by the agency on a case-by-case basis at generator sites. Experience in the field from compliance and technical assistance visits indicate generators rely, sometimes entirely, on TSDF personnel to provide them with designation determinations. At the same time, compliance inspectors consistently find TSDFs relying on generator certifications as adequate knowledge of dangerous waste without obtaining supporting documentation either in the form of analytical data, comparable studies, or proof of process knowledge. The resulting designations and profiles lack the substance Ecology feels is essential for safe waste management.

By clarifying in rule what is expected of generators and TSDFs as partners in the cradle-to-grave hazardous waste management system, Ecology clarifies the responsibility of each for providing essential components of information as the basis for good decisions. Because substantiated knowledge is an essential component for safe waste management, a position already reflected in existing rules and guidance, it is appropriate to further clarify such expectations in rule.

The regulated community has also expressed a desire for Ecology to place detailed guidance into rule whenever possible so that the agency's expectations are clear. It is not in the best interests of the regulated community to allow the rules to imply that substantiated knowledge is optional when relied upon in place of testing. In translating guidance into rule Ecology sought to remain consistent with the intent of existing rule (WAC 173-303-070(3)(c)(ii)) and the existing guidance while making the language both effective and clear as a regulation.

Comment 99: The preamble to the proposed rule changes emphasizes the need to establish knowledge so that a waste is properly designated and managed safely. The preamble states that the requirements are already in the current regulations. The proposed regulations do not change those requirements, but restricts the owner/operator to fewer methods that result in additional testing and assume that the generator does not know the waste stream. These methods should remain guidance and not be codified. Keeping the method as guidance would allow for other methods for designation and meet the safety requirements.

Response: *See response to comments 94 though 98, above, and response to comments 99 through 105, below.*

Comment 100: Ecology has not demonstrated why the existing screening methods are inadequate or what additional benefits will accrue as a result of these mandatory procedures. The proposed options in WAC 173-303-300(2) create mandatory requirements in place of the less burdensome and more flexible alternatives in the current regulations. The new requirement will require each TSDF to revise its waste analysis plan and profiles to document knowledge to meet the new requirement before waste may be received. Because most options are unrealistic and burdensome given the number of generators and waste streams managed at a TSDF, it is likely that they will be forced to perform chemical and physical analysis in the event a generator will not provide such information. The unfavorable alternative is to refuse to accept a generator's waste. The economic impact to TSDFs from compliance with the propose requirements will be significant and should be carefully considered.

Response: *See response to comments 94 though 98, above, and response to comments 99 through 105 and response to comments 111 and 112, below.*

Comment 101: The proposed definition of knowledge removes necessary flexibility to address the variety of waste management scenarios that must be addressed by the regulations. There are three main scenarios resulting in greatly varied waste management considerations for whether direct testing of the waste is appropriate. (1) commercial TSD facilities receiving waste from off-site, (2) off-site TSD facilities owned by the same company, and (3) on-site management within a TSD facility. A commercial TSD facility waste profile process documents information about the waste in order for the waste to change hands between different companies. Off-site facilities owned by the same company have different standards based on the fact the waste is not changing hands between different entities. On-site management within a TSD facility is not subject to the off-site verification procedures in -300(4)(b), -300(5)(g) and -300(6). These three standards are clearly not identical and Ecology should not try to harmonize them. The greatly varied waste management considerations for commercial TSD facilities receiving waste from off-site, off-site TSD facilities owned by the same company, and especially on-site management within a TSD facility should be reasons enough for Ecology to withdraw this definition. Overlaying this proposed definition on the existing rules is taking away the ability to tailor waste management considerations across the spectrum of waste management considerations.

Response: *See response to comments 99 through 105 and response to comments 111 and 112, below.*

Comment 102: The proposed definition of knowledge is unnecessarily prescriptive and inflexible and requires encyclopedic knowledge of the waste. A great deal of information can be garnered from direct testing of a waste, including information not relevant to the actual designation under -070(3) or proper management under -300(2) of a waste (e.g. viscosity, color). Direct testing of a waste seldom reveals information about the process sufficient to designate waste, especially listed waste. Hence the proposed definition's requirement that knowledge about the process must be sufficient to substitute for direct testing is unnecessarily stringent and would pose significant implementation problems and expense for generators. In practice, most waste designations utilize at least some process knowledge that can not be equated with any direct testing.

Comment 103: The three options proposed by Ecology in -300(2)(a)(i) through (iii) are too limiting. Ecology's proposal to require facilities to confirm all waste profiles using specified methods [-300(2)(a)(i) through (iii)] is beyond existing requirements and inconsistent with EPA, Waste Analysis At Facilities That Generate, Treat, Store, and Dispose of Hazardous Wastes: A Guidance Manual, April 1994. Faxback 50010 (hereinafter referred to as EPA's 1994 Waste Analysis Guidance), with which the proposal claims to be consistent. Although Ecology requested comments on additional ways to provide options in the regulations, Ecology's approach to define the ways in the regulations is the wrong way to go about regulating sufficient knowledge for a generator and how an off-site TSD facility confirms knowledge to ensure proper management. Ecology should not be trying to list all the options in the regulations. The current regulations contain the appropriate flexibility and are generally consistent with EPA's regulations and should not be changed.

Comment 104: Based on evaluating Ecology's proposal it appears that TSD facilities can no longer adapt their waste profile evaluation processes. FH is concerned about Ecology's approach to revising the requirements for waste analysis and waste designation. We readily acknowledge the need for confirming waste information at a TSD facility and obtaining sufficient information as part of a waste designation process for waste accepted into a TSD facility. However, we are concerned that the ability of individual TSD facilities to adapt waste profile evaluation processes to their particular needs is being eliminated through the proposed rule amendments. The amendments are prescriptive as to the approach and requirements. We also note that the placement of the proposed rule amendments in -300(2) would make them applicable to onsite TSD activities as well as offsite facilities. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Comment 105: The proposed changes by Ecology for -300(2) and its subsections are not consistent with general requirements in the existing regulations by applying off-site commercial requirements to onsite transfers and offsite shipments between sites owned by the same company. The placement of the requirements in -300(2) results in its application to waste shipments not expected to be subject to EPA's 1994 Waste Analysis Guidance, i.e. shipments to TSD facilities from other sites owned by the same company as well as onsite transfers. Page 1-15 of EPA's 1994 Waste Analysis Guidance states "…if you own/operate an off-site (facility) and rely on information provided by a generator …" This makes it clear that verification of one's own processes and procedures for waste data generation is redundant and not appropriate for this rulemaking. These practices are very important to the onsite management of mixed waste at the Hanford Facility. The application of comprehensive waste testing requirements for onsite transfers is costly and inconsistent with EPA's 1994 Waste Analysis Guidance. The existing regulations are written so that all of the available flexibility is preserved so that permit writers can tailor the needs of the waste analysis plan. The text on Ecology's web page states: "In addition to being consistent with general requirements in the current regulations, the proposed changes are consistent with federal guidance on waste analysis and current final permits at commercial dangerous waste management facilities on the subject of waste analysis and the use of generator knowledge." If this is true, then there is little or no need for the rulemaking as presented because any deficiencies at existing facilities could be addressed through permit modifications rather than rulemaking. Finally, the preamble states that it is directed at waste profiles for waste streams, implying waste acceptance at commercial TSD facilities. However, most of the impact is on generators and onsite TSD facilities, both through the operation of the proposed definition in -040 and due to the claimed existence of similar requirements in commercial TSD permits. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Response to comments 99 through 105*: The amended rule provides flexibility on how to comply without testing by providing options on how to meet an adequate standard of knowledge for safe management at TSDFs through their waste analysis plans.*

Existing waste analysis plans, based on the dangerous waste regulations, have evolved over time to allow flexibility in testing dangerous waste for acceptance by allowing the use of a variety of screening methods instead of more costly SW-846 methods in order to gain greater protections and better information. This flexibility better informs the waste management process from acceptance, storage, treatment or recycling, to final disposal.

In the new rule three options are also provided for TSDFs to meet and document adequate knowledge for safe waste management when the choice is made not to test a dangerous waste. These three options, discussed in existing guidance, are the commonly used means for generators and TSDFs to use knowledge to properly designate and meet the additional information needs of profiling for a receiving facility. The proposed rule was amended to add a fourth option for meeting the safe-management standard by allowing the proposal of other information for agency approval on a case-by-case basis. However, this is not intended to provide a loophole that would allow TSDFs to rely solely on a generator certification of knowledge without supporting documentation.

It is Ecology's position that the majority of "captive" TSDFs, (facilities owned by the same company sending to a company-owned, off-site TSDF, or a large generator with on-site TSDF units) should be able to easily meet the adequate knowledge standard because they are in control of product inventory and the processes used within their company. Ecology also maintains that existing WAPs within TSDFs are consistent with the new rule and permit modifications will not be necessary.

Comment 106: We are concerned that mixed waste generators may be required to perform additional analysis work on mixed waste if the proposed requirements are adopted. Testing of mixed waste generally results in radiation exposure to generators. The proposed definition does not fully accommodate the types of knowledge described in the Joint Nuclear Regulatory Commission/EPA Guidance.

Response: *See response to comments 99 through 105, above, and 106 through 110, below.*

Comment 107: Restricting the methods that the TSDFs can accept for "knowledge" will result in more testing by both the generators and TSDFs. Either the generators will have to perform additional testing when TSDFs question a designation based on "knowledge" or the TSDFs will when the additional cost for testing is less then the time needed to determine the basis for the generator decision. These additional costs and delays will be passed on to the generator. Washington TSDFs will be at a competitive disadvantage because of the additional requirements. Generators would choose an out of state disposal facilities that would not required to perform additional testing and who were compliant with Federal requirements for "generator knowledge. This effect would not only be fiscally detrimental to generators and Washington TSDFs but also be more detrimental to the environment on two counts. The first is that increasing the distance a waste would have to travel would increase the risk of potential discharges to the environment due to accidents. The second is that increasing the transporting distance increases emission from the transportation vehicle.

Response: *See response to comments 99 through 105, above, and response to comments 111 and 112, below.*

Comment 108: The currently available mixed waste testing guidance flexibility appears to be eliminated by this proposal. Another important point for the FH is the additional guidance available on mixed waste (Joint NRC/EPA Guidance on Testing Requirements for Mixed Radioactive and Hazardous Waste, 11/20/1997, 62 FR 62079). The NRC/EPA 1997 mixed waste guidance is used at the Hanford Facility to address testing issues associated with mixed waste. Maintaining the flexibility in the regulations provided for mixed waste will be a very important element to preserve based on the agreements reached during permitting Notice of Deficiency workshops at the Hanford Facility for TSD units covering the whole range of treatment, storage, and/or disposal of mixed waste. Waste Analysis Plans have been painstakingly crafted over the last decade between FH and Ecology. All available flexibility is used during the Notice of Deficiency workshops to arrive at an operating permit for a TSD unit. There are still a fair amount of TSD units in the process of obtaining operating permits. The impacts of this rule amendment could be enormous if the waste analysis plans must be renegotiated all over again.

We are also concerned that our TSD units managing mixed waste may be required to perform additional testing work on mixed waste if the requirements proposed are adopted. Testing of mixed waste generally results in radiation exposure to TSD workers. The NRC/EPA 1997 mixed waste guidance, Section V, indicates that TSD facilities managing mixed waste should utilize the available flexibility in their waste analysis plan to avoid unnecessary waste testing. The proposed rule reduces this flexibility by introducing strictures on the types of knowledge that can be used for designation. The placement of the proposed requirements in -300(2) requires that they be complied with in the waste analysis plan by the wording of -300(5). For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Response: *See response to comments 99 through 105, above, and 106 through 110, below.*

Comment 109: We are also concerned that mixed waste facilities may be required to perform additional analysis work on mixed waste if the requirements are adopted. Testing of mixed waste generally results in radiation exposure to TSD workers.

Comment 110: The proposed definition of knowledge eliminates mixed waste testing flexibility provided in guidance issued by the EPA/NRC. We are also concerned that mixed waste generators may be required to perform additional testing on mixed waste if the proposed requirements are adopted. Testing of mixed waste generally results in radiation exposure to personnel. Joint NRC/EPA mixed waste testing guidance (Joint NRC/EPA Guidance on Testing Requirements for Mixed Radioactive and Hazardous Waste, 11/20/1997, 62 FR 62079.), Sections II and III, encourages generators and TSD facilities that manage mixed waste to utilize waste knowledge to characterize their wastes to eliminate unnecessary or redundant waste testing. The NRC/EPA 1997 mixed waste guidance then describes several types of knowledge that can be utilized. The proposed rule does not fully accommodate the types of knowledge described in the NRC/EPA guidance. Mixed waste testing is very expensive and can only be performed by certain laboratories. It is not uncommon to spend

$5,000 per sample for simple low level radioactive waste testing. High level waste testing, on the other end of the spectrum can reach in the hundreds of thousands of dollars.

When the standard in WAC 173-303 is more stringent than EPA's requirements, potential inconsistencies between the state's requirements and the Atomic Energy Act (AEA) might be raised. If Ecology finalizes the proposal, FH will have to look very carefully at these provisions to determine if WAC 173-303, under the Hazardous Waste Management Act, is raising additional inconsistency issues with respect to section 1006 of RCRA.

At the Hanford Facility, the FH and Ecology's Nuclear Waste Program have used waste analysis plans and the permitting process in the Hanford Facility RCRA Permit to balance the appropriate considerations for mixed waste testing.

FH encourages Ecology to maintain the same level of regard as NRC/EPA has. Since Ecology's proposed definition seems to run counter to the NRC/EPA 1997 mixed waste guidance, Ecology should not finalize this definition. See also the mixed waste comments under -300(2).

***Response to comments 106 though 110**: Supporting the use of knowledge with better documentation will result in less testing when such testing would pose a hazard to waste management workers.*

Substantiated knowledge that better informs decision makers will result in less testing rather than more. By ensuring that profiles developed for dangerous waste and mixed waste are better documented and supported with dependable information, the agency is ensuring that waste management decisions will be better informed. Informed decisions early in the waste management process will reduce risk posed by dangerous or mixed waste further down the waste management chain. This is important when risks to workers outweigh other issues; however the agency must also consider risks to human health and the environment further along the waste management process posed by dealing with treatment or disposal at secondary or tertiary TSDFs or waste management units. In finalizing this rule Ecology is taking into consideration safe management for the entire waste management system, not just the generation, initial profiling and storage at the beginning of a dangerous waste's life cycle.

Comment 111: The commenter requests that Ecology maintain a performance based stance on "knowledge." Waste is generated during a specific process/function. The process owner is aware of the chemical content that goes into the process and then what comes out of the unit as waste generated. This same process owner is the most accurate source of information for specifying the components and their concentration in a given waste unit. This approach is very reliable and can be formally documented through engineering and process flow diagrams. The process owner can determine the chemical content of a unit of waste based on what was introduced into the system. The process owner understands the process and the chemistry of the reaction and is the determiner whether the chemicals used in the process might result in a regulated hazardous waste. The process owner is able to report this information to a waste disposal/destruction facility operator through the waste profiling mechanism. Referencing written procedures, activity logs, and instrument-monitoring data recorders/logs are non-analytical ways to make a validation.

Comment 112: A great deal of information can be garnered from direct testing of a waste, including information not relevant to the actual designation or safe management of a waste. However, the wording of the proposed definition of knowledge appears to make encyclopedic knowledge of the waste necessary in order to substitute for laboratory analysis- "sufficient information …to reliably substitute." Direct testing of a waste seldom reveals information about the process sufficient to designate waste, especially listed waste. In practice, most waste designation utilizes at least some process knowledge.

***Response to comments 111 and 112**: The new rules do not require "encyclopedic" knowledge of every waste stream; they are performance based and rely on a "safe management" standard.*

When choosing not to test, the new rules require enough knowledge to ensure proper waste designation and safe management, requirements reflected in existing rules and guidance. For a few waste streams this may require extensive and detailed knowledge of products, product constituents, processes, and the accounting for the presence of hazardous components picked up by waste generation. For many waste streams, documentation of the basis for knowledge will consist of MSDS, RTECs data, and process descriptions.

Comment 113: The commenter requests omission of the second sentence of the proposed definition of knowledge. The specificity of the language and TSD requirements are not necessary to protect life, health, and the environment, will be extremely costly to waste generators like WSU, and will negatively impact existing environmental programs such as pollution prevention/waste minimization efforts, emergency preparedness and emergency response programs and community outreach. As a research institution, WSU has more than 1,200 labs generating thousands of waste containers every year of a very small size. A lab may have multiple processes in operation at any given time, and processes may vary within a short period of time. Analysis of each of these small waste containers/streams would be extremely expensive, would require accumulation of wastes in labs while awaiting analysis, and would add little or nothing to waste composition knowledge. Researchers know, and can and have provided the necessary information to EH&S for safe collection and storage and shipment of their wastes. Detailed experimentation procedure data for all the research conducted at the institution would be both unnecessary and extremely burdensome.

Comment 114: The revisions and additions to WAC 173-303-300(2) create a broad expansion of federal mandates. The changes impose mandatory responsibility on TSDFs to ensure that each description of dangerous waste received into these TSDFs is accurate and that waste designations are complete and appropriate in accordance with federal and state dangerous waste regulations. A significant burden is removed from a generator under the proposed regulations in that generators may shift the burden of ensuring that all such information is valid to the TSDF. The proposed changes to a TSDF's duties will present an additional competitive disadvantage for in-state TSDFs. Generators may simply force them to assume more of the waste identification burden or simply ship their waste to out-of-state TSDFs to avoid paying the compliance costs that will be incurred by TSDFs and likely passed on to the generators.

Response to comments 113 and 114*: The new rules do not require increased testing or additional resources not already anticipated by existing rules, permits, and guidance.*
If generators or TSDFs have not been supporting designation or waste profiles as described by the new rules, they have not been complying with existing rule WAC 173-303-070(3)(c)(ii), permits, and established guidance on such rules and permits. In such cases, additional costs will be incurred for generators either to test their waste or document the knowledge that supports designation determinations. TSDFs will also incur costs to gather supporting information for profiles based solely on generator certifications. This may require either additional testing, site visits, or documentation based on applicable studies or similar processes. Ecology does not consider this an economic impact associated with these new rules, but rather a cost associated with compliance with existing requirements.

Commenters state that Washington TSDFs will be placed at a competitive disadvantage. However the new rule is consistent with existing Federal rules and guidance and is not more stringent than RCRA requirements in this respect. Therefore the problem of inconsistent compliance at out-of-state facilities is a matter for EPA and the specific authorized states. Ecology's compliance program seeks to meet the expectations of EPA Region 10 with regard to the federal RCRA regulations as written and interpreted by them.

Comment 115: The proposed definition of "knowledge" would impact all generators' waste designation processes and is significantly more prescriptive than the current Ecology regulatory framework. The level of knowledge being proposed necessary to substitute for laboratory testing of waste will likely have the result of many more questions being raised about waste designation, and a resultant shift to laboratory testing by generators to characterize their waste. Ecology notes in their reason statement that laboratory testing is costly and unnecessary in some cases. The issues of knowledge were heavily commented on during the last revision of the Chemical Testing Methods for Designating Dangerous Waste (publication #97-407). Many sections of this publication and the definition of 'process knowledge' in the glossary of this document received much attention. Since Ecology did not propose any related changes to Publication #97-407, the regulated community is at a loss as to how the proposed changes apply to all the discussions contained in the response to comments section for publication #97-407 that is contained in Appendix D to Responsiveness Summary Amendments to the *Dangerous Waste Regulations*, Chapter 173-303 WAC, Publication 97-439, dated January 1988.

Response*: Inconsistencies between the new rule and "Chemical Test Methods for Dangerous Waste," if they exist, will be addressed by revising the publication (Chemical Testing Methods) during its next revision. Ecology received comments that the discussion of process knowledge in this publication was inconsistent with the new rule. A comparison was made and the agency does not agree that the two are inconsistent in intent. Clarifications in language and terminology in the publication will be made to ensure there is no room for confusion between rule and guidance.*

Comment 116: The Waste Analysis Guidance requirement that Ecology seeks to adopt is dated and thus of dubious value.

Comment 117: EPA's 1994 Waste Analysis Guidance requirements that Ecology seeks to adopt are outdated and thus of no value. Ecology's proposed steps in -300(2)(a) appear similar to the information contained in EPA's 1994 Waste Analysis Guidance under Special Concerns When Using Acceptable Knowledge on page 1-15 which states: "There are several special concerns that you should be aware of it you rely on acceptable knowledge to manage your wastes. First, if you own/operate an off-site TSDF and rely, on information supplied by the generator, you should, if possible, become thoroughly familiar with the generator's processes to verify the integrity of the data. This can be accomplished by (1) conducting facility visits of generators and/or (2) obtaining split samples for confirmatory analysis. Second, if you use process descriptions and existing published or documented data as acceptable knowledge, you should scrutinize carefully whether:

- There are any differences between the process in the documented data and you process
- The published or documented data that were used are current

These issues are of concern, for example, because EPA recently revised the criteria that qualify a waste as a hazardous waste due to being were characteristically toxic. Not only were the number of constituents deemed hazardous increased, but also the prescribed test method was modified [i.e., the TCLP replaced the Extraction Procedure Toxicity Test (EP TOX Test)]."

The TCLP rule, a sweeping change to the dangerous waste characteristics, was published March 29, 1990 (55 FR 11862) and required a new test method (the Toxicity Characteristic Leaching Procedure) as well as identifying 25 new characteristically toxic wastes. The guidance was intended to upgrade information due to sweeping changes in the regulations and avoid the use of outdated or inapplicable knowledge from the EP TOX procedure. One year prior to the publication of the 1994 Waste Analysis Guidance, underlying hazardous constituents were first instituted in May 1993 (58 FR 29860) and expanded to other waste codes in 1996. It has now been eight years since major changes like this have happened in EPA's program. Hence it is much less likely at this point that generators are inappropriately relying on outdated information to try and designate their waste, or that TSD facilities are overlooking significant constituents that would adversely affect their ability to manage the waste safely, properly and compliantly. Ecology should not include this type of guidance into regulations at this point in the regulatory history of RCRA and the Hazardous Waste Management Act. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

Comment 118: It is a good idea to reference -380(1)(c) for recordkeeping requirements, but the extra explanatory text needs to be deleted on what the records need to consist of. Ecology is proposing to add the following text as the new -300(2)(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 information on the waste whether the owner or operator conducts direct testing on the waste or relies on knowledge from the generator." FH agrees that referencing the recordkeeping requirements helps ensures the reader is informed of the -380(1)(c) requirements. We do not agree that the language after the word subsection should be

retained. The extra language now introduces yet another new term 'adequate information' to the regulations. This new text needs to be avoided so that yet another term is thrown into the already complex waste analysis mix of terms. For the reasons cited in this comment, and the other comments submitted on this proposed change to -300(2), Ecology needs to retract most of the proposed changes.

***Response to comments 116 through 118**: The EPA guidance referenced and used by Ecology is current and applicable. The EPA guidance issued in 1994 is, to the agency's knowledge, the most recent guidance document on waste analysis plans. It is Ecology's position that it is still a valuable and current document. Ecology acknowledges that an updated guidance written for Washington's TSDFs would be useful, and has such a proposal under consideration.*

WAC 173-303-370

Comment 119: Ecology proposed text in -370(4) that duplicates existing text in -280(1). Also, the renumbering of regulatory sections affects the referencing of other sections. For example, -350(3)(b) references -370(5) and with the new additions of -370(4) and (5), the renumbering has created a problem with -350(3)(b). Ecology needs to update all applicable WAC 173-303 references when subsection numbering changes.

***Response:** The proposed text in -370(4) will be deleted since it duplicates existing text in -280(1). Proposed -370(5) will be moved to the end of the section so as not to cause a conflict with the existing cross citation that cannot be changed as part of the current process since no changes were proposed to WAC 173-303-350.*

WAC 173-303-390

Comment 120: The proposed changes to WAC 173-303-390(2)(g) and (h) relating to annual dangerous waste reporting appear to have good intentions but unintended consequences. The proposal appears to aim at improved RCRA permitting. The commenter supports permitting improvement efforts such as this, but on the other hand, is concerned that Ecology incorporated the federal text without evaluating the way TSD facilities gather information and prepare the annual dangerous waste report.

Specifically, -390(2)(g) requires information on the description of efforts taken during the year to reduce the volume and toxicity of the waste to be reported. This is a direct conflict with current practices because annual dangerous waste reporting under TurboWaste, Ecology's software, uses mass [kilograms] and waste codes. In addition, review of the TurboWaste reporting fields do not yield a field for which the required description could be entered. Without changes to the proposed text of the rule, it appears Ecology has begun the effort to completely overhaul the way TSD facilities have to collect information for the annual dangerous waste report and that Ecology will be initiating a significant overhaul to TurboWaste. If so, as one option, Ecology needs to include a delayed implementation of this requirement until Ecology's software is updated and training is provided to the regulated

community what specific information is required and how that information should be collected and reported.

Per Annual Dangerous Waste Report instructions, dangerous waste "descriptions" are provided as brief "Waste Stream" narratives including applicable federal and state dangerous waste codes; dangerous waste "quantities" are reported as mass units in kilograms. There are no other "volume and toxicity" parameters required by the reporting instructions.
In -390(2)(h), a description is required of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years, to the extent such information is available for the years prior to 1984. This requirement appears to carry no logic as there is no data still available prior to 1984, and Ecology's existing software does not allow this kind of description to be added. It appears the first year this provision will be in place will constitute the baseline year for subsequent years and that in the second year, the first comparison can be made, since the volume and toxicity of a waste is currently not been reported in TurboWaste. In addition, review of the TurboWaste reporting fields do not yield a field for which the required description could be entered.

The Hanford Facility collects waste minimization and pollution prevention (P2) data to meet the requirements of Department of Energy (DOE) Order 450.1 and associated Executive Orders. The reporting elements are defined by DOE Headquarters in Washington DC and are presently being revised for P2 goals beyond 2005. Presently, waste generation information is binned into routine and non-routine (this would include both RCRA and CERCLA waste) and by waste type (not by waste codes). The information is reported in cubic meters except that sanitary waste, TSCA waste, RCRA waste, and State-only dangerous waste in reporting in metric tons. The way this information is collected and reported would not be compatible with Ecology's proposal to report volume and toxicity of dangerous waste generated.

The Hanford Facility's mission is related to closure of the site with no baseline "production" level of operations. Waste generation quantities can vary greatly from year to year, depending on the Decontamination & Decommissioning project schedules. The value added of year to year comparisons of waste generation "volume and toxicity" for a site undergoing closure is questionable, and may be meaningless.

For the Hanford Facility, the proposed rule with requirements for dangerous waste "volume and toxicity" reporting could necessitate a greatly expanded waste sampling and analytical program to determine toxicity, with accompanying site-wide infrastructure improvements and additional data management capabilities. Such an expansion may be cost prohibitive with respect to funding priorities. Even if Ecology changes the terms "volume and toxicity" to "quantity and description," a significant data gathering program will be required to come up with the descriptions required by both of the new requirements. Again, based on an above comment, the value added of this additional reporting requirement is questionable. Ecology needs to provide a method to balance the impacts of the rule with the time it will take to implement new requirements.

Response: *The proposed amendment does not require facilities to take on a new reporting responsibility. Adoption of this rule by Ecology means that implementation responsibility for this rule has shifted from EPA to the state. Facilities have been required to submit this information to EPA since the rule was first promulgated. Ecology will implement it to the same extent and in the same manner that EPA has implemented the rule. No new information gathering or types of data generated are expected to be required. The state will be satisfied with the same type of submittal that has met the regulatory requirements as administered by EPA.*

If a facility is currently required to prepare pollution prevention plans and updates under state law or an executive order, they do not need to submit additional information as required by the new sub-sections. If a facility is not currently required to comply with pollution prevention planning requirements, they can submit a brief narrative description as a supplement to the Annual Report. It is an unfortunate consequence of the state adopting a federal rule this many years after it was first promulgated by EPA that the provision may appear obsolete, such as the mention of 1984 baseline data. However, these are not new requirements. They are HSWA requirements that EPA has been responsible for implementing for the past approximately 20 years. The state considered how adoption of this rule at this time would appear to the regulated community, and on balance, it was determined that gaining permitting authority outweighed the possible confusion of taking on an older provision that may not have been implemented in the past as strictly as the wording would indicate.

Ecology is not proposing to adopt the waste minimization requirements for generators at this time and they will not be subject to -390(2)(g) and (h). They remain subject to the federal version of the rule. The proposed rule did "exempt" them from the -390 reporting requirements although the wording in -220 is being deleted from the final rule so as not to jeopardize authorization of the portion that applies to TSDs. Although not explicitly exempted, generator waste minimization requirements were not proposed and those requirements remain as they are under current federal rule. They will be considered for future adoption by the state.

TurboWaste will not be modified to accommodate these changes, and TSDs do not need to change the way they collect information for the annual dangerous waste report. Although Ecology is adopting the language that exists in the federal rule, it is expected that facilities have already been complying with the requirements throughout the past 20 years, so this is not a new requirement. Ecology is not expecting facilities to compare data prior to 1984 or in the years since then up to this point. That reporting would have already been submitted to EPA. The year 1984 is the first year that this requirement went into effect, and the commenter is correct that reporting from this point forward (2006) will be based on the year Ecology assumes responsibility for this requirement from EPA.

Rather that not merely conflicting with existing pollution prevention planning requirements, Ecology's intention is that a facility complying with state P3 requirements is already meeting the intent of the waste minimization requirements and will not be asked to provide additional information. Ecology and EPA originally approached the waste minimization/pollution prevention requirements in two different ways. Ecology understands that facilities that are performing clean-ups will have years where waste generation totals are higher than previous years. Facilities should not consider instituting expensive and greatly expanded waste sampling and analytical programs to determine the toxicity of their waste.

Waste minimization compliance that has met EPA requirements in the past will be considered sufficient for complying with the newly adopted state requirement.

WAC 173-303-395(1)(d)

Comment 121: The Hanford Facility is subject to Department of Energy Orders which specify that the Uniform Fire Code (UFC) be used. If Ecology now uses the International Fire Code in the *Dangerous Waste regulations*, it will impose two different standards at the Hanford site. Ecology needs to determine whether or not the two codes are equivalent, and if not provide an option to comply with either standard at the discretion of the local fire marshal.

***Response**: In 2003, the Washington state legislature passed an amendment that replaced the Uniform Fire Code (UFC) with the International Fire Code (IFC). All cities and counties around the state are in the process of adopting this code, which has been collectively approved by the Washington State Association of Fire Marshals. Switching to the IFC makes Washington state consistent and in-step with the majority of the United States. Without an extensive review by a fire code expert, it is not possible to provide an analysis of all the differences between the IFC and the UFC, but it does appear that the two codes are not equivalent as they pertain to the dangerous waste rule citations. At facilities where federal facility orders require that the UFC be used, (such as at the Department of Energy Hanford site), Ecology's Hazardous Waste Program inspectors will work with the facility to meet dangerous waste rule requirements.*

WAC 173-303-400

Comment 122: The proposed amendment at WAC 173-303-400(3)(c)(ix) does not cite the correct sections of 40 CFR 265. By saying the section is "modified to read" when the intent is to add additional language to the existing regulation, Ecology appears to be repealing the existing requires in that section.

***Response:** The change will be made in the final rule. Since the proposed language modifies existing sentences in the federal regulations, rather than adds additional sentences to the regulations, Ecology will clarify which sentences in sections 265.112(d)(1) and 265.115 are modified by the proposed amendments.*

Comment 123: The proposed amendment at WAC 173-303-400(3)(c)(ix) does not properly cite 40 CFR 265 sections intended to be included. The proposed amendment also appears to have the unintended effect of repealing the existing requirements cited by saying the section "is modified to read" when the intent is to add additional language to the existing regulation. Ecology appears to be repealing the existing requirements in that section. Ecology's interim status regulations do not require changing, and the partial closure provisions proposed by Ecology are inconsistent with EPA regulations at 40 CFR 265.112(d)(1).

***Response:** Since the proposed language modifies existing sentences in the federal regulations, rather than adds additional sentences to the regulations, Ecology will clarify which sentences in sections 265.112(d)(1) and 265.115 are modified by the proposed amendments.*

Notification of partial closure is currently required for closure of surface impoundments, waste piles, land treatment, and landfill units. The proposed amendments extend the notification requirement to treatment and storage tanks, container storage, and incinerator units. It is consistent to expect notification of closure for these units whether it is for partial closure or final closure or for an interim status facility. Closure notification is required so that Ecology can ensure the facility has an approved closure plan and that the closure proceeds in accordance with approved regulations. For facility owners or operators without approved closure plans, the closure notification triggers Ecology's review and approval of the closure plan in accordance with the regulations.

WAC 173-303-505

Comment 124: One commenter was in opposition to the proposed language that, under certain circumstances, Ecology would allow a fertilizer registrant to forgo submittal of the test information required in subsection (b)(v)(A) Initial Criteria of WAC 173-303-505. The Initial Criteria information requirements are: toxicity characteristic leaching procedure (TCLP) metals and halogenated organic compounds (HOC) test data.

Response: *Ecology will retain the proposed amendment. As written, the language in the proposal provides Ecology with some flexibility regarding the testing requirements for waste-derived and micronutrient fertilizers. That language states, in part, "…the information requirements in (b)(v)(A) of this subsection <u>may</u> not be required if…"(emphasis added). Ecology has noted over the five years these requirements have been in place that some fertilizer products (most notably micronutrient fertilizers) are consistent products with unchanging source materials and very low levels of leachable metals and halogenated organic compounds. The expense of these tests can be a financial burden and automatic retesting of such stable products provides no environmental gain. From a regulatory and a business perspective, it makes sense that Ecology should have the ability to determine on a case-by-case basis that consistent products do not automatically need to undergo these tests with every registration renewal. However, waste-derived fertilizer products are considered by Ecology to be less consistent in their make-up due to the nature of the source materials. As a result, the flexibility of the proposed language change will also allow Ecology to continue to require the TCLP metals and HOC testing on any products of concern as determined to be appropriate on a case-by-case basis.*

WAC 173-303-515

Comment 125: The commenter supports the proposed amendment.

Response*: Support noted.*

Comment 126: Ecology is requiring a test for listed wastes when listed wastes can only be designated based on process knowledge. The mere presence of a listed constituent does not mean that a material is designated as a listed dangerous waste. Test results indicating the presence of acetone in used oil would not determine if the acetone was an F listed solvent since testing cannot determine if the solvent was 10% or more before use and whether the use was used for its solvent properties. Testing also could not determine if the acetone was unused and therefore a potential U listed dangerous waste. Testing can only determine whether a

characteristic and/or criteria of dangerous waste is exhibited or whether environmental media or debris no longer contains a listed constituent. In the March 8, 1990, Federal Register on page 8758, EPA explained that it is often necessary to know the origin of the waste to determine whether it is a listed waste and that, if such documentation is lacking, the agency (EPA) may assume it is not a listed waste. Ecology specifically omitted listed waste discussions from the Chemical Testing Methods for Designating Dangerous Waste (Publication #97-407) because of this fact.

Testing would not be required for determining the presence of listed hazardous waste since testing cannot make a listing determination; only generator knowledge can determine the applicability of listings. By avoiding finalizing the listed waste language as proposed, unnecessary and expensive testing will be eliminated since testing cannot determine the applicability of listings. Deleting the testing requirement for listings would also maintain consistency with waste designation policies and the Federal program.

In the preamble discussions Ecology makes a statement: "Testing for specific chlorinated compounds is part of the allowed procedure under EPA guidance to rebut the presumption that listed waste was added to a used oil, and is therefore established policy for implementing the used oil rules." Ecology should not tie in the listed waste and chlorinated compound terminologies. Chlorinated compounds are not necessarily listed wastes. Instead, Ecology should use the term "total halogens" in place of "a listed hazardous waste" in order to be consistent with Table 1 in -515.

***Response**: The commenter is not correct about the existing regulation and Federal Register preamble on the application and use of the "rebuttable presumption." Existing federal regulation and 1992 preamble for the adoption of 40 CFR 279 apply the "rebuttable presumption" as a mechanism to identify used oil that has been mixed with listed hazardous waste (see FR Vol. 57, No. 176, p. 41579, Sept. 10, 1992). The presumption itself assumes a used oil is a listed waste when screening reveals it to exceed 1000 ppm total halogens. The method of rebutting the presumption is to either produce knowledge that indicates the oil was either formulated with listed constituent components, or that the halogens were gained by the oil through normal use, or to test the oil to show that it does not contain more than 100 ppm of any one listed constituent. Ecology adopted the "rebuttable presumption" portion of the federal regulation as is, and is not proposing to change it. The proposed rule gives Ecology the option to require testing on a case-by-case basis when adulteration of a used oil is suspected. Instead of declaring the used oil a solid waste subject to designation, Ecology will be able to consider a waste in question as used oil until testing proves otherwise.*

WAC 173-303-573

Comment 127: The commenter supports adoption of mercury-containing equipment as a Universal Waste.

Response: *Comment noted.*

Comment 128: Adding mercury-containing equipment as a universal waste will be a positive step toward giving people a convenient and cost-effective way to recycle mercury-containing material such as thermometers, manometers and mercury switches. The commenter asks that elemental mercury itself (other than what may be contained in mercury equipment) be considered a universal waste, in order to simplify recycling.

***Response**: When adding universal wastes, Ecology has worked to closely adhere to EPA's criteria for selecting universal waste. One of these criteria is that the waste is common to a wide variety of industries and other types of institutions. As a waste, elemental mercury is not commonly generated by many facilities, as is the case with lamps, batteries and thermostats. Universal wastes normally pose little risk of causing major contamination and clean-ups, such as might happen with a spilled container of mercury that held a relatively large amount of mercury. Liquid elemental mercury may be stored in breakable or inadequate containers, often by homeowners or schools, with corresponding risks of spillage during transport and handling activities. The universal waste rules are not usually applicable to these types of small quantity generators. Also, the universal waste rules are not designed to provide in-depth criteria for appropriate management of highly toxic liquid wastes. Often homeowners and some small businesses can use their local household hazardous waste facility for disposing of elemental mercury.*

Comment 129: In the proposed rules you are making mercury containing equipment a universal waste. A generator may treat this waste as universal waste as an option or they may manage the waste as hazardous waste. Since many of the devices that will fall under this revision are themselves containers (i.e. Thermometers, sphygmomanometers, etc) as defined by interpretation by EPA, when these devices are empty they will be excluded as empty containers under WAC 173-303-160(2). Under the proposed rules would they still be regulated when empty? If I had a drum of thermometers and manage them as universal waste I must send the entire device out for recycle. If I manage them as waste and drain the mercury I may reduce my cost by thousands by discarding the empty containers. I believe there will be some confusion over the management of empty containers on this proposed rule. If these units are not considered containers by DOE as EPA has defined them then the intact units may be sent to landfill as a debris and managed under the alternative LDR standards for debris in conflict with the EPA. I do not believe DOE can define them as anything other than containers therefore.

***Response:** Ecology encourages generators to manage their mercury-containing equipment under the universal waste rule. However, generators can choose to manage mercury-containing equipment as dangerous waste subject to additional waste management requirements. Adoption of the universal waste rule will not change or affect the management or ultimate disposition of mercury-containing devices when the generator chooses to manage them as dangerous waste. Ecology believes that most generators will take advantage of the simplified universal waste rules for managing mercury-containing equipment. Universal waste can be stored on-site for up to a year, and shipped without a manifest to either a recycler or to a treatment, storage or disposal facility.*

Under the universal waste rule, mercury-containing equipment cannot be opened by universal waste handlers (UWH) so that the mercury can be drained out and collected. Universal waste handlers are allowed to remove glass ampules and collect them as intact units. Ecology strongly discourages generators or non-RCRA permitted facilities from opening mercury-containing equipment in order to remove and bulk the mercury

(which is not allowed when managed as universal waste). The risks associated with handling mercury in this fashion are too great, both from a worker protection standpoint and from the likelihood of a spill. Also, with some devices (such as thermometers) it may be difficult to fully empty out the mercury. If these "empty" devices are placed in a municipal landfill and they still contain residual mercury, the generator could be liable for possible mercury contamination at the landfill.

For purposes of determining treatment under land disposal restrictions, intact mercury-containing equipment would be classified as a container. As such, it does not qualify as debris and must be managed under the normal treatment standards for D009 mercury wastes, which includes retorting.

WAC 173-303-610

Comment 130: The commenter requests that Ecology allow permitted treatment, storage, and disposal facilities (TSDFs) to use the Class 1 permit modification process to implement any permit modifications prompted by this proposed change to WAC 173-303-610(3)(c)(i) that do not result in permanent closure of a unit. An example would be the case where a tank is due for closure and replacement. In the alternative, Ecology is asked to clarify the regulation to apply only to final closure of units that will not be replaced to maintain existing capacity at a TSDF.

Response: *Notification of closure and schedules for closure are two separate issues. Notification of closure at a permitted facility does not require a permit modification. The requirements for time allowed for closure are outlined in -610(4). Changes to the schedule for closure do require permit modifications, usually a Class 1 permit modification with prior approval of the Department of Ecology.*

"Partial closure" is defined as the closure of a dangerous waste management unit in accordance with the applicable closure requirements of WAC 173-303-400 and WAC 173-303-600 through -670 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems) while other units at the same facility continue to operate. Replacement of a tank with a new tank that continues to be used for the treatment and storage of dangerous waste is not closure. A Class 1 permit modification is required for replacement of a tank with a tank that meets the same design standards and has a capacity within plus or minus ten percent of the replaced tank provided the capacity difference is not more than 1,500 gallons, the facility's permitted tank capacity is not increased, and the replacement tank meets the same conditions in the permit.

Comment 131: Ecology's final status regulations do not require changing (WAC 173-303-610(3)(c)(i)), and the partial closure provisions proposed by Ecology are inconsistent with EPA regulations at 40 CFR 264.112(d)(1). Ecology should have no concerns about partial closure notifications at a TSD unit that needs to have a permit to operate. Section -610 applies to operating facilities seeking a permit, and -610(3)(a) clearly outlines the procedures to get an approved closure plan. If there are partial closure concerns at a facility and there is appropriate justification to impose partial closure notifications, Ecology can impose these through the omnibus provisions of -800(8) as part of the permit issuance process. EPA's requirements for partial closure at 40 CFR 264.112(d)(1) contain an additional sentence not

found in -610(3)(c)(i). Ecology should only propose text to make -610(3)(c)(i) consistent with 40 CFR 264.112(d)(1). Other partial closure notifications are not required.

Response: *Notification of partial closure is currently required for closure of surface impoundments, waste piles, land treatment, and landfill units. The proposed amendments extend the notification requirement to treatment and storage tanks, container storage, and incinerator units. It is consistent to expect notification of closure for these units whether it is for partial closure or final closure at a final status facility. Closure notification is required so Ecology can ensure the facility has a current approved closure plan and that the closure proceeds in accordance with approved regulations and with the facility's permit.*

40 CFR 264.112(d)(1) contains an additional requirement concerning notification for partial and final closure of a boiler or industrial furnace. That requirement is not in -610(3)(c)(i) because the Department of Ecology has not adopted the federal regulations for boilers or industrial furnaces and is not authorized to implement these regulations. EPA Region 10 is the agency in Washington state with compliance and permitting oversight over facilities with these units.

WAC 173-303-630(8)(a)

Comment 132: The Hanford Facility is subject to Department of Energy Orders which specify that the Uniform Fire Code (UFC) be used. If Ecology now uses the International Fire Code in the *Dangerous Waste regulations*, it will impose two different standards at the Hanford site. Ecology needs to determine whether or not the two codes are equivalent, and if not provide an option to comply with either standard at the discretion of the local fire marshal.

Response*: In 2003, the Washington state legislature passed an amendment that replaced the Uniform Fire Code (UFC) with the International Fire Code (IFC). All cities and counties around the state are in the process of adopting this code, which has been collectively approved by the Washington State Association of Fire Marshals. Switching to the IFC makes Washington state consistent and in-step with the majority of the United States. Without an extensive review by a fire code expert, it is not possible to provide an analysis of all the differences between the IFC and the UFC, but it does appear that the two codes are not equivalent as they pertain to the dangerous waste rule citations. At facilities where federal facility orders require that the UFC be used, (such as at the Department of Energy Hanford site), Ecology's Hazardous Waste Program inspectors will work with the facility to meet dangerous waste rule requirements.*

WAC 173-303-640

Comment 133: In reviewing the proposed changes to the "notes" in -640, an improper reference to (h)(iv)(A) through (C) was found in two locations. In -640(4)(i)(D) and (E), the reference should be (i)(A) through (C). The sub-subsections (A) through (C) are not found anywhere in (h).

Response: *These corrections have been made in the final rule.*

Comment 134: The proposed language of -640(7)(d) fails to bring the requirement into alignment with other sections of the *Dangerous Waste Regulations*. Instead, the proposed language requires reporting of any release from the tank system regardless of potential impact to human health or the environment, in conflict with the reporting requirements of -145 which only require reporting when a release threatens human health or the environment.

Response: *The proposed language at -640(7)(d) which states that any release must be reported in accordance with section -145 means that spills from tanks and tank systems must be reported using the same criteria as any other spills subject to -145. Spills must be reported when a release threatens human health or the environment.*

Comment 135: The proposal to -640(7)(d) deletes the exception to the spill reporting requirement for very small releases that are immediately cleaned up. The commenters suggest this exception be retained.

Response: *The operator of a tank system is already subject to the reporting requirements of section -145 as well as to those of -640(7)(d), both at the same time. Section -145 currently has no minimal volume reporting requirements, which applies to tank system operators. Therefore, with the amendments to -640(7)(d) the tank operator is not being subject to any new rule that is more stringent than what they are currently subject to. The amendments to -640(7)(d) removes a requirement that is in conflict with section -145, which the tank system operator currently must comply with.*

Comment 136: Ecology should merely identify the other requirements from -145 and -360(2) in -640(7)(d)(i) so that it is easier to identify all applicable reporting requirements.

Response: *Ecology is making the rule clearer by using section -145 as the section for reporting requirement since it applies to any person responsible for a spill rather then section 640(7)(d) which only applies to tank operators. There has been confusion expressed by generators in the past regarding these apparently conflicting requirements.*

Comment 137: Delete proposed changes to -640(7)(d)(iii) regarding the 15-day contingency plan report. Retain the text as is currently exists.

Response: *The 15-day reporting requirement for contingency plans is not a new or proposed rule; it is currently a requirement in section 360. The 15-day reference was placed in section -640(7)(d) to alert the reader that there may be a shorter reporting period they are subject to if the spill is considered an emergency. By adding the 15-day reporting reference in -640(7)(d) Ecology hopes to make it easier for generators to remain in compliance with reporting time frames.*

Comment 138: The proposed revision can be read to require an immediate report of any release to the environment without regard to the circumstances. The commenter suggests the following wording for section -640(7)(d)…."Any release to the environment that threatens human health and the environment must be reported in accordance with section -145"

Response: *Ecology respects the concern of the commenter regarding the circumstances about releases to the environment that "threatens" human health. Since that particular circumstance is outlined in section -145 Ecology felt there was no need to repeat that same statement in section -640(7)(d).*

WAC 173-303-646

Comment 139: The commenter supports provisions that maintain consistency with the federal hazardous waste rules including the federal rule language related to the off-site management of CAMU eligible wastes. This provision affords the state maximum flexibility for the safe and effective management of CAMU eligible wastes in accordance with the federal rules.

Response: *Comment noted.*

Comment 140: Waste Management supports the adoption of the federal regulations for corrective action management units (CAMUs), particularly the inclusion of language related to off-site management of CAMU-eligible waste in both in-state and out-of-state facilities.

Response: *Ecology notes your support of these amendments to the* Dangerous Waste Regulations.

Comment 141: To further encourage cleanups and more equitably allocate responsibility for corrective actions, the commenter believes Ecology should incorporate the private right of action provision from the Model Toxics Control Act (MTCA) regulations (WAC 173-340-545) into new section -64620(4). At a minimum, corrective actions must be consistent with the sections of the MTCA regulations outlined in this section.

Response: *The purpose of the proposed regulation amendments to WAC 173-303-646 was to adopt the revised federal corrective action management unit (CAMU) regulations. The level of detail in the revised CAMU regulations resulted in a reformatting of the entire section. Although the proposed amendments present the entire section as new, Ecology did not intend to make additional revisions to WAC 173-303-646 at this time. The language proposed in your comment will be considered in future rulemaking.*

WAC 173-303-802

Comment 142: This change to permit-by-rule (WAC 173-303-802(5) and -040 definition of a designated facility) is a very positive improvement. The regulated community can be flexible about how to manage the wastes in a cost effective manner yet still ensure protection of the environment.

Response: *Comment noted.*

Comment 143: The proposed change will allow permit-by-rule (PBR) facilities to receive and treat RCRA regulated hazardous wastes without a TSDF permit and without the regulatory scrutiny or stringent requirements applicable under such permits. PSC believes this will increasingly impact TSDFs and make them an uncompetitive alternative for the treatment of the waste streams that will fall under this new exclusion.

Response: *The amendment removes the requirement to have a TSD permit to treat federally-regulated wastewaters generated off-site. It does not change how wastewater treatment units are regulated. Treating wastewater in wastewater treatment units is an activity regulated by an NPDES, state waste discharge, or pretreatment permit or authorization, and the additional PBR requirements*

It is true that the proposed changes do not impose the same requirements as found in a TSD permit; however, Washington's requirements for treating wastewater generated off-site in wastewater treatment units are considerably more stringent than EPA- EPA exempts this activity. In addition, it should not be presumed that these units will not go without scrutiny by Ecology. The wastewater treatment units being addressed in this rule amendment are generally operated by large businesses that are already subject to Ecology's inspection routine.

The proposed change is also narrow in scope. It only applies to wastewater treatment units that: 1) meet the definition of a tank or tank system, 2) treat wastewater, 3) treat wastewater generated off-site with similar characteristics to that generated on-site (for example, wastewaters generated at a satellite location owned by the parent company, 4) treat wastewater that can be effectively treated in the receiving wastewater treatment facility, and 5) are part of a wastewater treatment facility that is regulated under a water quality permit or authorization and the permit or authorization covers the waste stream and constituents being discharged. Ecology believes that this change will only apply to a limited number of facilities and does not expect it to impact business done by TSDFs. Ecology believes that the amendment will provide opportunities for better treatment of wastewater streams with dangerous waste constituents.

Comment 144: Although the new section will impose requirements on these treatment facilities that do not apply under current regulations, the additional regulations are not among those that are the most costly and burdensome to TSDFs that will compete for these same waste streams (e.g., closure and post-closure financial assurance, reporting and recordkeeping requirements).

Response: *Wastewater treatment units treating wastewaters generated off-site will be regulated like other permit-by-rule units. The commenter is correct in stating that these units are not subject to the financial assurance requirements and some of the recordkeeping requirements applicable to TSDFs. However, PBR facilities must comply with WAC 173-303-380(1)(d), operating record and the reporting requirements in WAC 173-303-390. As mentioned previously (see response to comment 143), Washington's PBR requirements are far more stringent than EPA.*

Comment 145: This section does not define what is meant by "generated within the same industry" or by "the wastewaters will be effectively treated by the wastewater treatment unit." The NAICS codes are complex, and a single six-digit code may involve one industry that produces numerous waste streams or different waste streams based upon the chemical or products used in the particular industrial process.

Response: *"Same industry" can refer to the same company, a subsidiary of that company, or an industry with the same NAICS code or in the same category of NAICS code. The scope of this rule is limited to treating wastewaters generated off-site that have similar characteristics to wastewaters*

generated onsite. The water quality permit writer or regulatory authority will review information about the new wastewater stream (including characteristics, concentration levels, and volume) and the capabilities of the receiving wastewater treatment facility to determine if the wastewaters will be effectively treated. "Effectively treated" means that the dangerous waste constituents and other constituents in the wastewater are removed or chemically altered to meet permit limits or standards that are protective of human health and aquatic life.

Comment 146: Neither this section nor the definitions in the *Dangerous Waste Regulations* define what constitutes "wastewater" for purposes of this section. Because the term "wastewater" is not defined, it should be required that these PBR facilities are in fact treating "wastewaters" and not concentrated chemicals or non-aqueous wastes. PSC believes that Ecology should promulgate a formal definition for "wastewaters" that refers to wastes that are substantially water with contaminants amounting to a few percent at most.

Response: *Neither EPA nor Ecology has defined wastewater for the purposes of treating in wastewater treatment units under permit-by-rule. However, EPA and Ecology have agreed on what wouldn't be considered a wastewater. In order to meet permit-by-rule provisions, a wastewater treatment unit must be treating wastewaters and not concentrated chemicals or non-aqueous wastes.*

Ecology has defined "wastewater" in permit-by-rule guidance as any waste permitted or authorized under a site's NPDES permit, state waste discharge permit, or pretreatment permit issued by the Department or a local sewage utility delegated pretreatment program pursuant to RCW 90.48.165, which is to be discharged through a wastewater treatment plant. Essentially, the definition of "wastewater" will be any waste the water quality permit authorizes for discharge as a wastewater.

Comment 147: Some criteria must be met for a hazardous waste to qualify as a "wastewater" and for the exclusion to apply to a wastewater treatment facility receiving waste from off-site sources. To meet this exemption, any PBR and each unit thereof, must meet the definition of "tank" and should exclude other unit operations which are not obviously tanks, such as furnaces, boilers, presses, filters, sumps, and many other types of processing equipment that would allow a facility to treat non-aqueous waste materials. The exemption should be limited to only those units that are part of a wastewater treatment facility subject to regulation under the appropriate permit and the unit should be directly involved in the actual treatment. In no event should a wastewater treatment facility that generates a wastewater treatment sludge be allowed to receive such sludge which is hazardous waste from an off-site generator.

Response: *The proposed amendment only applies to wastewater treatment units. The wording in WAC 173-303-802(5)(a) has been revised as follows to clarify this distinction:*

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

In order to be eligible for permit-by-rule, a wastewater treatment unit must have a water quality permit or authorization that covers the waste stream(s) and constituents being discharged and the facility must

comply with the conditions of that permit. A wastewater treatment unit must meet the definition of a tank or tank system as found in WAC 173-303-040. This definition does not include furnaces, boilers, presses, filters, sumps, and other types of processing equipment. Wastewater treatment units can not accept any dangerous waste sludge, spent solutions, solids, or commercial chemical products.

Comment 148: The relative reduction in regulatory oversight of dangerous wastes is inconsistent with Ecology's general trend to increase regulation over TSDFs, oil processors, and recycling facilities. PBR facilities that elect to take wastes should be required to meet all of the requirements of WAC 173-303-380 to ensure that adequate records are available for regulatory scrutiny of dangerous wastes that are entering these facilities for "treatment" as well as the actual quality and effectiveness of the PBR facility treatment process in eliminating or reducing the quantity and toxicity of hazardous wastes. These facilities should also meet requirements for tank systems (WAC 173-303-640) and financial requirements (WAC 173-303-620).

Response: *There will be no change in regulatory oversight for wastewater treatment units treating federally regulated wastewater generated off-site with the proposed amendment. As has always been the case, these units will be subject to the permit-by-rule requirements of WAC 173-303-802(5). Ecology believes that these requirements are sufficiently stringent to ensure that wastewater in these units will be managed appropriately to protect human health and the environment. The tank standards in WAC 173-303-640 and financial requirements in WAC 173-303-620 will not be added to the permit-by-rule regulations.*

WAC 173-303-802(5)(a)(iii)(I) has been revised as follows to add some additional recordkeeping requirements for owners and operators of wastewater treatment units treating federally regulated hazardous wastes generated off-site:

(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;

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).

Comment 149: If the owner/operator of a wastewater treatment unit would like to treat dangerous wastewater received from off-site, and that wastewater is generated within the same industry and the wastewaters will be effectively treated by the wastewater treatment unit, in some circumstances and on a case-by-case basis, there should be a way to accomplish this without having to re-apply for a modification to the discharge permit or to wait a number of years for the current permit to expire before reapplying.

Reapplication/permit modification may be necessary if the wastewater received from off-site created a significant volume increase in the wastewater intake to the treatment plant, or if the wastewater had significantly different levels of similar contaminants than the receiving treatment plant typically receives from on-site sources. However, there will be cases where the water received from off-site will be virtually identical to what is normally received on-site

and received from off-site in quantities of a much lesser volume than is normally received at the permitted facility. If the received wastewater is not contributing significantly to the volume through-put of the plant and contaminants are virtually identical, then there would seem to be no need for a formal reapplication for a new or modified permit. Instead, an option could be inserted into the regulation for a submittal of a Letter of Request to Ecology outlining the proposal and the reason it is believed a formal reapplication would be unnecessary. Ecology could then review the case and issue an approval letter (jointly with the local sewage utility approval if applicable). If Ecology does not agree that justification is sufficient to avoid the reapplication process, then they may deny the request and insist that the company will not be able to proceed without going through the application process. The Letter of Request would be reviewed and either approved or denied within 30 days of receipt by the department.

This option would afford much more flexibility to companies and will avoid the excessive use of resources both at Ecology and at the company making the request. When this option could be taken, it would avoid the time and resources necessary for the permit application process, review of permit, public comment on new or modified permit, issuance of a new permit and all other related documentation and activities.

Response: *In proposing this change to the regulations, Ecology recognized that there would be a workload impact to water quality permit writers. To ensure that a water quality permit or authorization covers the new wastewater stream and constituents and to ensure that the receiving wastewater treatment facility will effectively treat the new wastewater stream, the water quality permit writer will need to thoroughly review the source and characteristics of the wastewater and the capabilities of the receiving wastewater treatment system.*

Because it is impossible to predict what the various scenarios might be and the extent of review required, Ecology recommends that industries wanting to take advantage of this change should plan to do so when their wastewater discharge permit is up for renewal. However, there is a provision that allows permit writers to approve new sources of wastewater without having to modify the permit or wait for permit renewal if there is no significant impact from a new source of wastewater and the permit does not need to be revised. Whether or not this provision is used will be a case-by-case decision by the permit writer assigned and will depend upon the characteristics of the new wastewater stream and the time the permit writer has available to do their review.

Hazardous Waste Facilities Initiative

WAC 173-303-120(3) Recycling

HWFI Comment 1: Change the language so that it does not denote applicability.

Response: *Ecology agrees with the comment. The language has been revised. Applicability is now clarified in section WAC 173-303-610(1).*

HWFI Comment 2: The way the rules are structured, recyclers of state-only dangerous waste would not be subject to closure and financial assurance requirements. Revise -610 and -620 accordingly so that it is clear that those recyclers operating under -500 are subject to new requirements.

Response: *The language of WAC 173-303-120(3) makes it clear that anyone conducting recycling listed in -120(3), including those recycling state-only dangerous waste, are subject to closure and financial requirements. No additional clarification is necessary.*

HWFI Comment 3: Recycling and reclaiming of CFC/HCFC operating under -120(3)(c) and -506 should not be subject to closure and financial requirements because these materials are valuable, require little processing, are regulated under air pollution control rules and, if spilled, rapidly disappear through evaporation.

Response: *Ecology appreciates the description of recycling and reclamation of refrigerant gases.*

Ecology intended that the recycling of dangerous wastes covered in this section of the rules would be subject to closure and financial requirements. This is because of the opportunity for accumulating dangerous wastes that may pose threats to human health and the environment, and may represent a significant financial burden if abandoned at the time the recycling operation closes down. However, through an oversight the exemption for closure and financial responsibility in existing section -506 was not deleted. The exemption will exist until a future rule-making procedure. The Department intends that recyclers of spent CFC/HCFC be required to complete closure plans and provide financial assurance for closure, but will attempt to achieve these through voluntary actions by facility owners and operators.

Ecology is also including a revision to rules addressing how the estimates for the costs of closing some types of off-site recycling and used oil processing equipment and structures (recycling units) are addressed. See the response to comments for WAC 173-303-620 (HWFI Comments 12 through 16) below.

WAC 173-303-120(4) Recycling without Storage

HWFI Comment 4: The commenter supports proposal for allowing 72 hours for staging of recyclable materials prior to placing them in an active recycling process.

Response: *The Department appreciates your support for this new rule. Please see the response to HWFI Comment 5, below, for information on changes made to the propose rule.*

HWFI Comment 5: The commenter generally supports the intent of this proposed rule but is concerned that its allowing 72 hours for staging of wastes prior to recycling may be less stringent than federal standards.

Response: *The Department explained the reasons for seeking this flexibility in its July 6, 2004 preamble for the proposed rule. We believe it makes sense in Washington because waste acceptance and tracking procedures by recyclers are carefully monitored, waste staging and accumulation must meet standards for TSDs, it encourages recycling because operations are more efficient and cost-effective, it has limited application because there are five such operations in the State, and because there is no defined time period in federal rules before a waste is considered "stored" which triggers the necessity of*

obtaining a hazardous waste permit for storage. In response to this concern, the rule is being revised to make it a case-by-case determination by the Department to allow up to 72 hours for staging of wastes prior to active recycling. The criteria the Department will consider is also identified in the revised rule, to include but not be limited to: the types and volumes of wastes being recycled, operational factors of the recycling process(es), and the compliance history of the operator. The Department will apply this provision through compliance letters or agreed orders with individual facility operators.

It is also worth noting that the State of Vermont has adopted a three day staging rule for the same types of recycling operations. EPA Region 1 authorized the state program including this rule (see 64 FR185, page 51702; September 24, 1999). In its rules, Vermont also requires that recyclers prepare closure plans and provide financial assurance for closure.

WAC 173-303-515(9)

HWFI Comment 6: The commenter generally supports the effort to assure that used oil processing facilities are held accountable for planning and paying for the closure of their operations.

Response: *The Department appreciates your support.*

HWFI Comment 7: Several comments were received that questioned the need to impose closure and financial requirements on used oil processors and re-refiners. Commenters stated that used oil is a valuable resource that is quickly processed and sold to customers as an alternative fuel. One commenter stated that these rules will result in an increase of about $ 0.40 per gallon to used oil generators. The costs imposed by the proposed rules will be burdensome to the point that some used oil generators may illegally dump used oil rather than sent it to a legitimate collector or processor.

Response: *Ecology recognizes that cost of operations for used oil processors will increase as a result of the new rules. These costs will be borne directly by a small number of facilities that are subject to the new requirements and indirectly by their customers. Ecology's economic analysis shows that the long-term benefits of the new rules outweigh the costs incurred (Cost Benefit Analysis, Least Burden Determination, Proposed Dangerous Waste Amendments Chapter 173-303 WAC, publication # 04-04-030).*

The comment stating that these rules will result in a $0.40 cent per gallon increase in costs to used oil generators provided no evidence to support that claim, so Ecology cannot respond except in very general terms. Used oil processors located in Washington reported a total of approximately 12 million gallons of used oil collected in 2003. This does not include used oil shipped to processors located outside of Washington. If the $0.40 per gallon increase is accurate, it represents an increase in revenue of $480,000 per year to the used oil processors. This figure far exceeds any reasonable estimate of the direct annual cost impacts to used oil processors as a result of this rule.

In the final rule, Ecology has included three new factors to help mitigate the increased costs to used oil processors. These include an exclusion for recyclable materials that require only incidental processing and are managed in dedicated tanks or containers from the estimate of closure costs (see response to HWFI Comments

12 and 13 for discussion on WAC 173-303-620(3)(a)(iii)(A)), extending the period of time to fully pay in to a trust fund from three to five years (WAC 173-303-620(4)(d)(ii)), and creating a provision for alternative financial mechanisms (WAC 173-303-620(4)(e)).

Do-it-yourself householders and many small business operators, have a variety of options for depositing their used oil at local public and private collection centers at no or minimal charge. These rules are not expected to alter the collection opportunities. The Department does not anticipate an increase in the frequency of illegal dumping as a result of these rules.

WAC 173-303-610 Closure and post-closure

HWFI Comment 8: Applicability terms should appear in one location, preferably -610(1)(a)(ii) and not spread through several sections of the rules.

Response: *Ecology agrees and has made the changes for clarification by creating a new subsection, 173-303-610(1)(c). Existing subsections (c) and (d) were renumbered to (d) and (e) to accommodate this revision.*

HWFI Comment 9: Federal and state agencies conducting recycling that would be subject to this proposed rule should be exempted from the requirement to prepare closure plans. Closure plans are linked to the requirement to provide financial responsibility. Federal and state agencies are exempted from financial requirements, and should therefore be exempted from the need to prepare closure plans.

Response*: Federal and state agencies are exempted from financial requirements for closure for treatment, storage and disposal (TSD) facilities in both federal RCRA and State dangerous waste rules (see WAC 173-303-620(1)(c)). These agencies, however, are not exempted from the requirement to prepare closure plans for TSDs at WAC 173-303-610. The Department strongly believes that the same approach should apply to recycling units. Agencies should be responsible for the safe and orderly closure of recycling units, as closure plans are an effective and efficient means, and to document and disclose the decontamination and decommissioning procedures.*

WAC 173-303-610(12) Closure Plans for Off-Site Recyclers and Used Oil Processors

HWFI Comment 10: The commenter suggests that a process and time period be included to resubmit a closure plan for which approval has been denied by the Department. Commenter also suggests that the rule clarify that an operator may appeal a decision of the Department to deny approval of a closure plan.

Response*: Ecology agrees and has included the suggested language in sections WAC 173-303--610(12)(a) and (e).*

HWFI Comment 11: In -610(12)(d) the scope of the closure plan should not be for the recycling facility. It should be limited to recycling units.

Response*: Ecology agrees and has made that change.*

WAC 173-303-620 Financial Requirements

HWFI Comment 12: Several organizations and individuals expressed concern about the additional cost burden that the proposed rules will place on small businesses in Washington.

HWFI Comment 13: Two commenters stated that the Department should demonstrate that the required financial assurance mechanisms, particularly insurance for closure, are available to small and medium-sized recyclers in Washington before adopting those requirements. (3, 9) Another commenter stated that Ecology should postpone adoption of these rules until the Legislature creates an insurance program for waste management facilities similar to the existing program administered by the Pollution Liability Insurance Agency (PLIA) for service stations and home heating oil tanks.

Response to comments 12 and 13: *The rules provide that the owner or operator of a TSD, a recycler or used oil processor may choose one of six financial mechanisms to provide financial assurance for closure. This includes a trust fund, surety bond guaranteeing payment, surety bond guaranteeing performance, letter of credit, insurance, and financial test and corporate guarantee. Because of qualifying factors, the financial test and corporate guarantee is typically not available to small and medium-sized businesses. The availability of bonds, letters of credit, and insurance mechanisms depends upon the financial and risk factors of the facility owner or operator, market conditions for financial products, and the dollar amount of the mechanism being sought. Based on an informal inquiry with a limited number of insurance companies, it appears that insurance for closure in amounts of less than $50,000 are difficult to obtain, if at all. Bonds and letters of credit may be available, but the purchaser must provide a high level of collateral and pay annual premiums in order to obtain them. The trust fund is available to owners and operators of small and medium-sized businesses.*

In recognition of the cost burden associated with the proposed rule, Ecology has 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,*
- *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.*

The time frame for providing financial assurance is sufficiently long enough that should the 2005 Legislature create an alternative mechanism, facilities impacted by the new requirements will be able to consider using such an alternative. 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, Ecology also recognizes that the reduced costs to facility owners and operators may be offset by some additional financial risk to the public.

HWFI Comment 14: Recyclable materials are valuable, are not held for long periods of time by facility owners and operators and, therefore don't represent a large risk to the taxpayer. Also, if a facility does go through bankruptcy or is abandoned, Ecology may sell the recyclable materials and recover some of the costs for a publicly funded closure. Recycling and used oil processing facilities should not be included in the scope of this rule.

Response: *Please refer to the July 6, 2004 preamble for the proposed rule and the report to the Legislature (September, 2002) for examples of the environmental risks and financial costs associated with dangerous waste recycling and used oil processing facilities in Washington. The costs associated with safely removing wastes, disposing of wastes, and decontaminating structures and equipment may be significant. Ecology's position has been that facility owners and operators should be responsible and accountable for those costs. We have also consistently recognized that by imposing requirements for closure plans and financial assurance for closure on owners and operators of off-site recycling and used oil facilities, the costs of waste recycling will increase. The economic analysis of the proposed rules provides estimates of the increased costs, plus the benefits to be gained from reduced environmental and financial liability (Small Business Economic Impact Statement for Proposed* Dangerous Waste Regulation*, Publication # 04-04-019 and Cost Benefit Analysis, Publication # 04-04-030).*

In the final rule, Ecology is including three mitigating measures. In WAC 173-303-620(3)(a)(iii)(A), a revision to rules was included addressing how the estimates for the costs of closing some types of off-site recycling and used oil processing equipment and structures (recycling units) are addressed. Normally, an owner or operator of a hazardous waste management facility may not incorporate any salvage value of dangerous wastes, structures or equipment in an estimate for the cost of facility closure. This revision will allow the value of recyclable materials that require only incidental processing before they may be sold as products to the general public to be excluded from the estimate of costs for closing a recycling unit. To qualify for this exclusion, these recyclable materials must be managed in tanks or containers that are dedicated solely to those wastes. Tanks, containers or equipment that are used to stage, store, or process other more contaminated wastes would not qualify for the exclusion. The cost of decontaminating the tanks, containers or equipment dedicated to qualifying recyclable materials must be included in the estimate for closing the recycling unit. "Incidental processing" is specified in this revision to mean simple screening or filtering of debris to remove minor amounts of foreign material or removal of minor amounts of water (less than 5% by volume). The Department expects that this rule will apply to various types of recyclable materials such as refrigerant gases containing CFC/HCFC and "dry" used oil that require only incidental processing before they may be sold as products.

In WAC 173-303-620(4)(d)(ii), the period of time to establish fully funded trust funds is extended from three years to five years from the date of approval of a facility closure plan. In WAC 173-303-620(4)(e), facility owners and operators subject to these requirements may request an alternative mechanism for establishing financial assurance for closure.

HWFI Comment 15: The Department should postpone revisions to financial mechanisms until the Environmental Protection Agency completes its review and adopts changes to federal rules that would be effective in all states. Specifically, the Department should not, at this time, adopt the proposed revisions that prohibit performance bonds, prohibit captive insurance, require that insurance companies meet minimum ratings, or revise the financial test and corporate guarantee.

Response: *The Department has asked EPA about the status of their review of financial requirements at the federal level. EPA is conducting two separate activities that have a relationship to financial requirements. The first activity involves EPA's proposed rule that would create a standardized permit for certain types of storage and treatment activities. This rule, which is scheduled for adoption in early 2005, would not apply to commercial hazardous waste treatment, storage and disposal facilities, off-site recyclers or used oil processors. In the standardized rule proposal, EPA included prohibitions on captive insurance and a requirement that insurance companies meet minimum ratings by specified national insurance rating agencies. Captive insurance is a term used to describe when a parent company creates a subsidiary insurance company that provides insurance back to the parent company or other subsidiaries. These captive insurance companies must meet all licensing requirements in the state in which they created.*

The second activity involves a request by EPA to the Environmental Financial Advisory Board to review the financial test/corporate guarantee and insurance mechanisms of 40 CFR Part 264.143. EPA did not provide a schedule for completion of this review, or for proposing rule revisions. Given the level of interest by financial institutions and the process normally employed by EPA, it will likely be several years before final revisions are adopted on these issues.

We have also reviewed the comments associated with captive insurance and ratings of insurance companies. After review of the information submitted, the justification for proposing the changes, evaluation of potential impacts in Washington, and the desire to address financial mechanisms in a timely manner, Ecology is taking these actions in the final rule:

- *reinserting performance bonds as an acceptable mechanism for providing financial assurance for closure and post-closure;*
- *withdrawing the prohibition on captive insurance;*
- *keeping the requirement that insurance companies must meet minimum ratings by Standard & Poor's, Moody's, and Best, but revising those ratings to accept one lower tier of ratings;*
- *keeping the requirement in the financial test and corporate guarantee that the minimum tangible net worth of the company must be at least $20 million;*

In regard to captive insurance companies, Ecology believes that if the captive can meet the minimum required insurance ratings it will provide sufficient assurance that the insurance company is financially viable and will be able to pay claims against pollution liability or closure policies.

HWFI Comment 16: The proposed rule states that Ecology must be named as the beneficiary to insurance. Was the intent that Ecology should be named as a secondary beneficiary in case the primary holder of the policy does not or cannot file claims?

Response: *Yes. The final rule has been revised to require that Ecology be named as a secondary beneficiary on insurance for closure.*

WAC 173-303-960 Special powers and authorities of the department

HWFI Comment 17: Several commenters were opposed to the proposal to delete "imminent and substantial endangerment" from this section of the *Dangerous Waste Regulations* and replace it with the term "significant threat." Imminent and substantial endangerment is well understood by the business community and has been tested in several court cases throughout the US. The term "significant threat" has not been defined or tested in a legal sense.

Response: *As explained in the July 6, 2004 preamble to the proposed rules, this revision was intended to make the* Dangerous Waste Regulations *consistent with the scope of authority granted to the Department of Ecology in the State Hazardous Waste Management Act (RCW 70.105.120). The statute does not limit the authority of the Department of Ecology to request the attorney general to file suits to enforce the requirements of that chapter of law. We have found that, in all but a very few instances, the normal inspection, compliance and enforcement methods available to the Department of Ecology have successfully achieved compliance with the* Dangerous Waste Regulations *and hazardous waste permits. Our position, however, is that in some circumstances, there may be a need to request the attorney general to seek injunctive relief against a party that refuses to comply with regulatory and/or permit requirements. Because the existing language of WAC 173-303-960 may be interpreted to be narrower in scope than the statutory authority of RCW 70.105.120, we believe it is prudent to address that inconsistency.*

In the final rule, Ecology is following the advice of the Attorney General's Office to revise both subsections -960(1) and (2). We are striking the language regarding authority to conduct inspections because this authority already exists in RCW 70.105.130. We are revising the language of this section 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 the Department 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.

Chemical Testing Methods

General Response: *Ecology has decided to withdraw its proposed update to the guidance document, 'Chemical Testing Methods for Designating Dangerous Waste, February 1998, Publication #97-407.' The proposed changes in the regulations referencing this guidance document are also being withdrawn. Based on comments received, Ecology conducted an initial evaluation to determine how well the revised guidance will work. Ecology has determined that further work is necessary to evaluate the proposed changes before they are finalized. Therefore, Ecology will continue with the efforts begun with this project and will work to improve the guidance to meet the following objectives:*

- *Provide an easy, quick, accurate, and relatively inexpensive method for determining whether or not a waste designates for state-only toxicity,*
- *Better define the universe of persistent chemicals that have a negative impact on human health and the environment, and*

- *Improve the wording in the guidance to make it is easier for the typical generator to understand.*

Ecology will provide a revised guidance document for public review during the next regulatory update process, tentatively scheduled for 2006.

Due to withdrawal of the proposed changes, individual responses were not prepared for comments received on the proposed changes. The comments appear below.

CTM Comment 1: The definition of persistence in 173-303-040 is inconsistent with the new definition of persistence provided by "Chemical Testing Methods for Designating Dangerous Waste" (e.g. 60 days versus 365 days).

CTM Comment 2: The suggestion was made that any changes to Appendix 5: HOCs of Concern 'should be systematically and methodically updated in a way that is workable for waste generators.' Specifically, it was suggested that changes to Appendix 5 occur effective the first of each calendar year so the changes in waste designation minimize impact to generators. The suggestion was also made that a column of date of addition or deletion be added to the table in order to help generators more clearly identify changes to the Appendix.

CTM Comment 3: The suggestion was made that the list also be 'provided in multiple formats (Microsoft Word, Microsoft Excel, etc.) to make data comparisons easier to accomplish.

CTM Comment 4: A table was provided with the following recommendations:

- Change "Chemicals of Concern" to "HOCs of Concern" on page #1 of Appendix 1
- Change "…to provide date in the detection…" to "to provide data in the detection" on page # 5-32 of Appendix 5
- Repeat table heads on each page for Tables 1 & 2 of Appendix 5
- Delete Footnotes 1-3 as the aren't used in Appendix 5 Tables 1 & 2, pages 5-42 & 5-52
- Change all "N.O.S./1/" to "N.O.S" in Tables 1 & 2 of Appendix 5
- Change "…conducted in preparation for this change…" to "…conducted in preparation for this document…" in Chapter 3, Section C.2.b.2, page 25
- Change "…HOC either is or is not concern.." to "…HOC either is or is not of concern…" in Chapter 3, Section C.2.c, page 28
- Change "…The list (Appendix 4).." to "…The List (Appendix 5)…" in Chapter 3, Section C.2.c, page 28
- Change the Heading "SW-846 Method NR" to "SW-846 Method No." in Table 3-3 on page 30.

CTM Comment 5: The following suggestions were made:

- Consider changing the title of "Decision Tree #1 General Evaluation" to "Decision Tree #1, HOC General Evaluation" in Chapter 3, Section C.2.a on page # 22.
- In Note 1, correct the typographical error, change "polyaromatic hydrocarbons" to 'polycyclic aromatic hydrocarbons" in Chapter 3, Section C.2.a on page # 22.
- Consider using the abbreviation "dw #" instead of "dw" throughout Decision Tree #1 in Chapter 3, Section C.2.a on page # 22.

CTM Comment 6: A concern was raised with the second blue box in Decision Tree #1 in Chapter 3, Section C.2.a on page # 22. The commenter enquires if there are other instances where a waste must be evaluated to determine if it is an EHW under regulatory requirements 173-303-070 (5) (b) & (c).

CTM Comment 7: The following suggestions were made:

- Consider changing the title of "Decision Tree #2 Specific Chemical Evaluation" to "Decision Tree #2, HOC Specific Chemical Evaluation" in Chapter 3, Section C.2.a on page # 23.
- Consider using the abbreviation "dw #" instead of "dw" throughout Decision Tree #2 in Chapter 3, Section C.2.a on page # 23.
- In the reference to Table 1, note that this table is in Appendix 5 in Decision Tree #2 in Chapter 3, Section C.2.a on page # 23

CTM Comment 8: A comment was made that the definition for persistence in 173-303-040 is not in agreement with the changed definition in the guidance document.

CTM Comment 9: The suggestion was made to add both the chemical abstract number and the chemical structure to the examples in Chapter 3, Section C.2.d.1 on page 31 to improve understanding of the principals being discussed.

CTM Comment 10: A suggestion was made to remove the footnotes 1-3 from Appendix 5 as they are not used. In addition, it was recommended these references be added to the appropriate discussion in the text.

CTM Comment 11: Two major concerns were raised. The first is: 1) the commenters were concerned that challenges exist with the implementation of the new, recommended general evaluation analyses. Those concerns in particular center on the cost of the analysis, whether labs are prepared to conduct the analyses, whether lab standards are available and other possible barriers to implementation. The second is associated with the widespread use of halogenated organic compounds and the lack of information on the biological impact of these compounds. Two specific recommendations were made:

- Require that products containing HOCs be identified and inform purchasers that the products need to be managed as dangerous waste when disposed of and
- Limit the types of products that use HOCs. Developing a PBDE action plan that bans certain uses of PBDES is a step in the right direction.

CTM Comment 12: Concerns were raised about the basis for designating HOC as a class of persistent Dangerous Waste. Specifically, the comment was made that 'It would be preferable if WDOE classified each chemical or closely related chemical group based on available acute and chronic toxicity data.' Chlorinated paraffins (CP) were used as an example and the issue was raised that all current persistence information was applicable to short-chain CPs while no ecological impact had been identified for long-change CPs.

CTM Comment 13: The suggestion was made that Ecology '…. consider removal (of) all compounds from Appendix 5 (HOCs of Concern) for which there are no data to support such designation, and revise the determination process to include weighted concentration level for each compound based on its relative hazard.'

CTM Comment 14: The commenter identified that there was considerable inconsistency between Ecology's proposed changes to the guidance document "Chemical Testing Methods for Designating Dangerous Waste" and the documents presented on its website. In particular, changes to the Appendices did not agree with the text of the guidance document. Therefore it was suggested that Ecology provide a better explanation of its proposed changes including impacts/flexibility on the regulated community.

CTM Comment 15: The suggestion was made that Ecology should not change only the persistence and HOC related portions of its guidance document "Chemical Testing Methods for Designating Dangerous Waste" but should provide '… a complete revision of the subject document, not just revisions related to HOCs and persistence.'

CTM Comment 16: The recommendation was made that Ecology should 'delete (the) definition of Chemicals of Concern in Appendix 1.'

CTM Comment 17: A concern was raised about Ecology's change to the definition of persistence and specifically the change from 365 to 60 days for the determination of a persistent compound.

CTM Comment 18: Concerns were raised about the change to the definition of polymer and how it is supported in Chapter 3, Section C.1.b. In particular, the changes to the definition of polymer in Appendix 1 were not reflected in the text.

CTM Comment 19: Concerns were raised about the change in name to one of the PAHs referenced in Appendix 1 definition of PAHs. In addition, a concern was raised about the identification of CAS numbers in the test of the guidance and the CAS numbers did not appear in the posted document.

CTM Comment 20: The suggestion was made that Ecology 'Purge the entire subject document of information related to 49 CFR 173.128, organic peroxides….'

CTM Comment 21: The comment was made that Ecology should ' … retain the list of methods discussed/footnoted in the body of the subject document, retain the sample containers and preservation table, avoid using the term "general evaluation analysis', and delete the method test for all methods listed.' The suggestion was also made that, if the Appendix does not retain the sample containers and preservation tables, a reference is included to where that information can be found on EPA's SW-846 website.

CTM Comment 22: The recommendation was made to delete Appendix 4 as it is not explained, justified or referred to in the text. In addition, the concern was raised that chlorinated paraffins were not regulated in the past and their inclusion is an expansion of Ecology's authority.

CTM Comment 23: Several concerns were raised:

- Change 'HOCs of Concern' to 'HOCs Regulated under WAC 173-303",
- Ecology cannot maintain a list on their web page and update it regularly as it fails to comply with the Administrative Procedures Act (RCW 34.05),
- The table is sorted alphabetically inconsistently,
- The last two columns in the table are unnecessary and should be deleted, and
- Change the definition of HOCs in Appendix 1 to be consistent with the definition in -040.

CTM Comment 24: Ecology needs to propose a change pertaining to the designation of Division 1.5 reactive waste. Under –090(7)(a)(viii), Ecology needs to remove the reference to Division 1.5 as reactive waste in order to be consistent with the federal rules. Because the Chemical Testing Methods for Designating Dangerous Waste (publication #97-407) document is being amended due to halogenated organic compounds, Ecology needs to put the effort into confirming the accuracy of this comment and make the appropriate change. The change should also be made to update the document Chemical Testing Methods for Designating Dangerous Waste (publication #97-407) to delete reference to Division 1.5 since this document is open for change as part of this rulemaking. The commenter understands that Ecology has inadvertently created a new class of state-only dangerous waste by adding Division 1.5 to the reactive provisions.

CTM Comment 25: As Ecology is making changes to the persistence portion of the document, it should also change text to reflect required data sources, in particular NIOSH RTECS, Material Safety Data Sheets and The Hazardous Substances Data Base, National Library of Medicine.

CTM Comment 26: Change footnote 6 to read "60 FR 3092, January 13, 1995."

CTM Comment 27: Example 3-1 should be removed from the revised document.

CTM Comment 28: The comment was made that footnote on page 11 '… still refers to SW-846 Chapter Seven methodology for cyanide, sulfide reactivity.' EPA is in the process of evaluating this analysis and there is a distinct possibility the analysis will be deleted from SW-846. The commenter wanted to make Ecology aware of this possible change and questioned whether Ecology wanted to address the issue in this update of the document.

Appendix A

Individuals and Organizations Providing Comment
Comment Cross Reference Table

#	Commenter Name and Address	Comment Response Number
1	Jeffery L Cizek PSNS 1400 Farragutt Avenue Bremerton, WA 98314-5001	7, CTM 1, CTM 2, CTM 3
2	Craig Lorch Ecolights Northwest PO Box 24996 Seattle, WA 98124	115, 128, HWFI 4, HWFI 12
3	Craig Lorch Total Reclaim, Inc. PO Box 24996 Seattle, WA 98124	HWFI 3, HWFI 12, HWFI 14
4	Fred Miller Radi-Chem Env. PO Box 103 Albion, WA 99102	1
5	Andrew M. Kenefick Waste Management 801 Second Avenue, Suite 614 Seattle, WA 98104	140, HWFI 15
6	Roby D. Enge PNNL PO Box 999 Richland, WA 99352	2, 22, 24, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 84, 85, 88, 89, 90, 106, 109, 112, 116, 122, 134, 135, HWFI 17
7	Pam Jenkins DOC PO Box 41112 Olympia, WA 98504-1112	43, 44, 45, 46, 47, 48, 49, 50, 51
8	Ken Armstrong King County 130 Nickerson Street, Suite100 Seattle, WA 98109	31, CTM 4, CTM 5, CTM 6, CTM 7, CTM 8, CTM 9, CTM 10, CTM 11
9	Christopher Harris NORA 1511 West Babcock Bozeman, MT 59715	HWFI 6, HWFI 7
10	Jimmy Ko Boeing PO Box 3707 Seattle, WA 98124-2207	28, 52, 53, 94, 99, 107, 142, HWFI 7, HWFI 12, CTM 12, CTM 13

#	Commenter Name and Address	Comment Response Number
11	John Reed WSU Environmental Health & Safety Dept. Pullman, WA 99164-1172	54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 113
12	DW Coleman Energy Northwest PO Box 968 Richland, WA 99352-0968	64, 65, 66, 95, 138
13	Gary Smith 16541 Redmond Way #336C Redmond, WA 98052	127, HWFI 3, HWFI 7, HWFI 12, HWFI 13, HWFI 14
14	Mark Johnson NFIB 4160 6th Avenue SE, Suite 201 Lacey, WA 98503	4, 19, 127, HWFI 7, HWFI 12
15	Mo Azose Phillips (PSC) 18000 72nd Avenue S, Suite 217 Kent, WA 98032	6, 100, 114, 130, 141, 143, 144, 145, 146, 147, 148, HWFI 7, HWFI 12, HWFI 17
16	Bobette Plendl Goodrich 3100 112th St SW Everett, WA 98204	149
17	Shawn Waliser (2) Safe Food & Fertilizer 617 H St SW Quincy, WA 98848	20, 21
18	Patty Martin Safe Food & Fertilizer 617 H St SW Quincy, WA 98848	20, 21, 124
19	Gary A. Webster NEWALTA 1200, 333-11 Avenue SW Calgary, AB T2R 1L9	12, 79, 125, HWFI 17
20	Tony Miskho Flour Hanford PO Box 1000, MSIN H8-40 Richland, WA 99352	3, 5, 9, 10, 11, 13, 14, 15, 16, 17, 18, 22, 24, 26, 27, 29, 30, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 80, 81, 82, 86, 87, 91, 92, 93, 96, 97, 98, 101, 102, 103,104, 105, 108, 110, 117, 118, 119, 120, 121, 123, 126, 131, 132, 133, 136, 137, HWFI 1, HWFI 8, HWFI 9, HWFI 10, HWFI 11, CTM 14, CTM 15, CTM 16, CTM 17, CTM 18, CTM 19, CTM 20, CTM 21, CTM 22, CTM 23, CTM 24, CTM 25, CTM 26

#	Commenter Name and Address	Comment Response Number
21	Tony McKarns USDOE PO Box 500, MSINA5-15 Richland, WA 99352	5, 9, 10, 11, 13,14, 15, 16, 17, 18, 22, 24, 26, 27, 29, 30, 32, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 80, 81, 82, 86, 87, 91, 92, 93, 96, 97, 98, 101, 102, 103,104, 105, 108, 110, 117, 118, 119, 120, 121, 123, 126, 131, 132, 133, 136, 137, HWFI 1, HWFI 8, HWFI 9, HWFI 10, HWFI 11, CTM 14, CTM 15, CTM 16, CTM 17, CTM 18, CTM 19, CTM 20, CTM 21, CTM 22, CTM 23, CTM 24, CTM 25, CTM 26
22	Scott Campbell 422767 SR 20 USK, WA 99180	HWFI 7
23	Mike Jeffers Rebec LLC PO Box 658 Edmonds, WA 98020	129, HWFI 7
24	Ed Levesque Lakes Auto Wrecking 4034 100th St SW Tacoma, WA 98499	HWFI 7
25	Ed Levesque Lakeview Auto Wrecking 11528 Pacific Highway SW Tacoma, WA 98499	HWFI 7
26	Ed Levesque Midland Auto Wrecking 10324 Portland AVE E Tacoma, WA 98445	HWFI 7
27	Richard Pratt Snohomish Transmission 17476 147th St SE, Unit A Monroe, WA 98272	HWFI 7
28	Howard Mackert Mackert Automotive 3523A 57th St Ct NW Gig Harbor, WA 98335	HWFI 7
29	Mike West Southtowne Auto Rbld 14864 Tukwila International Blvd Tukwila, WA 98168	HWFI 7
30	Steve Ferrill Ferrill's Auto Parts 18306 Highway 99 Lynnwood, WA 98027	HWFI 7

#	Commenter Name and Address	Comment Response Number
31	C.A. Magnuson South End Auto Wrecking 3400 East Valley Rd Renton, WA 98055	HWFI 7
32	James Wilson KC Truck Parts Inc. 183 State Hwy 508 Chehalis, WA 98532	HWFI 7
33	Kathleen Kole 2025 Northshore Dr Bellingham, WA 98226	HWFI 7
34	John Kole 2114 Humboldt St Bellingham, WA 98225	HWFI 7
35	Jana Filli 2023 McNeill St Port Townsend, WA 98368	HWFI 7
36	Will Perry King County 999 Third Ave, Suite 700 Seattle, WA 98104	CTM 27
37	Edward Repa NSWMA 4301 Connecticut Avenue NW, Suite 300 Washington DC 20008	139, HWFI 15, HWFI 16
38	Marion LaBounty SQG Specialists Inc. 1901 East D Street Tacoma, WA he98421	HWFI 2
39	Jimi L Guthrie NUWC - Code 172, Bldg. 206 610 Dowell Street Keyport, WA 98345	CTM 28
40	Richard Albright EPA - Office of Air, Waste and Toxics MS-107 1200 Sixth Ave. Seattle, WA 98101	23, 25, HWFI 5
41	Sheila Lockwood UW - Environmental Programs Office Box 354400 Seattle, WA 98195	78, 83, 111
42	Randy's Towing 2135 Elmway Okanogan, WA 98840	HWFI 7

CTM=Chemical Testing Methods HWFI=Hazardous Waste Facilities Initiative

Appendix B

Preamble to the Proposed Amendments
***Dangerous Waste Regulations* Chapter 173-303 WAC**
July 2004

This document contains preamble explanations for the proposed amendments to the *Dangerous Waste Regulations*, Chapter 173-303 WAC. The proposed rule language itself is in a separate document, as are the changes to *Chemical Testing Methods for Designating Dangerous Waste*. Most of the proposed amendments were made public for review and comment a few months ago. Those comments were considered and some rule language changes were made as a result. In addition, the following explanations for the rule changes have been modified to address some of the questions and comments. Your comments on the proposed amendments will be taken into consideration prior to adoption, which is scheduled for later this year.

Ecology Adoption of Federal Hazardous Waste Requirements

Ecology is proposing to adopt several federal hazardous waste rules into the state *Dangerous Waste Regulations*. Most are proposed with language that is identical to the federal rule. Others are proposed with differences in the state version. Following are summary paragraphs that describe each rule. Any state differences are noted directly below the federal rule summary in *italics*.

Imports and Exports of Hazardous Waste: Implementation of OECD Council Decision C(92)39 Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations 61 FR 16290-16316

Summary: This rule identifies the wastes, under RCRA, that are subject to a graduated system (green, amber, red) of procedural and substantive controls when they move across national borders within the Organization for Economic Cooperation and Development (OECD) for recovery. This rule seeks to make the transactions fully transparent and to prevent or minimize the possibility of such wastes being abandoned or otherwise illegally handled. These requirements will apply only to U.S. exporters and importers of RCRA hazardous wastes destined for recovery in OECD countries (except for Canada and Mexico; waste shipments to and from these countries will continue to move under the current bilateral agreements and regulations). Those U.S. exporters and importers transacting hazardous waste movements outside the scope of this rule will remain subject to EPA's current waste export and import regulations at 40 CFR Part 262, Subparts E and F. This rule does not increase the scope of wastes subject to U.S. export and import controls; it does, however, modify the procedural controls governing their export and import when shipped for recovery among

OECD countries. This rule will assist in harmonizing the new OECD requirements, reducing confusion to U.S. importers and exporters and increasing the efficiency of the process.

Hazardous Waste Management System; Carbamate Production, Identification and Listing of Hazardous Waste; Land Disposal Restrictions 62 FR 32974-32980

Summary: This rule amends regulations to conform with the Federal appeals court ruling in *Dithiocarbamate Task Force v. EPA* (98 F.3d 1394 (D.C. Cir. 1996)) that invalidated, in part, Agency regulations listing certain carbamate wastes as hazardous. These regulations also pertain to certain hazardous waste management of carbamate industry wastes under RCRA. The vacated hazardous waste listings and associated regulatory requirements are to be treated as if they were never in effect.

Second Emergency Revision of the Land Disposal Restrictions (LDR) Treatment Standards for Listed Hazardous Wastes From Carbamate Production 62 FR 45568-45573

Summary: The emergency revision extends by one year the time that alternate carbamate treatment standards are in place. EPA is taking this action because analytical problems associated with the measurement of constituent levels in carbamate waste residues have not been resolved. This notice applies only to the carbamate wastes that remain listed as hazardous wastes. This is the second emergency rule related to the carbamate treatment standards. The first was promulgated on August 26, 1996 (61 FR 43924). That rule established temporary alternative treatment standards for carbamate wastes for a one-year period, because the Agency believed that one year was sufficient time for laboratory standards to be developed and for laboratories to take appropriate steps to conduct the necessary analysis for these wastes. This current rule further extends these alternate treatment standards, because not all of the laboratory standards have been developed. Additionally, there is confusion as to which analytical methods can be used to measure carbamate constituents.

Hazardous Waste Combustors; Revised Standards; Final Rule-Part 1: RCRA Comparable Fuel Exclusion; Permit Modifications for Hazardous Waste Combustion Units; Notification of Intent to Comply; Waste Minimization and Pollution Prevention Criteria for Compliance Extensions 63 FR 33782 - 33829

Summary: EPA is adding a new RCRA permit modification provision intended to make it easier for facilities to make changes to their existing RCRA permits. Facilities with certain hazardous waste combustion units can use this permit modification provision when adding air pollution control equipment, making other changes in equipment or making changes in operation needed to comply with upcoming air emission standards. EPA is also adding notification requirements for sources which intend to comply with this rule. (While this is a Clean Air Act provision, it is referenced by the RCRA regulations.) Finally, EPA is adding allowances for extensions to the compliance period to promote the installation of cost effective pollution prevention technologies.

With this rule, EPA also excluded, from the regulatory definition of solid waste, fuels produced from a hazardous waste which are comparable to some currently used fossil fuels. Ecology is not proposing the Syngas exclusion for adoption because it does not encourage recycling, product sustainability, or pollution prevention efforts. It provides an avenue for using products one time, generating a hazardous waste from that use, then burning the waste. This concept is in opposition to efforts for waste reduction, moving wastes up the waste management hierarchy, and Beyond Waste goals. Other reasons include the problematic concept of "use of process knowledge" to determine if waste meets the syngas specification limit/exclusion, and limitations on what is known about human health risks.

NESHAPS: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Final Rule 64 FR 52828-53077; 64 FR 63209-63213

Summary: This rule finalizes National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for three source categories referred to collectively as hazardous waste combustors. Hazardous waste combustors include hazardous waste burning incinerators, hazardous waste burning cement kilns, and hazardous waste burning lightweight aggregate kilns. These standards are promulgated under joint authority of the Clean Air Act (CAA) and the Resource Conservation and Recovery Act (RCRA). The rule establishes emission standards for chlorinated dioxins and furans, other toxic organic compounds, toxic metals, hydrochloric acid, chlorine gas and particulate matter. The standards reflect the performance of Maximum Achievable Control Technologies (MACT). After submittal of the Notification of Compliance (NOC) under the CAA, and after modification of the RCRA permit at individual facilities, the RCRA national stack emission standards will no longer apply to hazardous waste combustors. By using both authorities, EPA consolidates regulatory control of hazardous waste combustion into a single set of regulations, eliminating conflicting or duplicative federal requirements while increasing protection of human health and the environment.

Land Disposal Restrictions Phase IV: Final Rule Promulgating Treatment Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils, and Exclusion of Recycled Wood Preserving Wastewaters 64 FR 56469-56472

Summary: This rule corrects two minor typographical errors and one omission in the May 11, 1999 technical amendment (64 FR 25408) to the Phase IV Land Disposal Restrictions (LDR). This rule also corrects three errors in the May 26, 1998 LDR Phase IV final rule (63 FR 28556).

180-Day Accumulation Time Under RCRA for Waste Water Treatment Sludges From the Metal Finishing Industry 65 FR 12378-12398

Summary: This rule promulgates regulations that allow large quantity generators of F006 wastes up to 180 days (or 270 days in certain circumstances) to accumulate F006 waste on-site in tanks, containers, or containment buildings without a hazardous waste storage permit or interim status, provided that these generators (1) have implemented pollution prevention

practices, (2) recycle the F006 waste through metals recovery, (3) accumulate no more than 20,000 kg of F006 waste at any one time, and (4) comply with applicable management standards. The same management standards that apply to 90-day on-site accumulation of hazardous waste apply to the new 180-day (or 270-day, as applicable) on-site accumulation of F006 waste. The extension of the accumulation time addresses economic barriers to the recycling of F006 waste through metals recovery. This change will provide large quantity generators of F006 waste an incentive to choose recycling instead of treatment and land disposal as their final waste management option.

Organobromines Production Wastes; Petroleum Refining Wastes; Identification and Listing of Hazardous Waste; Land Disposal Restrictions 64 FR 36365-36367

Summary: This rule corrects an error made in the August 6, 1998 rule (63 FR 42110) which listed four wastes from the petroleum refining industry as hazardous. The amending language in the August 6, 1998 rule included a typographical error that made the intent of the amendment unclear.

NESHAPS: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Technical Corrections 65 FR 42292-42302; 66 FR 24270-24272; 66 FR 35087-35107

Summary: This rule adds gas turbines to the list of approved burners for comparable/syngas fuel burners under 40 CFR 261.38(c)(ii)(2). Gas turbines were inadvertently excluded from the list of approved fuel burners in the June 19, 1998 National Emissions Standards for Hazardous Air Pollutants (NESHAPS) rulemaking (63 FR 33782). This rule also corrects a typographical error made in the June 19, 1998 rule.

Ecology is not proposing to adopt the Syngas exclusion changes that are part of this federal rule since the exclusion itself is not being proposed.

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Chlorinated Aliphatics Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; and CERCLA Hazardous Substance Designation and Reportable Quantities 65 FR 67068-67133

Summary: (1) This rule adds two wastes (K174 and K175) generated by the chlorinated aliphatics industry to the list of hazardous wastes at 40 CFR 261.32. The new wastes will be subjected to stringent management and treatment standards under RCRA, and to emergency notification requirements. EPA is allowing a contingent-management listing approach for one of these new wastes. Under this approach, the waste will not be a listed hazardous waste if sent to a specific type of management facility. (2) In this rule, EPA also finalizes determinations not to list as hazardous four wastes generated by the chlorinated aliphatics industry.

Hazardous Waste Identification Rule (HWIR): Revisions to the Mixture and Derived-From Rules 66 FR 27266-27297

Summary: This rule finalizes the retention of the mixture rule and the derived-from rule with two revisions. The first revision expands the exclusion for mixtures and/or derivatives of wastes listed solely for the ignitability, corrosivity and/or reactivity characteristic. The second revision is a new conditional exemption from the mixture and derived-from rules for mixed wastes.

The mixture rule being proposed by Ecology is a less stringent regulation than the existing rule that will allow many generators to treat their dangerous waste that would otherwise remain a listed waste. Ecology is proposing to adopt most of this rule; however, it is not proposing to exempt mixtures of solid waste and hazardous waste. This is consistent with other state dangerous waste regulatory requirements that prohibit mixing a hazardous waste with a solid waste. This would be considered dilution of dangerous wastes, and dilution has consistently been seen as an inappropriate waste management alternative.
Under state regulations, waste must be evaluated against state criteria once it passes the federal designation scheme. The proposed rule retains consideration of state criteria before a waste would be excluded. This is necessary so as not to mislead generators into thinking that their waste is no longer dangerous waste if it could exhibit state criteria. Under the federal rule, if the waste no longer exhibits the characteristic it could be excluded; the state rule requires that the waste also not exhibit a criteria (for example, toxicity). In this respect, the use of the word "dangerous" is used in the proposed rule since it is comprehensive in that it encompasses characteristic, listed, and criteria wastes.

In conjunction with evaluating this rule for state proposal, other federal mixture rules were reviewed. Ecology rules are more stringent than the federal regulations in several areas, and mixtures is one of those areas. "Mixture" rules allow mixing solid waste with listed waste to remove a federal listing. For example, Ecology does not exclude de minimis wastewaters and is not proposing any changes in that area. De minimis exclusions have consistently been considered as inappropriate ways to manage dangerous wastes in Washington primarily because many small amounts of such wastes can add up to larger amounts of waste being excluded through dilution. Additionally, such practices are inconsistent with managing dangerous wastes as far up the waste management hierarchy as possible and moving toward Beyond Waste goals. Federal waste codes should be assigned to any federally regulated hazardous wastes that are not excluded at the state level.

Two other federal mixture rules that were reviewed are for hazardous waste containing radioactive waste and for Bevill (mining) wastes. These rules exclude: 1) eligible radioactive mixed wastes when certain conditions are met, and 2) mixing a Belvill waste with a listed waste to remove the federal listing. The federal rule language for mixed wastes at 40 CFR 261.3(h) is not being proposed since the low level mixed waste exclusion rule is not being proposed. See Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR 27218-27266 below. And the state does not exclude Bevill wastes, so it also does not have a mixture exclusion comparable to the federal 40 CFR 261.3(g)(4).

Change of Official EPA Mailing Address; Additional Technical Amendments and Corrections 66 FR 34374-34376

Summary: This rule updates the official mailing address for EPA, due to the relocation of the majority of its Headquarter offices to downtown Washington, DC.

Hazardous Waste Management System; Identification and Listing of Hazardous Waste: Inorganic Chemical Manufacturing Wastes; Land Disposal Restrictions for Newly Identified Wastes; and CERCLA Hazardous Substance Designation and Reportable Quantities 66 FR 58258-58300; 67 FR 17119-17120

Summary: EPA has added to its list of hazardous wastes, three inorganic chemical manufacturing wastes. This listing subjects the wastes to RCRA Subtitle C management and treatment standards and CERCLA emergency notification requirements for releases to the environment. Additionally, the toxic constituents found in the newly listed wastes have been added to the list of constituents which forms the basis for classifying wastes as hazardous and establishes treatments standards for the wastes. This rule also subjects the three inorganic chemical manufacturing wastes to the universal treatments standards under the LDRs program.

With this rule, EPA has also made final determinations not to list the remainder of wastes generated by inorganic chemical manufacturing processes which were described in the proposed regulations. Finally, EPA deferred final action on all elements of the proposed rule related to manganese.

Amendments to the Corrective Action Management Unit Rule 67 FR 2962-3029

Summary: EPA is amending the 1993 Corrective Action Management Unit (CAMU) rule to facilitate treatment, storage and disposal of hazardous wastes managed for implementing cleanup, and to remove cleanup disincentives that RCRA can create. The 1993 CAMU rule is being revised as follows:

- To govern the types of wastes eligible for placement in CAMUs, a definition for "CAMU-eligible waste" is created, which is distinct from the 40 CFR 260.10 definition of "remediation waste;"
- More detailed minimum design and operating standards for CAMUs in which waste remains after closure, with opportunities for Regional Administrator-approved alternate designs;
- Treatment requirements for wastes placed in CAMUs, including minimum treatment standards, with opportunities for adjustment;
- More specific CAMU application information requirements including public notice and opportunity for comment, before final CAMU determination;
- Requirements for CAMUs used only for treatment and storage; and
- "Grandfathering" of certain types of existing CAMUs and allowing them to operate under the 1993 rule.

With this rule, EPA has also:

- Amended the regulations for staging piles to allow for mixing, blending and other similar physical operations that prepare wastes for subsequent management or treatment;
- Added a new provision that allows off-site placement of hazardous CAMU-eligible waste in hazardous waste landfills, if treated to meet CAMU treatment standards;

- Granted interim authorization for the new CAMU amendments, to states currently authorized for the 1993 CAMU rule; and
- Expedited state authorization for the CAMU rule, for states that have authorization for RCRA corrective action but not the 1993 CAMU rule.

To incorporate the new federal requirements for corrective action management units (CAMUs), the section on corrective action, WAC 173-303-646, has been broken down into several new sections. A table at WAC 173-303-646 shows the proposed new sections and how they relate to the current rule structure. Substantive revisions to WAC 173-303-646 were made in proposed sections -64640, -64650, and -64670. Proposed sections -646910 and -646920 are new. Comments should be directed to proposed sections -64640, -64650, -64670, -646910 and -646920 since these proposed sections reflect the changes based on the new CAMU rule that is being incorporated. No other changes are being proposed to corrective action requirements.

NESHAP: Interim Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Interim Standards Rule) 67 FR 6792-6818

Summary: On September 30, 1999, as amended November 19, 1999 (64 FR 52828 & 64 FR 63209), the Agency promulgated the NESHAPS rule to control emissions of hazardous air pollutants from incinerators, cement kilns and lightweight aggregate kilns that burn hazardous wastes. Portions of the rule were challenged and subsequently vacated by the U.S. Court of Appeals for the District of Columbia Circuit on July 24, 2001. On October 19, 2001, EPA and all petitioners jointly moved the Court to stay the issuance of its mandate for four months to allow EPA time to develop interim standards. The motion also included plans for EPA to issue final standards by June 14, 2005 and to promulgate by February 14, 2002, a rule with amended interim emission standards and compliance and implementation amendments. The Court granted EPA's request and stayed issuance of its mandate until February 14, 2002.

In general, this rule amends the September 1999 NESHAPS rule to accommodate the parties' joint motion. This rule replaces the vacated emission standards temporarily until final standards are promulgated (by June 14, 2005). EPA believes this Interim Standards Rule best fulfills the statutory requirement to have national emission standards in place by a specified time, while avoiding unnecessary disruption and burden to regulated industry, and affected state and federal administrative agencies.

NESHAP: Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Final Rule 67 FR 6968-6996

Summary: This rule is promulgated to correct several technical errors which were made on September 30, 1999 (NESHAPs rule) when EPA established standards for hazardous waste-burning cement kilns, lightweight aggregate kilns, and incinerators (64 FR 52828, as amended 64 FR 63209).

Most of the changes from this rule are to 40 CFR Part 266.100 (BIF) which is not part of the state regulations and those changes are not being proposed.

Zinc Fertilizers Made From Recycled Hazardous Secondary Materials 67 FR 48393 - 48415

Summary: This final rule establishes a more consistent regulatory framework for the practice of making zinc fertilizer products from recycled hazardous secondary materials. More specifically, it establishes conditions for excluding hazardous secondary materials used to make zinc fertilizers from the regulatory definition of solid waste. The rule also establishes new product specifications for contaminants in zinc fertilizers made from those secondary materials.

Land Disposal Restrictions: National Treatment Variance To Designate New Treatment Subcategories for Radioactively Contaminated Cadmium-, Mercury-, and Silver-Containing Batteries 67 FR 62618 – 62624

Summary: EPA is taking direct final action to grant a national treatability variance from the Land Disposal Restrictions (LDR) treatment standards for radioactively contaminated cadmium-, mercury-, and silver-containing batteries by designating new treatment subcategories for these wastes in response to a rulemaking petition from the Department of Energy. The current treatment standards of thermal recovery for cadmium batteries and of roasting and retorting for mercury batteries are technically inappropriate, because any recovered metals would likely contain residual radioactive contamination and not be usable.

The current numerical treatment standard for silver batteries is also inappropriate because of the potential increase in radiation exposure to workers associated with manually segregating silver-containing batteries for the purpose of treatment. Macroencapsulation in accordance with the provisions for treatment standards for hazardous debris is designated as the required treatment prior to land disposal for the new waste subcategories. This will allow safe disposal of these radioactively contaminated materials.

NESHAP: Standards for Hazardous Air Pollutants for Hazardous Waste Combustors-Corrections 67 FR 77687 - 77692

Summary: On September 30, 1999, EPA promulgated regulations to control emissions of hazardous air pollutants from incinerators, cement kilns and lightweight aggregate kilns that burn hazardous wastes. EPA subsequently promulgated three rules that revised these regulations: a Direct Final Rule published on July 3, 2001, an Interim Standards Rule published on February 13, 2002, and a Final Amendments Rule published on February 14, 2002. In today's action, we are correcting technical errors in those regulations.

Universal Waste for Mercury-Containing Equipment Proposed by EPA on June 12, 2002 Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes and Mercury-Containing Equipment 67 FR 40508-40528

Ecology is proposing to add mercury-containing equipment to the universal waste rule. The proposed rule language is identical to EPA's proposed, but not yet finalized rule.

WASTE MINIMIZATION

HSWA Codification Rule 50 FR 28702-28755 July 15, 1985
Biennial Report Correction 51 FR 28556 August 8, 1986

Ecology is proposing to adopt the portions of these two rules that apply to facilities (TSDs). The purpose of the rule is to require that a program be in place to reduce volume and toxicity of hazardous waste. This is older federal rule language that the state has not previously adopted. Although there are federal waste minimization requirements for both generators and for facility owners and operators, Ecology intends to propose only the facility requirements at this time. Including this rule language in the state regulation will result in more efficient work on permits in the future. Rather than dual permits being issued by both EPA and Ecology, Ecology will be able to issue the entire permit. Adoption of these federal requirements is not intended to conflict with existing pollution prevention planning requirements.

National Environmental Performance Track Program 69 FR 21737-21754, April 22, 2004

Summary: EPA is issuing regulations applicable only to members of EPA's National Environmental Performance Track Program (Performance Track, or the Program). Today's action includes a revision to the Resource Conservation and Recovery Act (RCRA) regulations to allow hazardous waste generators who are members of Performance Track up to 180 days, and in certain cases 270 days, to accumulate their hazardous waste without a RCRA permit or interim status; and simplified reporting requirements for facilities that are members of Performance Track and governed by Maximum Available Control Technology (MACT) provisions of the Clean Air Act (CAA). Today's final rule reflects EPA's response to comments filed by the public, interested stakeholders and associations, the Performance Track Participants Association, and Performance Track members. These provisions are intended to serve as incentives for facility membership in the National Environmental Performance Track Program while ensuring the current level of environmental protection provided by the relevant RCRA and MACT provisions.

Ecology is not proposing to adopt the following rule.
Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR 27218-27266

Ecology is not proposing to adopt EPA's Low Level Mixed Waste Exclusion, Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR 27218-27266. Adoption of the rule may complicate Ecology's efforts to investigate and remediate, if necessary, past releases from U.S. Ecology, and may be inconsistent with the Hanford Sitewide Permit, which includes the U.S. Ecology site as part of the Hanford "facility," for purposes of corrective action. Note

that U. S. Ecology is a commercial low level radioactive waste disposal facility on the Hanford site (radioactive waste landfill). It is operated by a private company (U. S. Ecology) to receive commercial (i.e. not defense related) radioactive waste and is leased to the company by the State of Washington. It is currently under investigation by Ecology for past releases of hazardous materials.

Preamble for State-Initiated Amendments

The following describes changes that are being proposed to the *Dangerous Waste Regulations* that are not related to the federal hazardous waste requirements described above. These are technical corrections, clarifications, and changes that are a result of suggestions from stakeholders, and changes that implement projects and research.

While most changes are identified and explained below, other changes were made throughout the regulations to change SIC codes to NAICS codes, to update references to solid waste regulations by changing chapter citations from 173-304 to 173-350 WAC, to correct citations throughout the regulation, to change references from the Uniform Fire Code to the International Fire Code, and make other minor technical corrections.

Changes are also being made to update *Chemical Testing Methods for Designating Dangerous Waste*. The changes themselves are available for review in a separate document. The only changes that show up in the regulations are revision dates in WAC 173-303-110 and a few other sections.

Rule amendment language to implement the Hazardous Waste Facilities Initiative was not available in the earlier draft since various options were still under consideration. Rule language to extend financial responsibility and closure requirements to recyclers and used oil facilities is now being proposed. Several sections are being amended; the explanations and list of sections being amended are grouped together at the end of this document.

WAC 173-303-010

The terms "public health" and human health" are used in the *Dangerous Waste Regulations*. This change clarifies that the terms mean the same thing and are used interchangeably throughout the regulations.

WAC 173-303-040

"Designated Facility" is being amended for consistency with the change in permit by rule requirements at WAC 173-303-802(5) that allow federally regulated hazardous wastes to be accepted at wastewater treatment units.

WAC 173-303-040

"Knowledge" see explanation under WAC 173-303-300.

WAC 173-303-040
"Partial closure" is amended to correct a citation.

WAC 173-303-040
"Registration number" is added as a new definition.

WAC 173-303-040
"Recycling unit" is added as a new definition. (See Hazardous Waste Facilities Initiative.)

WAC 173-303-045
A change is being made to update the version of 40 CFR that is cited for provisions that are incorporated by reference. July 1, 2003 is the new date for incorporation by reference since it is the version of the federal regulations that includes all newer rules that Ecology is proposing for adoption. A more recent reference was added for the Performance Track rule that EPA promulgated more recently. Also, a citation that was previously noted as being non-delegable by EPA, federal delisting authority, was moved to show that although EPA can now delegate delisting authority to the states, Ecology has not adopted or incorporated by reference the federal delisting rules. Also, one citation is being corrected.

WAC 173-303-060
"Notification Form 2" is being changed to "Dangerous Waste Site Identification Form" here and at WAC 173-303-210(2) and WAC 173-303-240(6)(a).

WAC 173-303-070(8)
This addition is being made to clarify application of the used oil management standards to small quantity generator used oil. This intent was made clear in the Federal Register Notice in 1992. This addition results in consistency between the federal and the state regulations.

WAC 173-303-071(3)(g)
Clarification is needed for the arsenical-treated wood exclusion (WAC 173-303-071(3)(g)(i)) to clear up confusion about the terms of the conditional exclusion. Some people have misinterpreted the phrase "if the waste is generated by persons who utilize the arsenical treated wood for the material's intended end use" to mean that the exclusion only applies if the treated wood waste is reused for its intended end use, such as for fence posts and landscaping timbers. Under that interpretation, solid waste disposal would not be allowed.

This revision will clarify that in order to meet the exclusion, the treated wood product needs to have been previously used, and used in a manner typical for treated wood. Arsenical-treated wood waste or sawdust generated by wood preserving facilities or sawmills would not qualify as a typical use. Also, the revision will clarify that the exemption can be used by any generator of an arsenical-treated wood waste, and not just by the person who originally used the product. If the requirement of the exclusion is met, disposal options would include sending the material to a Subtitle D landfill.

WAC 173-303-071(3)(g)(ii)
This is a clarification that wood wastes are included in this exclusion. The preamble to the 1993 proposed amendments to the *Dangerous Waste Regulations* states that wood wastes, including sawmill sawdust and shavings, are included in the exclusion. It should be noted that sawdust and shavings from arsenical treated wood (-071(3)(g)(i)) are not excluded wastes.

WAC 173-303-071(3)(k)(i)
Although Ecology was requested to consider changing the TSCA citation in this exclusion for PCBs for consistency with TSCA, no change is being proposed at this time until PCB issues can be looked at in a broader context. The existing citation currently used in the *Dangerous Waste Regulations* is somewhat more stringent in that it prohibits PCB waste from being disposed in a solid waste landfill. The broader citation being suggested (40 CFR 761 Subpart D) would allow PCB waste to be land disposed in a solid waste landfill as an option, thereby avoiding the intent of the Dangerous Wastes Regulations.

WAC 173-303-090(5)(a)(iv) Organic Peroxides
The current dangerous waste regulation requires that all organic peroxide waste described in the federal Department of Transportation (DOT) regulations at 49 CFR 173.128 be designed as ignitable dangerous waste (see WAC 173-303-090(5)(a)(iv)). Ecology is proposing to remove that requirement. Based on the description of organic peroxides in 49 CFR 173.128 and chemical characteristics of organic peroxides, the current dangerous waste regulation is inconsistent with the DOT regulation and inaccurate technically.

Previously, DOT grouped oxidizers and organic peroxides into one class. The *Dangerous Waste Regulations* referenced that one class for designation as ignitable waste. However, DOT has separated these classes of chemicals to be more precise about their chemical properties but, to date, Ecology has not make corresponding changes to the dangerous waste regulations. This proposed action will make that change.

Ecology believes that organic peroxides are a dangerous class of chemicals if they are not properly managed. Ecology expects wastes containing organic peroxides will be designated by generators on a case-by-case basis. Unless they are dilute, most organic peroxides wastes will still designate as D001 (flammable), D003 (reactive), or both.

WAC 173-303-100(5)(b)
This modification is made to clarify the book designation process. The existing language indicates that the severest toxicity be used and that RTECS data supercedes when there are toxic category conflicts. In cases where the most severe toxicity is not in RTECS, the proper toxic category assignment was unclear. This also eliminated fish data from consideration if it was more severe than other criteria because it is no longer listed in RTECS. With this proposed change, which requires the conflicts to be within the same criteria (comparing apples to apples), the use of data for criteria that are not in RTECS is allowed. Also, note that the results from an actual fish bioassay test would take priority over a book designation result for the same waste.

WAC 173-303-104

This section is being amended to keep all state-specific waste codes in one location.

WAC 173-303-110(3) Chemical Testing Methods Update

This and other cross citations to Chemical Testing Methods are being updated to reflect revisions to State-only persistence criteria for halogenated organic compounds in Chapter 3, Section C of Ecology publication #97-407 '*Chemical Testing Methods for Designating Dangerous Waste*'. Changes to *Chemical Testing Methods* are available for review. Comments on *Chemical Testing Methods* should be sent directly to Alex Stone (see information on submitting comments above).

Ecology has received numerous comments and concerns about the current regulations and guidance for designating wastes containing halogenated organic compounds (HOCs) for state-only persistence. The main concerns identified were 1) Ecology's current definitions identify all HOCs as compounds of concern regardless of the environmental impact those compounds may or may not have, 2) the universe of HOCs is so large, and HOCs are so widely used that it is difficult if not impossible to accurately identify state-only persistent wastes, 3) Ecology's current guidance does not clearly identify how to obtain the information (detailed analyses) needed to determine state-only persistence, and 4) Ecology's current guidance is inconsistent and difficult to follow.

Based on this input, Ecology is proposing to revise the regulations and the guidance. These revisions will be limited solely to the sections dealing with state-only designation of waste containing HOCs (Chapter 3, Section C). Unless otherwise noted, the remainder of the guidance will not be changed during this process and is not open for comment or review.

Ecology formed a team of technical experts to review and update the regulations and guidance dealing with the designation of wastes containing HOCs. The team included experts from the Hazardous Waste and Toxics Reduction (HWTR) and Nuclear Waste Programs, and from Ecology's Manchester Laboratory. The team reviewed the technical issues associated with persistence and formulated revisions to the guidance which resolves the issues identified above. Models of existing regulations were explored, and one based upon the current used oil regulations is reflected in changes to the current guidance.

The revisions to Chapter 3, Section C and the associated Appendices consist of 1) revising the screening technique which provides the generator with a more efficient and cost effective way to determine whether or not a waste contains sufficient HOCs to designate as state-only persistent waste, 2) allowing the designation of the waste to be based solely upon the screening method if the generator chooses, 3) allowing the generator to conduct specific chemical analyses of their wastes to prove that waste does not contain HOCs of concern even though it failed the screening test, 4) providing a table of specific HOCs of concern which Ecology currently identifies as persistent compounds or compounds of concern that have potential persistent issues, 5) providing an explanation of how chemicals will be added to or deleted from this list of HOCs of concern as additional scientific information is made available, 6) providing improved definitions and examples of waste streams that are both included and

exempt from these criteria, and 7) providing two flow charts that can be used to follow the designation process and, clarify how the designation is to be accomplished.

WAC 173-303-161(6)

The current timeframe for maintaining a list of labpack contents is not being interpreted consistently. For example, one interpretation is that the time that a list of all contents must be kept is only until the annual report is complete, which is less than one year. If the contents of the labpack are not listed on the annual report, all record of what is actually shipped could be lost by March 1st of the following year. Adding a time limitation to this requirement provides clarity and is consistent with the time limit for maintaining other types of paperwork.

WAC 173-303-190(5)(b)

This change is made as a follow up to the transportation changes that were adopted in June 2000. The marking requirement was inadvertently noted as applying to packages containing one hundred ten gallons. This change will include the intermediate bulk containers of greater than 110 gallons but less than a thousand gallons and would also include cylinders within this range that are commonly used for antifreeze. Most people are already marking in accordance with the higher amount (one thousand gallons) as it does not make sense for the marking requirement to apply to small, but not intermediate sized containers.

WAC 173-303-200(2)(a)(ii)

WAC 173-303-200(2)(a) is being amended to clarify that contingency planning and general facility inspections are required for satellite accumulation. Under the current rule, it is not clear that contingency planning and general facility inspections are required in satellite accumulation areas. WAC 173-303-200(2)(a)(ii) specifies compliance with (d) of subsection 200(1). This has been interpreted to eliminate the area of satellite accumulation (essentially the footprint of the waste storage container) from contingency planning and general facility inspections. This is not consistent with the way this regulation has been interpreted or implemented in the past by Ecology. This clarification provides consistency with Ecology's intent and practice of requiring contingency plans (-350) and general facility inspections (-320) in areas where there is the potential for impact on public health and the environment in the event of an emergency circumstance (-350), and where malfunctions and deterioration, operator errors, and discharges…may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health (-320). Including subsection (1)(f) makes it clear that LDR requirements apply to waste that is shipped directly from a satellite area.

WAC 173-303-201(2)(e)

This correction is being made since requirements for containers are already cited in WAC 173-303-200 and apply to this section as well.

WAC 173-303-300(2)(a) & (b) and new definition in WAC 173-303-040 for "Knowledge"

Ecology is proposing to amend the regulations to clarify requirements for confirming and documenting information from a generator on a waste profile for a waste stream. Ecology believes the proposed amendment is consistent with general requirements in the existing

regulations to ensure sufficient information for waste designation (WAC 173-303-070) and proper management of the waste (WAC 173-303-300(2)).

In current permits, facilities have been allowed to rely on generator knowledge to complete waste profiles and make waste acceptance decisions with the understanding that knowledge is documented and supported. This allows treatment, storage, and recycling facilities to avoid unnecessary and costly laboratory analysis. Waste analysis plans include test methods and analysis for the purpose of safe and proper waste management instead of focusing only on methods used for waste designation or identification. When Chapter 173-303 WAC specifies a method, "representative and appropriate sampling and test methods" refer to methods in WAC 173-303-110 for formal waste designation and other regulatory requirements. However, other representative and appropriate sampling and test methods are not precluded when needed to develop a complete waste characterization to support an accurate waste profile used by dangerous waste management facilities to comply with their permit or WAC 173-303-300, general waste analysis.

This amendment specifically addresses one aspect of the regulations on waste analysis that has been a focus of the HWTR program and commercial TSDF over the past several years. In addition to being consistent with general requirements in the current regulations, the proposed changes are consistent with federal guidance on waste analysis and current final permits at commercial dangerous waste management facilities on the subject of waste analysis and the use of generator knowledge. The rule amendment lists three approaches to obtain and confirm knowledge from generators on a waste stream. Ecology encourages commenters to suggest additional approaches consistent with the current general regulation and federal guidance that would equally ensure sufficient information about the waste.

During public review of an earlier draft, several comments and questions were submitted on these requirements.

1) Wouldn't the definition of "knowledge" be difficult to implement since TSDFs have knowledge about the treatment of the waste and the generators have knowledge of the processes generating the waste?

> Ecology's goal with the rule amendment is to ensure that sufficient generator knowledge is passed onto the TSD so the waste can be properly managed. Further, Ecology wants to ensure that records on how the knowledge was verified are kept by the TSD.

2) Wouldn't it be difficult for Washington TSDFs to visit some of the generators to become more familiar with the waste being generated?

> A site visit to the generator's facility is not the only option open to a TSD to gain and confirm sufficient information about the waste. However, if the process generating the wastes or the level of reliability of the information on the waste is questionable so that a site visit is the only way to ensure adequate information for proper waste management, then that step should be taken.

3) The proposed change would lengthen the time needed to approve a profile because the TSDF would need to become familiar with many of the generators' processes. This additional activity would require resources (labor and/or travel) and result in higher disposal costs for Washington TSDFs and generators.

> Based on the regulations, federal guidance, and current commercial Part B permits, the TSD needs to obtain and confirm sufficient information about the waste. The rule amendment elaborates on that requirement but doesn't impose new requirements.

4) Isn't the ability of individual facilities to adapt waste analysis requirements to their particular needs being eliminated through the proposed rule amendments since they are prescriptive as to the approach and requirements?

> The rule amendment lists three ways to approach gaining and confirming knowledge on the waste. Ecology encourages commenters to offer other viable methods that would equally ensure quality knowledge about the waste.

5) Do these requirements exist in current permits?

> Current commercial dangerous waste permits already include these requirements. The rule amendment will help highlight the requirement and ensure all further permits will address adequate knowledge.

6) Isn't the proposed definition of "knowledge" significantly more prescriptive than the current Ecology regulatory framework? Does this conflict with *Chemical Testing Methods for Designating Dangerous Waste* (publication #97-407), and will the definition result in a shift to more testing?

> Requirements to ensure the use of sufficient knowledge are already in the current regulations. The rule amendment is a clarification of how knowledge can be obtained, confirmed and documented and is not expected to result in a shift to testing. Instead, it should result in more clarity for those who rely on the use of knowledge for designation. The proposed definition of "knowledge" provides clarity for generators, and it is consistent with WAC 173-303-070(3)(c)(ii) which provides the option to use knowledge when it can be demonstrated to be sufficient for determining whether or not the waste is designated. It is also consistent with requirements in WAC 173-303-330(2) on the need for reliable information about a waste for its safe and proper management. Guidance in "*Chemical Testing Methods*" is consistent with the regulations that knowledge, if used in lieu of chemical testing, must be sufficient for proper waste designation.

WAC 173-303-400(3)(c)(ix)

Owners and operators of interim status facilities are currently required to have a written plan for closure of dangerous waste management units; this plan must be available for submittal and inspection by Ecology. A change is being proposed to require owners or operators of interim status facilities to submit a closure plan for partial closure of a tank, container storage, or incinerator unit at least 45 days prior to the date on which they expect to begin closure of

such a unit. This is consistent with the current requirements that require owners or operators to submit a plan for final closure of a facility with such units.

An owner or operator of an interim status facility is currently required to notify Ecology before beginning a final closure of facility with only tanks, container storage, or incinerator units. The proposed change requires an owner or operator of an interim status facility to notify Ecology of partial closure of a tank, container storage, or incinerator unit at least 45 days prior to date on which he expects to begin closure of such a unit. Notification is in the form of a letter to Ecology.

Partial closure of these units will then be subject to public comment on the closure and to Ecology oversight, consistent with current requirements for final closure of a facility with such units.

Owners and operators of interim status facilities are currently required to submit closure certification within 60 days of completion of closure for each dangerous waste management unit and within 60 days for completion in final closure. The proposed change clarifies this requirement by making it a complete phrase.

WAC 173-303-505 (1)

Fertilizer registration applications are approved or denied based on reviews conducted by Ecology and the Washington State Department of Agriculture as directed by chapter 15.54 RCW. Ecology reviews waste-derived fertilizers and makes recommendations for registration as described in WAC 173-303-505.

Currently, Ecology's review process requires the registrant of a waste-derived fertilizer to submit either: 1) toxicity characteristic leaching procedure (TCLP) metals test data and halogenated organic compounds (HOC) test data, or 2) a complete description of the fertilizer manufacturing process including a list of all ingredients in the fertilizer and the sources of those ingredients to include a description of the original generation process for each ingredient as well as evidence that any wastes used in the product do not designate as a dangerous waste according to the procedures in WAC 173-303-070. The information in either #1 or #2 is currently required for every renewal of a waste-derived fertilizer registration, and if the registrant chooses option #1, the TCLP and HOC test data must be rerun with each renewal.

The proposed rule amendment would provide Ecology the discretion to accept a waste-derived fertilizer registration renewal without requiring new TCLP and HOC test data. This discretion is limited to renewals of waste-derived fertilizers that have provided this information to Ecology at least twice before. The rule change would also require the registrant to provide documentation that the source materials in the product have not changed.

Ecology does not find it necessary to require new test data for renewals of waste-derived fertilizers that have met the TCLP and HOC testing requirements at least twice before. The expense of these tests, typically several hundred dollars, is also a factor in this proposed rule

change. However, the proposed rule amendment provides Ecology with the option to continue to require updated TCLP metals and HOC testing for registration renewals. Thus, if there were inconsistencies in prior test results or other concerns regarding a particular product, Ecology may require up-to-date test results with any renewal application.

WAC 173-303-515(13):
Ecology is proposing to amend the used oil management standards to include a section that gives the agency the ability to require generators of used oil to test their waste on a case-by-case basis to identify if the oil is on or off specification oil or to rebut the presumption that the oil is actually dangerous waste. This regulation will simplify testing requirements and be a benefit to used oil generators by allowing Ecology to request the less expensive analytical tests for on-specification determinations rather than the more expensive tests for designation.

In the past when an Ecology inspector had reason to believe that used oil was not on-specification oil, the only means to require testing was to declare the waste a solid waste and require dangerous waste designation testing in WAC 173-303-070. Designation testing can be much more expensive and involve more tests than the proposed testing to determine if a waste is on-specification used oil or off-specification used oil. There are also instances when used oil is high in chlorinated compounds. In some instances it does not mean that dangerous waste was added to the oil, but that the oil was contaminated with salt water. Consistent with current federal guidance on the used oil regulations, to rebut this presumption the new testing authority under WAC 173-303-515(13) would allow Ecology to ask for a test for just chlorinated compounds to ensure that the dangerous waste was not mixed with the used oil. Testing for specific chlorinated compounds is part of the allowed procedure under EPA guidance to rebut the presumption that listed waste was added to a used oil, and is therefore established policy for implementing the used oil rules.

WAC 173-303-610(2)(b)
This change updates the reference to the current standards in the MTCA regulations.

WAC 173-303-610(3)(c)(i)
This change requires owners or operators of final status facilities to notify Ecology of a partial closure of a tank, container storage, or incinerator unit at least 45 dates prior to the date of which they expect to begin closure of such a unit. This is consistent which the current requirements that require owners or operators to submit a plan for final closure of a facility with such units. Notification is in the form of a letter to the Department of Ecology. Partial closure of these units will then be subject to Ecology oversight, consistent with current requirements for final closure of a facility with such units.

WAC 173-303-640(2)(c)(v)(B) and-640(4)(h)(i)(C) notes
This note is being modified since this publication is now out of date and the copy available states that it is "For Historical Purposes Only." It is misleading to refer to the outdated American Petroleum Institute (API) publication that is essentially impossible for a facility operator to obtain and is no longer used by the industry. Other guidance on this topic is available and cited in the note.

WAC 173-303-640(7)(d)

These changes bring this subsection into alignment with the other sections in the *Dangerous Waste Regulations* that require reporting for spills. The existing rule language in section -640 stating that spills/releases from tanks that go to the environment need to be reported within 24 hours conflicts with the requirements of section -145. If a spill is classified as an emergency with contingency plan implementation, then it would also conflict with -360(2) requirements. In addition to the "immediate" vs. 24-hour notification, -640(7) specifies a report of the release within 30 days. Again, if the release was classified as an emergency with implementation of the contingency plan, a report is required within 15 days (see -360(2)(k)). Also, the current version of -640(7)(d)(ii) states that if a release is below the reportable quantity (RQ), then no reporting is required. This is yet another conflict with -145, which specifies that any amount is reportable if it impacts human health or the environment.

WAC 173-303-802(5) and WAC 173-303-040 *Designated Facility*

The purpose of this rule change is to allow facilities that operate wastewater treatment units under Permit by Rule (PBR) as described in WAC 173-303-802 (5) to receive hazardous wastewaters that have been generated from off site.

For example, this change will benefit those industries and businesses that operate wastewater treatment units under PBR by allowing them to take wastewaters from their off-site subsidiaries (or other similar industry wastewaters) for treatment, rather than having to send the wastewater to a third party for treatment. Industries or businesses that would benefit from this change include the aerospace and petroleum refinery industries as well as some government facilities.

The scope of this rule change will be limited to the receipt of wastewaters from off-site that are from a similar industry and have similar dangerous constituents to those in the wastewaters that are normally generated and treated by the host wastewater treatment unit. In others words, the host could only accept wastewaters that will be covered by permit requirements and will be effectively treated by the wastewater treatment facility. Businesses wanting to take advantage of this change should plan to do so when their wastewater discharge permit is up for renewal.

What this change will not do is open up opportunities for businesses to operate under permit by rule and receive wastewater from unrelated off-site sources. The potential receiving facility must have a wastewater treatment unit that was designed to treat wastewaters that are generated on-site before it would be eligible to receive similar wastewaters from off-site generated by their associated businesses.

Several comments and questions were raised during public review of the draft amendments on proposed changes to permit by rule. The following information, based on public comment, more thoroughly explains the proposed rule.

1) Is information available on the number and type of facilities that would take advantage of this provision, their compliance track record, the assurances that would be in place to manage the practice of treating federally regulated hazardous waste via a permit by rule facility, expected benefits, and potential environmental impacts?

Ecology is aware of several petroleum refineries and an aerospace manufacturing facility that would utilize this provision. Because the permit by rule allowance is tied to having a water quality discharge permit, the public will have an opportunity to review individual facility proposals during the water quality permitting process. There is a list of requirements in WAC 173-303-802(5) that a facility must comply with to have a permit by rule for treating dangerous wastewater generated off-site. These requirements are to ensure that the wastewater is managed appropriately to protect human health and the environment.

The ability of a facility to accept and treat dangerous waste from off-site will be evaluated on a case-by-case basis in the water quality permitting process. The proposed change is expected to provide opportunities for better treatment of dangerous waste streams. For example, this amendment would allow a petroleum refinery to treat contaminated groundwater from a gasoline station cleanup. Normally, this wastewater would be sent to a publicly owned treatment works which treats a broad range of wastewater types and so is not necessarily acclimated to this type of material. The petroleum refinery wastewater treatment system is designed to specifically treat oily/petroleum-contaminated wastewater and would likely result in better treatment.

Pollution prevention opportunities are evaluated at the point of generation, not at the receiving treatment facility. The proposed amendments should not affect this practice.

2) What are the potential water quality implications?

The proposed amendments will allow a facility to have a permit by rule provided they meet a number of conditions. These conditions include having a wastewater discharge permit or authorization that covers this waste stream. To be covered under a permit or authorization, specific information about the wastestream will have to be reviewed by the regulating authority. In essence, the permit by rule allowance for wastewater streams received from off-site will be reviewed and granted on a case-by-case basis.

The water quality implications of accepting and treating dangerous wastes from off-site will be evaluated as part of the water quality permitting process. This process requires an individual facility to submit a permit application that shows the dangerous wastewater received from off-site as a source of pollutants to their wastewater treatment unit or system, including volume and characteristics of the wastewater. The water quality permit writer will review this information to: determine if the dangerous waste and other constituents in the waste stream will be effectively treated in the wastewater treatment unit or system, determine if there will be impacts to the receiving water and sediments, and check that monitoring requirements and effluent limitations in the permit or authorization will cover the constituents in the waste stream.

3) The dangerous waste permit requirements in terms of storage, handling, disposal, and site closure, are vastly different from the requirements of the Clean Water Act and the associated NPDES permits that would now govern the treatment of the hazardous waste with PBR. Are the proposed requirements sufficiently protective?

The proposed amendments only exempt facilities from needing a dangerous waste permit for treatment of dangerous wastewater in a totally enclosed treatment facility, elementary neutralization unit, or wastewater treatment unit if the treatment is covered by a water quality permit or written discharge authorization. If the facility does not have a permit for this activity or if they are storing, handling, or disposing of the dangerous waste prior to or after treatment, they will still need a dangerous waste permit. Dangerous waste closure requirements would also still apply to any storage or disposal units and treatment units not qualifying for permit by rule.

4) What does *"include the waste stream in the application"* mean? Would they also need to define when and how much hazardous waste would be added to their treatment plant?

Water quality permit application instructions generally delineate the information required for waste streams that will be treated in totally enclosed treatment facilities or elementary neutralization or wastewater units. However, to be more specific and to cross reference water quality permit application requirements, the wording in WAC 173-303-802(5)(a)(ii) was revised from the earlier draft to read as follows: "include the waste stream as a source of wastewater in the application and provide an estimate of flow, the chemical characteristics of the waste stream, whether it is a batch vs. continuous discharge, and the treatment that it will receive;". This is information the water quality permit writer will need to evaluate the effectiveness of treatment and potential impacts to the receiving water and sediments.

5) What does "same industry" mean? Same SIC code of the same business?

"Same industry" can refer to the same company, a subsidiary of that company, or an industry with the same SIC (now NAICS) code or in the same category of NAICS codes.

6) The proposal refers to dangerous wastewater. Would this amendment (via the definition of designated facility) allow a PBR facility to also accept dangerous waste sludges or sediments collected from sumps that are highly concentrated wastes?

Ecology wanted to focus on the characteristics of the wastewater. Generally, wastewater from the same industry type generated off-site will have similar chemical characteristics as wastewater generated on-site and so is more likely to be effectively treated in the receiving facility's wastewater treatment unit/system. The proposed amendment is to allow the treatment of wastewaters from off-site; it was not intended for sludges or sediments. It is very unlikely that a facility could demonstrate that a sludge/sediment would be effectively treated; therefore, that waste stream would not be allowed.

7) The proposed rule requires waste stream information to be included in both the discharge permit and the permit application. The permittee already follows the State's wastewater regulation (Chapter 173-216 WAC) to include appropriate information in the permit

application in order to obtain the discharge permit. Isn't it unnecessary to include WAC 173-303-802(5)(a)(ii) in the proposed rule?

The requirement that waste streams be included in the water discharge permit application is to cross-reference the requirements for water quality permit applications. Sources of wastewater to be treated at a facility must be listed in the permit application, including an estimate of flow and the type of treatment the waste stream will receive. The water quality permit writer will also be reviewing the characteristics of this waste stream to determine whether it can be effectively treated and the potential impacts to receiving water and sediments. The proposed amendment was intended to be redundant to further emphasize the information that needs to be provided for the water quality permit writer to adequately evaluate the addition of the new waste stream.

8) Should the provision be limited to wastewater generated by subsidiaries rather than from the "same industry"?

Ecology wanted to focus on the characteristics of the wastewater. Wastewater with similar chemical characteristics can be generated from several different sources within the same industry type and be effectively treated in a receiving facility's wastewater treatment unit/system. Oily wastewater from one gas station could have the same chemical characteristics as from another gas station operated by a different company and be just as treatable. To limit this allowance to wastewater from subsidiaries seems unnecessarily restrictive.

9) The proposed changes to the permit-by-rule section take a more stringent state-only provision and seem to make it even more stringent and less flexible than the federal regulations. Ecology is increasing the level of stringency by requiring "waste stream" information in a permit application when permit application requirements do not call for this information. Also, is Ecology deleting the opportunity to take off-site waste when the facility has a permit or interim status?

The proposed rule will make the permit by rule allowance less stringent and more flexible than the current rule. Ecology's more restrictive approach than EPA with permit by rule was intentional to provide some additional safeguards to ensure that hazardous wastewaters are managed appropriately and in a manner protective of human health and the environment. Water quality permit applications do require that all sources of wastewater be reported. (Example -- See instructions for filling out the NPDES Form 2C and the Application to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works) The proposed amendment does not take away the opportunity to take off-site wastewater when a facility has a TSD permit or interim status. It just removes this restriction as the only way that a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit can qualify as a designated facility.

10) Can Ecology delete references to on-site and off-site waste distinctions in the proposed rule?

The wording was specifically crafted to make clear that facilities treating both sources of wastewater would have a permit by rule provided the other conditions of WAC 173-303-802(5) are met. The term "waste stream" is used to encompass all of the characteristics of wastewater, not just the chemistry. For example, the volume of a waste stream is also an important consideration in determining whether a wastewater stream can be effectively treated.

11) Can Ecology add "EPA" to (a)(i) since EPA is the one who issues NPDES permits at federal facilities?
Several different agencies have the authority to issue NPDES permits including EPA, Ecology, and the Energy Facility Site Evaluation Council. Rather than specifically listing all of these agencies, the wording was left to cover the different possibilities.

WAC 173-303-910(1)(c) and -910(6)(f)(i) Petitions

The Administrative Procedures Act, Chapter 34.05 RCW, limits the amount of time for a petition to be acted upon by an agency to 60 days total. This includes the time to initially review the petition, make a tentative decision, obtain public comment, then review those comments and make a final decision. The current 45 day minimum public comment period in WAC 173-303-910(1)(c) does not allow adequate time for the agency to review the petition, and to obtain and review public comment, then make a final decision. The shorter minimum public comment period will make it more feasible to meet the time limitations imposed by the Administrative Procedures Act.

WAC 173-303-9904 W001 Listing

The state waste code for PCB is being changed from W001 to WPCB to prevent confusion since EPA now uses "W001" as a form code for the Hazardous Waste Report Instructions and Forms. EPA changed the code for lab packs to W001. These codes have already been changed for the purposes of reporting as of January 2003. The waste code W001 is also being changed to WPCB at the following locations: WAC 173-303-071(3), WAC 173-303-515, and WAC 173-303-9904.

Hazardous Waste Facilities Initiative

Authority

The authority for the department to establish and administer standards for the management of hazardous wastes and used oil lies in the State Hazardous Waste Management Act, Chapter 70.105 RCW. In Washington, the term "dangerous wastes" is also used. Dangerous wastes are all federally regulated hazardous wastes (listed, flammable, corrosive, reactive or toxic), plus additional types of wastes captured by Washington's regulations because they are toxic or persistent. For the purpose discussion of this proposal, the terms "hazardous" and "dangerous" wastes are synonymous and mean all of the wastes covered by the Washington regulations, Chapter 173-303 WAC. The *Dangerous Waste Regulations* are the standards that apply persons who generate, transport, recycle, treat, store and/or dispose of dangerous wastes. They also contain the standards applied to the generation and handling of used oil.

The department has adopted most of the provisions of federal hazardous waste regulations into state rules. The federal rules (Resource Conservation and Recovery Act, subtitle C regulations) are contained in the code of federal regulations, 40 CFR Parts 260 through 279. The U.S. Environmental Protection Agency has authorized the department to administer major portions of the RCRA C regulations in Washington, including generator requirements, hazardous waste permits, used oil management standards, and enforcement. In most situations, this authorization means that businesses and other regulated persons deal only with the Department of Ecology rather than Ecology and EPA.

Background

There are currently twenty-eight facilities in Washington that are actively accepting hazardous wastes or used oil for management. This includes treatment, storage or disposal (TSD) facilities, recyclers and used oil processors that are owned by private companies or federal agencies. In some cases, a facility may be conducting more than one type of activity. A list of these facilities may be seen on the department's new web site at: *http://www.ecy.wa.gov/programs/hwtr/hwfacilities/* .

Current Requirements

TSDs are subject to comprehensive and detailed hazardous waste permits and regulatory requirements that include conditions for design and construction, operation and maintenance, record keeping, closure and financial responsibility. Closure and demonstration of financial responsibility for TSDs is required through applicable standards of WAC 173-303-610 and WAC 173-303-620. The department has provided detailed guidance on the preparation of closure plans in "Guidance for Clean Closure of Dangerous Waste Facilities", publication #94-111, August 1994. This publication may be viewed on the internet (*http://www.ecy.wa.gov/biblio/94111.html*).

The primary steps involved in the closure and demonstration financial responsibility for facilities include:

- **Preparation and submittal of a detailed closure plan**. The closure plan must identify how the facility will meet closure performance standards; describe procedures for removal of wastes; decontamination procedures; account for the disposal or treatment of the maximum inventory of wastes in dangerous waste management units; describe procedures for sampling and analysis; and discuss the schedule for closure of each dangerous waste management unit. The closure plan must be reviewed and approved by the department.
- **Cost estimate for closure**. A detailed written estimate must be prepared and submitted at the time of submittal of the closure plan. This cost estimate must be consistent with the closure plan. If the department requires changes to the closure plan, the cost estimate must reflect the final closure plan approved by the department. The cost estimate must be based on the costs to the owner/operator of hiring a third party to close the facility; and, may not include the salvage value of any unprocessed wastes. The cost estimate for closure must be adjusted annually to reflect inflation. It must also be modified reflect changes in the closure plan due to changes in facility processes, capacity or operations.
- **Demonstration of financial assurance for closure**. The facility owner/operator must submit financial instruments in an amount equal to the closure cost estimate consistent with the closure plan approved by the department. This demonstration must be updated each year until closure is completed.
- **Demonstration of liability coverage (pollution liability coverage)**. The facility owner/operator must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operation of the facility. For treatment and storage facilities, the minimum liability coverage required is $1 million per occurrence with an annual aggregate of at least $2 million. Slow releases (described as 'non-sudden' releases in the regulation) such as a leak from the bottom of a tank into underlying soil, are typically not covered by this type of liability coverage.

Owners and operators of facilities that recycle hazardous wastes are subject to the *Dangerous Waste Regulations* including notification, waste designation, waste analysis, emergency preparedness, personnel training, waste accumulation, container and tank standards, and decontamination at the time of closure. Unless specifically required on a case-by-case basis, recycling processes are generally exempt from the hazardous waste permit process.

The department has followed EPA's approach to regulating used oil by establishing management standards that are separate from, and in most cases less stringent than, regulations for managing hazardous wastes. The used oil management standards are found in WAC 173-303-515. The reason for creating separate standards for used oil, even though it is a type of waste that may exhibit many hazardous characteristics, is that there is a system in place that provides environmentally protective and economical recycling of used oil. In Washington, the vast majority of used oil that is collected is used as fuel for industrial burners and boilers.

Origin of this proposal

Three facilities in Washington, including a recycler, a used oil processor, and a combination TSD/recycler/used oil processor failed and were abandoned during the period from 1999 through 2001. The department began assessing inadequacies and gaps in hazardous waste requirements that allow facility owners and operators to avoid accountability for the financial costs of removing and disposing of wastes; decontaminating equipment, tanks and buildings; and addressing threats to human health or the environment.

In 2002, the department 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.

Five problem areas were identified, including:

1. Major waste streams and activities at waste management facilities are not subject to financial responsibility requirements. Used oil, spent antifreeze, and household hazardous wastes are examples of exempt waste streams. Off-site recycling and used oil processing/re-refining are examples of exempt activities.
2. Regulations and mechanisms addressing financial responsibility for TSDs are inadequate and/or out-of-date.
3. The department's ability to address potential environmental threats at recycling and used oil processing/re-refining facilities is limited.
4. Potential customers (i.e., waste generators) and interested citizens have difficulty in obtaining information on permits, compliance, enforcement, closure and cleanup at waste management facilities.

5. Resource levels are inadequate for current demands on Ecology's permitting and compliance programs.

The rules proposed in this action are intended to specifically address problems 1 and 2, identified above. In simple terms, these rules will assure that owners and operators of hazardous waste recycling or used oil processing/re-refining facilities cannot close, abandon, or otherwise avoid paying for waste removal, disposal and decontamination of equipment and structures. Under current rules these facilities may shut down and leave the costs of controlling environmental threats, removing wastes and conducting sites cleanup to property owners, former customers, or tax payers. For recycling facilities and used oil processors/re-refiners, these costs may often range from tens of thousands to several hundred thousand dollars. In some cases in Washington, the total cleanup costs have been several million dollars. Several examples are provided in the department's report to the Legislature.

Problem 3, above, has been partially addressed by the department through adjustments to its inspection and enforcement program, and through these proposed rule revisions by clarifying its existing authority to seek court-ordered restraining orders. Problem 4 has been addressed through the creation of a new internet web site that provides information on active facilities and guidance to waste generators on selection waste management facilities (see at *http://www.ecy.wa.gov/programs/hwtr/hwfacilities/*).

Problem 5, above, is not addressed through this proposal. In its 2002 report to the Legislature, the department recommended that a new fee be established for actively operating TSDs, recyclers and used oil processors. If adopted through the legislative process, the new fee would have created new revenues to pay for the department's development of permits and permit modifications, inspections, and assistance to facility owners/operators. The fee recommendation was controversial and did not receive sufficient support to justify submittal as draft legislation.

In the fall of 2003, the department presented two major options to stakeholders for revising closure and financial responsibility requirements for treatment, storage and disposal (TSD) facilities, recyclers and used oil processors. Major features of these options included:

Option 1. Revise selected requirements of financial mechanisms for TSDs. Extend traditional closure and financial responsibility requirements to recyclers and used oil processors/re-refiners.

Option 2. Revise selected requirements of financial mechanisms for TSDs. Require recyclers and used oil processors/re-refiners to prepare and submit closure plans. Establish a maximum closure amount of $50,000 for recyclers and used oil processors/re-refiners with a provision that the amount may be lower if justified by a detailed closure cost estimate; and delete the requirement for pollution liability coverage.

The $50,000 figure was based on work by department staff. Closure costs were estimated for two hypothetical facilities (a small scale solvent recycler and a medium-sized used oil processor) using two methods suggested by EPA and a third method employing actual cost

figures from two recently approved closure plans. $50,000 was proposed because it was in the low-to-middle range of the figures calculated. Option 2 was proposed because it a simpler approach to preparing cost estimates of closure for facility owners/operators; it would be easier for the department to review and establish compliance; and, it would not be subject to the requirement for annual updates. The primary disadvantage of setting the maximum closure cost at $50,000 is that in some situations it would not provide sufficient funds for closure for all facilities. If costs for closure exceeded $50,000, those costs would have to be borne by the facility owner/operator, property owners, former customers, or taxpayers.

Based upon comments received from stakeholders during an informal comment period and during comments from the public on our published intent to adopt rule (CR101), the department has chosen to propose Option 1, above. The primary reason for this decision is that owners/operators of facilities engaged in off-site recycling or used oil processing/re-refining should be accountable for the full cost of closing their facilities. Most of the persons submitting comments felt that the $50,000 maximum was not sufficient to cover the costs of closure. Several persons also expressed concern about the absence of pollution liability coverage. Other comments reflected a desire to scale the maximum closure amounts to the volume, types of wastes, or environmental risks posed by the wastes being managed.

The department considered these comments and determined that Option 1 provided the greatest level of confidence that the costs of closure would be accounted for and that the preparation of a site-specific cost estimate is scaled to the volume, types and risks associated with the wastes being managed. The primary disadvantage of selecting Option 1 is that it will result in higher direct costs for facility owners/operators for complying with closure and financial requirements, and to the department for administrative costs. Option 1 is also expected to indirectly result in higher costs to waste generators as facility owners/operators pass on their costs to customers.

The rules proposed in this action will revise and strengthen current standards for the protection of human health and the environment for hazardous waste and used oil management facilities. Revisions are proposed to the following sections of the *Dangerous Waste Regulations*:

WAC 173-303-040	Definitions
WAC 173-303-120	Recycled, reclaimed, and recovered wastes
WAC 173-303-515	Standards for managing used oil
WAC 173-303-610	Closure and post-closure
WAC 173-303-620	Financial requirements
WAC 173-303-960	Special powers and authorities of the department

With a few exceptions, these revisions will not apply to facilities conducting on-site recycling or on-site used oil processing, businesses collecting used oil from do-it-yourself generators, or household hazardous waste/small business hazardous waste management facilities operated by city or county agencies. The pesticide collection program as currently administered by the

Washington Department of Agriculture will also not be affected by these revisions. Facilities owned and operated by state or federal agencies will not be affected by proposed changes to rule for financial responsibility because state and federal facilities are self-insured and have sufficient assets to assure proper closure and are therefore exempt from such requirements in both state and federal rules.

Proposed Rule Revisions and Rationale

WAC 173-303-040 Definition – Recycling unit

Rationale - In order to implement new rules for recyclers and used oil processors/re-refiners, Ecology considered applying existing requirements for TSD units to equipment and structures that are used to reclaim, reuse or recycle hazardous wastes or process used oil. Ecology's determination was that applying existing terms like "dangerous waste management unit" and "regulated unit" was not appropriate because these terms have specific meanings and applications in the existing rules for dangerous waste permits. A new term, "recycling unit" is proposed because it will apply to equipment, structures and land that are not subject to dangerous waste permits. The department considered using the term "resource reclamation unit." This term is not proposed in this action because it may be construed too narrowly to mean only waste processes in which recyclable materials are actually reclaimed, and not used or reused.

A concern was expressed (EPA Region 10 - Seattle) that regulated TSDs may use the newly created term "recycling unit" to avoid permitting and TSD storage requirements. Ecology considered this concern and decided that the department retains the authority to make decisions on units that are subject to dangerous waste permitting when they are used for treatment, storage or disposal. In addition, Ecology retains the authority to require permits, on a case-by-case basis for recycling processes that pose a threat to human health and the environment (ref. WAC 173-303-120(4)). When a permit is required by Ecology, the department has the authority under WAC 173-303-800(8) to establish terms and conditions necessary to protect human health and the environment.

WAC 173-303-120(3) Requirement for Recyclers to Prepare and Update Closure Plans

Rationale - Recycling poses potential and actual threats to human health, the environment and the economic well being of property owners, customers and taxpayers of Washington State. Recycling processes are subject to operating and minimum closure standards in the *Dangerous Waste Regulations*. These regulations state that, upon closure of their operations, facility owners and operators must remove wastes and decontaminate equipment and structures. However, recyclers are exempt from dangerous waste permitting, including requirements to prepare detailed closure plans, provide pollution liability coverage (protection for claims of damage to third parties), and to plan and pay for the orderly and safe closure of their facilities (financial assurance). In its report to the Legislature (WDOE 02-040-028, September 2002), Ecology documented a number of facilities that closed, underwent bankruptcy or simply abandoned their operations and left the burden and cost of waste removal and cleanup to state or federal agencies, with the potential for cost recovery from property owners or former customers. Additional sites are identified and information is provided on costs and the status

of cleanup in a separate report prepared for the department (Ross & Associates, "Analysis of Cleanup Obligations and Costs for Hazardous Waste Management Facilities in Washington State," January 2003; publication #03-04-011; *http://www.ecy.wa.gov/biblio/0304011.html*).

Ecology is proposing to extend requirements to prepare closure plans, obtain pollution liability coverage, and demonstrate financial assurance for closure to recycling facilities. This will provide site specific plans for how to properly close and decontaminate equipment and structures used for waste processing, provide coverage for claims of damage from waste releases or discharges to third parties, and financial resources to pay for closure.

This applies to recyclers of state-only dangerous waste, materials used in a manner constituting disposal, CFC/HCFC refrigerants, dangerous wastes burned for energy recovery, spent lead-acid batteries, precious metal reclamation, and spent antifreeze. This new requirement applies to facilities that receive wastes from off-site for recycling. **It does not apply** to on-site recycling facilities, such as a generator that recycles spent solvents in an on-site distillation unit. It also does not apply to facilities like city or county operated household hazardous waste or exempt small generators facilities, transporters or 10-day transfer operations.

Ecology considered applying post-closure financial assurance requirements of TSDs to recyclers and used oil processors/re-refiners. Our proposal does not include post closure financial assurance because it may create additional administrative burden and expense. If cleanup of soil or ground water is necessary, it will be accomplished through the cleanup authority and provisions of the Model Toxics Control Act (Ch. 70.105D RCW).

Ecology also considered an option for these rules that involved establishing a maximum closure fund of $50,000 which could be lower if justified by a facility through a detailed closure cost estimate. This option also did not include the requirement for obtaining pollution liability coverage in the amount of $1 per occurrence, $2 million aggregate. This option is not included in this proposal. Many stakeholders preferred the added economic protection offered through the proposed rules that require facility owners/operators to obtain pollution liability coverage and financial assurance for closure in an amount established through an approved facility specific closure cost estimate.

WAC 173-303-120(4) Recyclers who do not store – time to enter recyclable materials into active process

Rationale - The provision of this section of the *Dangerous Waste Regulations* has traditionally been referred to as the "immediate recycler" exemption from permitting. A similar provision exists in federal rules under 40 CFR Part 261.6(c). Facilities may conduct recycling without a permit if wastes are not stored prior to entering them into an active recycling process. Federal hazardous waste rules do not contain the 24-hour specification, nor do they define "storage" or "recycling without storage." EPA acknowledges that there is no defined "holding time" for wastes prior to recycling. Decisions are allowed on a site specific basis or through state rules (for example, 24 hours; see M. Straus to J. Johnson, 03/27/89; J. Denit to F. Prasil, 09/01/93).

In the current *Dangerous Waste Regulations*, Ecology chose to more specifically define 'recycling without storage' by requiring facility operators to place recyclable materials into the active recycling process (WAC 173-303-120(4)) within 24 hours of receipt. Our proposal to revise this rule to allow up to 72 hours is based on:

- In the past two or three years, Ecology has developed clear and consistent requirements for recyclers involving time limits for waste receipt, check-in, tracking and the point at which wastes are placed into active recycling. Rather than revert to more vague interpretations of these procedures in order to achieve the desired level of flexibility, Ecology prefers to provide a clear regulatory standard (72 hours) for staging wastes.
- There will be no substantive reduction of environmental protection. Staging of wastes will remain subject to manifesting, employee training, containment and container & tank management standards of large quantity generators and TSDs.
- New requirements for closure and financial responsibility proposed by Ecology will enhance standards and reduce overall liability at these operations.
- The additional time period for qualifying recyclers will provide flexibility and efficiency for recycling operations, thereby encouraging more recycling of wastes and reducing operating costs.
- As discussed above, this proposal does not violate any existing statutory or regulatory requirement of federal statutes or regulations.

Ecology is also considering allowing TSDs additional time for manifested shipments of waste to remain in a "waste receiving area" before transferring to a permitted unit. The department's decisions on the appropriate length of time for wastes to be held in waste receiving areas are made on a site-specific basis and will be specified in the hazardous waste permits issued to the facility owners/operators.

WAC 173-303-120(4)(c)Requirement for Recyclers who do not store to prepare and update closure plans, provide financial responsibility (liability and closure)

Rationale - This proposal is necessary to apply closure and financial responsibility requirements to off-site recycling facilities. For the reasons discussed earlier in this proposal, this revision adds requirements for closure plans, liability coverage, and closure funding to recyclers who do not store, and deletes the current exemption in subsection (c)viii.

WAC 173-303-515(9) Standards for Management of Used Oil - Processors & re-refiners subject to closure, liability coverage and closure funding

Rationale - Used oil processing/re-refining poses potential and actual threats to human health, the environment and the economic well being of property owners, customers and taxpayers of Washington. In its report to the Legislature (WDOE 02-040-028, September 2002), Ecology documented a number of facilities that closed, underwent bankruptcy or simply abandoned their operations and left the burden and cost of waste removal and cleanup to state or federal agencies, with the potential for cost recovery from property owners or former customers.

Additional sites are identified and information is provided on costs and the status of cleanup in a separate report prepared for the department (Ross & Associates, "Analysis of Cleanup Obligations and Costs for Hazardous Waste Management Facilities in Washington State," January 2003; publication #03-04-011; http://www.ecy.wa.gov/biblio/0304011.html).

Existing standards for used oil processors/re-refiners (Part 279.54(h) incorporated by reference in WAC 173-303-515) require used oil processors to remove all wastes and decontaminate structures and equipment at the time of closure. Used oil processors/re-refiners are exempt from dangerous waste permitting, including requirements to prepare detailed closure plans, provide pollution liability coverage (protection for claims of damage to third parties), and to plan and pay for the orderly and safe closure of their facilities (financial assurance).

Through this rule, Ecology considered but did not adopt post-closure financial requirements because it may create additional administrative burden and expense. If additional cleanup of soil or ground water is necessary, it will be accomplished through cleanup authority and provisions of the Model Toxics Control Act (Ch. 70.105D RCW). Under existing regulations, these used oil operations do not have a dangerous waste permit that requires consideration for post-closure care.

WAC 173-303-610(1) Closure rule includes recycling facilities and/or recycling units
Rationale - This proposed rule clarifies that recycling units are subject to closure plans and financial responsibility requirements.

WAC 173-303-610(12) Closure rule includes recycling and used oil processing/re-refining
Rationale - A new subsection is created to establish the requirements for preparation and use of closure plans for off-site recycling and used oil processing/re-refining facilities. This new subsection is needed because the current rules for closure plans are predicated on the submittal of a hazardous waste permit application. The new subsection relies on exiting closure procedures, when possible. For example, by referencing disposal or decontamination procedures in WAC 173-303-610(3), the department intends the owner and operator of a "recycling unit" that includes container areas or tank systems to follow procedures outlined in WAC 173-303-630(10) and -640(8), respectively.

The department anticipates that existing guidelines for the preparation of closure plans for dangerous waste management unit will also apply to the closure plans for recycling units. The "Guidance for Clean Closure of Dangerous Waste Management Facilities," WDOE 94-111 are available upon request from the department. These are also available on-line at http://www.ecy.wa.gov/biblio/94111.html .

WAC 173-303-620(1) Financial Responsibility - Applicability
Rationale - This section establishes the financial responsibility requirements for off-site recyclers and used oil processors.

WAC 173-303-620(3)(a)(iii) does not allow facility owners/operators to include the salvage value of wastes, equipment or structures when preparing the facility closure cost estimate. The department seeks input on this issue regarding whether it should apply to recyclable materials and recycling units. In considering this issue the department recognizes that recyclable materials (e.g., spent solvents, on-specification used oil) may be relatively easier to sell that other types of dangerous wastes. On the other hand, if a recycling or used oil processing facility undergoes bankruptcy or is abandoned, the materials remaining on-site may not be recyclable as claimed and must be sampled, tested, and properly disposed.

WAC 173-303-620(4) Financial Responsibility - Financial mechanisms

Rationale: In evaluating issues of financial assurance for closure, the department applied a fairly simple concept – what is the level of confidence that the funds needed to pay for closure (based upon an approved closure cost estimate) will be available in the event that the facility owner/operator is absent or otherwise not cooperative?

The department identified several problems with regulatory requirements for closure and financial responsibility in its report to the Legislature (September 2002, WDOE 02-04-028). Options for addressing gaps and areas of inadequate or out-of-date requirements were identified and discussed with stakeholders. Several options were obtained from work by the Office of the Inspector General, US EPA, EPA's proposed rule for standardized permits for storage and treatment facilities, review of programs in other states, the Association of State and Territorial Solid Waste Management Organizations (ASTSWMO), a consultant to Ecology, discussions with other states, and Ecology staff.

Revisions to Financial Mechanisms

Facilities subject to financial responsibility requirements of WAC 173-303-620 may provide liability coverage and closure/post-closure assurance through one or a combination of the following mechanisms:

- Trust Fund
- Surety Bond (payment or performance)
- Letter of Credit
- Insurance
- Financial Test/Corporate Guarantee

There are currently eleven active TSDs located in Washington that must demonstrate financial responsibility (state and federally owned facilities are exempt from financial requirements). The types of financial mechanisms selected by these facilities are shown in Table 1, below.

Table 1: Facility Financial Mechanisms

Facility	Liability Mechanism	Closure/Post-Closure Mechanism
Energy NW, APEL	Suspended until 1st customers	Suspended until 1st customers
Emerald Services	Insurance	Letter of Credit
PacificEcoSolutions	Insurance	Insurance
Philip/BEI Kent	Insurance	Insurance
Philip/BEI Tacoma	Insurance	Insurance
Univar	Insurance	Surety Bond
Alcoa Ferndale	Corporate Guarantee	Corporate Guarantee
Boeing Auburn	Financial Test	Financial Test
Goldendale Aluminum	Insurance	Trust Fund
Noveon	Insurance	Letter of Credit
Reichhold Chemical	Not provided	Letter of Credit

Partially Funded Trust Fund

State and federal rules allow the use of trust funds as a financial mechanism for pollution liability coverage and closure funding. Trust funds are a very reliable source of funding because a dedicated fund is established at a financial institution in the amount of the closure cost estimate. The department may access these funds in the event of abandonment, bankruptcy or lack of cooperation by the facility owner/operator.

Up to now, Washington has adopted the federal approach of allowing facility owners/ operators to build up the trust fund for closure over time (maximum 10 years). This allowance is often called a 'partially funded trust fund' and is provided through 40 CFR 264.143(a)(3). The department has determined that partially funded trust funds, (except for recycling units, as discussed below), do not provide adequate financial assurance for closure or pollution liability. We are, therefore, proposing to delete this type of mechanism from WAC 173-303-620(4). Following adoption of this proposed rule, any new TSDs that seek to use the trust fund as a financial mechanism will need to assure the trust is fully funded at the time of permit application, or when transferring from another financial mechanism to a trust fund.

In creating new requirements for financial responsibility for recycling and used oil processing facilities, the department recognized that existing facilities that wish to use the trust fund as a financial mechanism may require additional time to build up the trust fund. The department is proposing in WAC 173-303-620(4)(12)(c)(i) to allow existing facilities seeking to use the trust fund up to three years after the date of the department's approval of the closure plan to place the full amount of the closure cost estimate into the trust fund. If the department does not approve a closure plan within one year of its submittal, the department may determine a closure cost estimate and require the facility to begin paying into a fund for financial assurance.

This assumes the department has reviewed and commented on a draft closure plan, but the facility has not responded with a final closure plan that meets the regulatory requirements within the first year. This also assumes that the department does not have justification for denying the closure plan outright pursuant to WAC 173-303-610(12)(ii).

Performance Surety Bond

One financial mechanism that is allowed through state and federal rules is the use of a bond that guarantees that closure activities will be performed and paid for by the financial institution holding the bond. No facilities in Washington are currently using this mechanism. While the concept appears to be valid (end result is clean closure of facilities according to regulatory and permits requirements) it is complex and difficult for facilities to maintain and for the department to administer. As a result, the department is proposing to delete this mechanism from WAC 173-303-620.

Captive Insurance

Captive insurance occurs when a corporation creates a subsidiary insurance company that provides insurance solely to other companies owned, or held in majority ownership, by the same parent corporation. The Office of Inspector General audit report on RCRA financial assurance (RCRA Financial Assurance for Closure and Post-Closure; 2001-P-007; March 30, 2001) identified the use of "captive insurance" as a problem, as follow:

> We believe that insurance policies issued by a "captive" insurance company do not provide an adequate level of assurance because we found no independence between facility failure and failure of the mechanism. Most captive insurance companies are "pure" captives, wholly owned subsidiaries controlled by the parent company or its other subsidiaries. (page 12).

The OIG report considers captive insurance to be a form of self insurance.

While it appears that no facilities in Washington are currently relying on captive insurance, the department wants to take this opportunity of revising the rules dealing with financial responsibility to define and delete captive insurance as an acceptable financial mechanism. Comments are invited on this proposal.

Minimum Ratings for Insurance Companies

Recent experience with a national waste management company whose insurance company declared bankruptcy resulted in the department's proposal to require insurance companies to meet minimum ratings as established by Moody's, Standard & Poor's or A.M. Best. This proposal is based upon the same approach made by EPA in its proposed rule for standardized permits and financial responsibility (Federal Register; October 12, 2001; page 522371). This proposal will provide a high level of confidence that insurers will have sufficient financial strength to pay claims against pollution liability coverage or closure/post-closure insurance, as applicable.

Financial Test and Corporate Guarantee

As with other financial mechanisms for closure/post-closure, the department has adopted, by reference, federal rules allowing facility owners/operators to demonstrate that they have sufficient financial resources to pay for closing their dangerous waste management units (see WAC 173-303-620(4)(b). This demonstration of sufficient financial resources is made by passing the financial test and corporate guarantee (see 40 CFR Part 264.143(f).

The current financial test and corporate guarantee requires the facility owner/operator or parent corporation to pass one of the following alternative sets of conditions:

a) a specific level of assets to liability; and a net working capital and tangible net worth at least six times the total current closure and post-closure cost estimate; and a tangible net worth of at least $10 million; and a specified level of assets in the U.S., or

b) levels of assets similar a), above, (including the $10 million in tangible net worth), plus a specified bond issuance rated by Standard and Poor's or Moody bond rating services.

These demonstrations must be updated annually and must be accompanied by independent financial reports and certifications. Typically, only large corporations qualify to use the financial test and corporate guarantee.

The financial test and corporate guarantee rule was first adopted by EPA in 1981 and has not been updated since. The department has reviewed the use of the financial test and corporate guarantee for two active facilities. A number of other facilities in Washington that have inactive or closed TSDs are also using the financial test or corporate guarantee to satisfy financial requirement for closure or post-closure. These facilities have not yet completed final closure, post-closure or corrective action.

In this proposal, the department is seeking to increase the level of tangible net worth in the financial test and corporate guarantee to $20 million. This level is adjusted due to inflation since 1981 (based on national inflation factor of approximately 1.8 for 1981 to 2003). Increasing the level of tangible net worth to reflect inflation alone will provide a higher level of confidence that facility owners/operators selecting this financial mechanism will have sufficient resources to pay for facility closure.

WAC 173-303-620(6) Financial assurance for post-closure monitoring and maintenance

Rationale - Although the proposed revisions to this section do not address requirements for recycling or used oil processing/re-refining facilities, the department is taking this opportunity to make financial assurance for post-closure monitoring and maintenance for TSDs consistent with the proposed changes to financial assurance for closure. The rationale for these proposed revisions is the same as that applied to change in closure, above.

WAC 173-303-620(8) Liability Requirements

Rationale: Please refer to the discussion on financial assurance for closure, above, for the rationale applied to proposed revisions addressing captive insurance, ratings of financial institutions, and tangible net worth.

The department is proposing to clarify that it may file a claim against pollution liability insurance as a damaged third party when ground water is detrimentally impacted due to releases or discharges of dangerous wastes or used oil from recycling units. Groundwater is a component of "waters of the state" for which the department is granted jurisdiction (see RCW 90.48.020 and 030). This clarification will allow the department to recover all, or a portion of, the costs of cleanup in the event that a facility owner/operator does not take appropriate remedial action when groundwater is contaminated as a result of a release or discharge from a covered recycling unit.

WAC 173-303-960 Authority for department to seek injunctive relief

Rationale – This proposed rule will allow Ecology to seek a court order (for example, a temporary restraining order to stop a facility from receiving additional wastes from off-site) prior to conditions deteriorating to "imminent and substantial threat" thresholds of the current WAC 173-303-960, and in some situations, prior to issuance of civil orders or penalties. This proposed rule will make the Dangerous Waste Rules consistent with the powers granted the department and the attorney general in the State Hazardous Waste Management Act, RCW 70.105.120.

There have been two recent situations where a used oil processor and a recycling facility continued to receive wastes from off-site in the face of enforcement actions by the department. The companies continued to receive revenues from the wastes received, but did not incur the costs of waste recycling and disposal. Threats to health and the environment were exacerbated, but did not reach the "imminent and substantial" threshold for quite some time.

Decisions on when to apply this authority will be based on consideration of factors involved with specific cases.

The revision addressed in this proposal was previously presented to stakeholders as a new subsection in rules for recycled, reclaimed and recovered wastes, WAC 173-303-120. This proposal deletes that previous recommendation and applies it through a simpler approach by amending WAC 173-303-960.

Appendix C

Public Notices

2004 Dangerous Waste Management Workshops

Each year, Ecology's Hazardous Waste & Toxic Reduction Program provides low-cost Dangerous Waste Management Workshops. The workshops discuss proper waste management and how to comply with the *Dangerous Waste Regulations.*

The training is a mix of presentations, group exercises, discussions, and question and answer sessions. You can have your questions answered in a casual, friendly atmosphere while you learn:

- ✓ How to increase profits by reducing waste
- ✓ How to avoid common compliance violations
- ✓ How to benefit from lowering your generator status
- ✓ The "designation" process for identifying a waste's hazards
- ✓ Principles of proper dangerous waste management
- ✓ TurboWaste.Net, the new Internet reporting option that can be used by all generators
- ✓ The proper way to complete your Annual Report
- ✓ What to expect if you have an unannounced compliance inspection

2004 Workshop Schedule

Date	City
January 21	Mt. Vernon
January 23	Kelso
January 27	Lynnwood
January 28	Lynnwood
January 29	Lynnwood
February 3	Yakima
February 5	Spokane

Hurry! Space is limited. The full-day training and lunch costs $55. Register on-line at *http://www.ecy.wa.gov/forms/dwmw/index.htm*, fax your request to (360) 407-6715, or call Tonya Wolfe at (360) 407-6023.

Emergency Planning & Community Right-to-Know Reporting

Shoptalk readers may know that they must make various reports under SARA Title III or the Emergency Planning & Community Right-to-Know Act regulation. One of the lesser-known but crucial reporting requirements is in Section 304 — Emergency Release Notification.

Under Section 304, if you release "reportable" quantities of certain chemicals you must immediately notify local and state emergency agencies. In Washington, these are your Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission (SERC), contact numbers are listed below. You must follow up within two weeks with a written notice that updates the initial information and describes the actual events of the release.

If an incident occurs at your facility and there is any doubt whether to make a call, MAKE THE CALL. It will not create problems for your business if it turns out the release was not a reportable incident.

The types of substances that must be reported are Extremely Hazardous Substances (EHS) and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substances. Lists of these substances, and their reportable quantities, can be found in the EPA's *Title III Consolidated List of Lists (http://130.11.53.73/lol).*

You can make your first notifications to the emergency agencies by telephone, radio, or in person. If your business released EHS at or above reportable quantities, you must also report this to the National Response Center (NRC).

Send written follow-up reports to the SERC at: Community Right-to-Know, Ecology, PO Box 47659, Olympia WA 98504-7659.
Numbers to keep handy: SERC: (800) 258-5990; NRC: (800) 424-8802
LEPC link: *http://www.ecy.wa.gov/programs/hwtr/epcra/pages/lepclist.html*

For more information on EPCRA reporting, visit Ecology's hazardous waste web page at: *www.ecy.wa.gov/programs/hwtr/epcra* or call us at 1-800-633-7585.

Another resource for spill and release reporting can be found at Ecology's spills web site at: *http://www.ecy.wa.gov/programs/spills/spills_services.html*

Upcoming Dangerous Waste Rule Amendments

The *Dangerous Waste Regulations* are being amended. Watch for articles in future issues of Shoptalk. If you would like more information regarding the amendments now, join the electronic listserve at *http://listserv.wa.gov/archives/dw-rules.html*

Draft amendments will be available in early 2004.

Getting Beyond Waste

Washington's industries have made great strides in reducing waste generation. Now, we need to change our thinking and get "beyond waste" in our society so that we see wastes as resources. The goal of the Beyond Waste Project is to develop long-range statewide plans for reducing and managing hazardous and solid wastes in Washington. Draft plans will be available late February or early March and public meetings will be held on the draft plans in late March. As part of the plan development process, Ecology held nine focus group meetings with hazardous waste generators in August and September 2003. For a report of what Ecology heard at these meetings, e-mail Chris Chapman at *ccha461@ecy.wa.gov* For more information about the project, visit the Beyond Waste web site at *http://www.ecy.wa.gov/beyondwaste/*

Hervieux, Patricia R.

From: Dumar, Laurie
Sent: Thursday, January 15, 2004 3:03 PM
To: ECOWACTRACK@listserv.wa.gov
Subject: Dept. of Ecology publishes their Semi Annual Rule Agenda

Dept. of Ecology Laws and Rules Web Site - January 15, 2004

Semi Annual Rule Agenda

A forecast of Ecology's rule-making for January - June 2004
Read more: http://www.ecy.wa.gov/laws-rules/misc/wsr0403021.pdf

Meeting Notice for Washington's Water Quality Assessment

You are invited to comment on Washington's Water Quality Assessment, including the updated "Polluted Waters" list. The comment period ends March 15, 2004.
Read more: http://www.ecy.wa.gov/laws-rules/misc/wsr0403020.pdf

Thank you for using WAC Track!

Laurie Dumar
Washington State Department of Ecology
(360) 407-6606
ldum461@ecy.wa.gov

"Working with you for a better Washington"

Department of Ecology
Rule Agenda
Janury 2004

CODE REVISERS OFFICE
STATE OF WASHINGTON
FILED
JAN 12 2004
TIME: 4:09 PM
WSR 04-03-021

WAC Chapter	Chapter Title	Contact Person	CR-101 Filing Date	CR-102 Filing Date	CR-103 Filing Date	Scope of Changes / Sections to Amend
Air Quality						
173-400, 173-405, 173-410, 173-433, 173-434 AO# 99-07, 7/96	Emissions Standards for Solid Waste Incinerators; General regulation for air pollution sources; Kraft Pulping Mills; Sulfite Pulping Mills; Solid Fuel Burning Device Standards	Tom Todd (360) 407-7528 ttod461@ecy.wa.gov	**Mar-99**	Jun-04	Dec-04	Hog Fuel Boiler RACT; define terms related to wood derived fuels; re-organize state incinerator rule.
173-400 AO # 03-07	General regulation for air pollution sources	Tom Todd (360) 407-7528 ttod461@ecy.wa.gov	**Aug-03**	Oct-04	Mar-05	This rule making amends the New Source Review portions of Chapter 173-400 WAC, General Regulations for Air Pollution Sources. We will be incorporating changes to the federal Major Source New Source Review Program that were promulgated on December 31, 2002. We will be integrating the federal program with the conditions and needs state law. Other changes will be made to gain full approval of the PSD program by EPA.
173-407 AO # 03=09	Greenhouse Gas Emissions	Melissa McEachron (360) 407-6860 mmce461@ecy.wa.gov	**Oct-03**	Mar-04	Aug-04	At the Governor's direction, Ecology and EFSEC will develop rules to mitigate carbon dioxide emissions from new power plants in Washington State. EFSEC will focus on a mitigation plan for larger new power plants; Ecology wil focus on one for smaller new power plants that fall outside of EFSEC's jurisdiction (less than 350 MW) and supply the public with electricity.
173-434 AO # 02-05 03/02	Solid Waste Incinerator Facilities	Steve Cross, (360)407-6875, stcr461@ecy.wa.gov	**Mar-02**	**6/3/2003 Continuance filed 7/29/03 to extend the comment period**	**Dec-04**	The purpose of the proposed rule change is to incorporate new federal language; add new terms to the definition section; change existing definitions; and provide alternate means of compliance demonstration with section WAC 173-434-130(3) and section WAC 173-434-160(1).
Shorelands & Environmental Assistance						
173-26 Ao# 03-02 01/03	Shoreline Management	Peter Skowlund (360) 407- 6522 psko461@ecy.wa.gov	**Jan-03**	**Jun-03**	**Dec-03**	New Shoreline Management Act (SMA) Guidelines for Development/Amendment of Master Programs, executing a settlement agreement amongst litigating parties that implements statutory requirements to update the guidelines consistent with SMA policy, replacing invalidated Parts 3 and 4 of chapter 173-26 WAC; among other things establishing planning and regulatory standards for future shoreline development and uses, requirements for protection and restoration of shoreline ecological functions, guidance on the limitations of regulatory authority and shorelines and growth management act integration.
197-11 AO#02-13 8/02	SEPA Rules	Barbara Ritchie, (360)407-6922, brit461@ecy.wa.gov	**Sep-02**	**Jan-03**	**Jul-03**	The proposed amendment of the State Environmental Policy Act (SEPA) Rules is in response to a recent law suit challenging Ecology's authority to adopt criteria that would override exemptions established by the Legislature. The Legislature exempted Class I, II, and III forest practices from SEPA environmental review. The Court of Appeals has ruled that because the legislative exemption is included in Part Nine of the SEPA Rules, Class I, II, and III forest practices are subject to the limitations in WAC 197-11-305 and may require SEPA review. Ecology has determined that we do not have authority to override legislative exemptions and that the SEPA Rules need to be revised to clarify that legislatively exempt actions do not require SEPA review.

Department of Ecology
Rule Agenda
Janury 2004

CODE REVISERS OFFICE
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WSR 04-03-021

WAC Chapter	Chapter Title	Contact Person	CR-101 Filing Date	CR-102 Filing Date	CR-103 Filing Date	Scope of Changes / Sections to Amend
Spill Prevention, Preparedness & Response						
317-10,173-181 AO#00-03 7/99	Oil Spill Contingency Plans and Response Contractor Standards	Linda Pilkey-Jarvis, (360) 407-7447, jpil461@ecy.wa.gov	**Feb-00**	May-04	Nov-04	Update plan requirements, mandate incident command systems, incorporate planning standards, and update primary response contractor standards.
Hazardous Waste and Toxic Reduction						
173-303 AO # 03-10 10/03	Dangerous Waste Regulations	Chipper Hervieux (360) 407-6756 pher461@ecy.wa.gov	Jan-04	Jun-04	Dec-04	This rulemaking will incorporate new federal requirements, make changes for consistency and clarification, and propose changes to implement recommendations of the Hazardous Waste Facility Initiative to improve financial responsibility.
Water Quality						
173-98 AO # 02-15 10/02	Uses and limitations of the Water Pollution Control State Revolving Fund	Dan Filip 360) 407-6509 dfil461@ecy.wa.gov	**Nov-02**	Jan-07	Jan-07	The Washington State Department of Ecology is initiating a "pilot rulemaking process" to propose to amend Chapter 173-98 WAC, *(Uses and Limitations of the Water Pollution Control Revolving Fund),* to allow public bodies to use the "Design/Build" concept for completion of wastewater facilities. The concept allows for a contract between local public bodies and firms to be awarded for the design and construction of portions of the facility largely independent of other design and construction efforts elsewhere at the facility. The scope of the pilot rulemaking process will be limited to new Design/Build (D/B) provisions.
173-224 AO # 03-11 10/03	Wastewater Discharge Permit Fees	Bev Poston (360) 407-6425 bpos461@ecy.wa.gov	**Dec-03**	May-04	Nov-04	The proposed rule amendment will increase fees for all permit holders to meet the fiscal growth factors for both FY2005 and FY2006. New fee categories for Concentrated Animal Feeding Operations and Municipal Stormwater Phase 2 Permittees will be created.
173-218, 218, 226 AO # 01-10 05/01	Underground Injection Control Program	Mary Shaleen-Hansen (360) 407-6143 maha461@ecy.wa.gov	**Dec-01**	May-04	Nov-04	The rule amendments will 1. bring it current with new federal rule changes 2. create consistency between the rules that govern UIC wells, and 3. clarify the language of the rule.
Water Resources						
173-563 & 531A AO # 01-05 7/01	Columbia River Main Stem and John Day-McNary Pools	Gerry O'Keefe (360) 407-6640 goke461@ecy.wa.gov	**Oct-02**	Jul-04	Nov-04	Amend and/or partial repeal of rules to adopt a rule that governs an integrated state water management program for the river's water resources .
173-175 AO # 03-08 9/03	Dam Safety Regulations	Dave Cummings (360) 407-6620 dcum461@ecy.wa.gov	Oct-03	Feb-04	Jul-04	This rule making will amend Ch 173-175 WAC Dam Safety Regulations; adopted in 1992, amended in 1995. The following two changes will be made: 1)Increasing fees for existing plan review and construction inspection; and 2)Rresumes collection of a fee for Ecology's periodic inspection of existing dams. Some updating of language and minor revisions will also take place.
173-503 AO # 03-05 4/03	Instream Resources Protection Program - Lower and Upper Skagit Water Resources Inventory Area (WRIA 3 and 4).	Dan Swenson (425) 649-7270 dswe461@ecy.wa.gov	**Apr-03**	Jun-04	Dec-04	This rulemaking will amend chapter 173-503 WAC Skagit River Instream Flow Rule. As a result of a Interim Memorandum of Agreement recently signed by the Department of Ecology, City of Anacortes, PUD No. 1 of Skagit County, Skagit County, the Sauk-Suiattle Indian Tribe, the Upper Skagit Indian Tribe and the Swinomish Indian Tribal Community, Ecology has agreed to initiate and conduct, and the other parties agree to support, rulemaking to amend WAC 173-503 solely for the purpose of allowing exempt wells to be used in the Upper Skagit Basin when mitigation is provided under a Ecology approved mitigation plan.
173-505 AO # 02-17 11/02	Instream Resources Protection Program Stillaguamish River basin - WRIA 5	Steve Hirschey (425) 649-7066 shir461@ecy.wa.gov and Kathleen Enseñat (360) 407- 6780 kspa461@ecy.wa.gov	**Nov-02**	May-04	Nov-04	The Washington State Department of Ecology's (Ecology) Water Resources Program (Program) is proposing to develop an Instream Resource Protection Program (IRPP) setting instream flows for certain streams and river segments and, in some cases, stream closures within the Stillaguamish River Basin.

PREPROPOSAL STATEMENT OF INQUIRY

(RCW 34.05.310)

CR-101 (7/22/01)

Do **NOT** use for expedited rule making

Agency: Department of Ecology A.O. 03-10

Subject of possible rule making: Dangerous Waste Regulations, chapter 173-303 WAC will be amended to incorporate several federal hazardous waste regulations, including adding mercury-containing devices to the universal waste rule, updating export requirements, adopting air emission permit rules, and amendments to corrective action rules. Changes to state-only requirements are primarily technical in nature; however, changes are being considered to implement the Hazardous Waste Facilities Initiative to extend financial requirements to recyclers and used oil processors and re-refiners.

(a) Statutes authorizing the agency to adopt rules on this subject: Chapters 70.105 and 70.105D RCW, the Hazardous Waste Management Act and Hazardous Waste Cleanup-Model Toxics Control Act.

(b) Reasons why rules on this subject may be needed and what they might accomplish: One key purpose of this rulemaking is to update the Dangerous Waste Regulations by incorporating recent federal hazardous waste requirements into the state's regulations. By staying current with the federal program, the regulated community has primarily one environmental agency to work with. The second purpose is to update state requirements, including implementing recommendations of the Hazardous Waste Facilities Initiative.

(c) Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies: The federal Environmental Protection Agency (EPA) implements hazardous waste regulations in Washington until Ecology adopts those regulations and begins implementing them. A formal EPA authorization process follows Ecology's adoption. EPA is aware of which federal regulations Ecology intends to adopt during this rulemaking. Ecology will provide drafts to EPA for their review and will communicate with EPA throughout the rulemaking process.

(d) Process for developing new rule (check all that apply):

- ☐ Negotiated rule making
- ☐ Pilot rule making
- ☐ Agency study
- ☒ Other (describe) One of the main purposes of this rulemaking is to update existing hazardous waste requirements with newer federal rules. Since many of these are already in effect (and were developed as part of federal rulemaking), the process will consist primarily of making draft and proposed rule language available for review and comment. Input will be sought where Ecology may differ from the federal program. See attached.

(e) How interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication:
(List names, addresses, telephone, fax numbers of persons to contact; describe meetings, other exchanges of information, etc.)

To receive information on the rulemaking (availability of draft and proposed rules, hearing announcements, and opportunities for public involvement), or for more detailed information about the rulemaking content and process, contact: Patricia Hervieux at pher461@ecy.wa.gov or, you may call (360) 407-6756, write Attn: HWTR PO Box 47600 Olympia, WA 98504-7600, or FAX (360) 407-6715. Please submit comments on the options for recyclers and used oil processor to Jim Sachet at the same address or to jsac461@ecy.wa.gov For announcements throughout the rulemaking you may sign up for the DW Regulations list serve at http://listserv.wa.gov/archives/dw-rules.html

Visit Ecology's Rules Website at:

http://www.ecy.wa.gov/laws-rules/currentactivity.htm

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04-04-101

NAME (TYPE OR PRINT) Greg Sorlie	
SIGNATURE Greg Sorlie	
TITLE Program Manager	DATE 2/2/04

(d) Process for developing new rule continued

Ecology is also asking for comment at this time on options to implement the Hazardous Waste Facilities Initiative. Ecology is considering making amendments to the Dangerous Waste Regulations that affect hazardous waste treatment, storage, disposal and recycling facilities, and used oil processors that accept wastes from off-site. These amendments will not change the way in which on-site recycling and treatment are done by hazardous waste generators, or waste collection and handling facilities operated by local governments (e.g., household hazardous waste collection, used oil collection).

We are asking the public and potentially affected parties to provide Ecology with information and comment at this time on two options for rulemaking regarding these hazardous waste facilities. The options under consideration are:

Option 1: Applying traditional site specific requirements to hazardous waste recycling facilities and used oil processors. Currently, hazardous waste treatment, storage and disposal facilities must, among other things, provide the following:

- A closure plan that describes how buildings, structures and equipment that manage hazardous wastes will be closed in a safe and timely manner;
- Pollution legal liability (PLL) coverage to pay for claims by third parties that are damaged from a release of hazardous wastes; and,
- A cost estimate for closure and financial assurance to pay for waste removal, decontamination and clean up (financial assurance).

Recyclers and used oil processors have been exempted from these requirements. Option 1 would extend the requirements listed above to recycling facilities and used oil processors. This approach results in specific cost estimates for closure based on a full inventory of wastes, third party costs, and no resale value of wastes in process.

Option 2: Developing a more streamlined approach for off-site recycling facilities and used oil processors. Under this option, recyclers and used oil processors would be required to address the eventual closure of their operations by:

- Preparing a closure plan; and
- Providing a maximum of $50,000 in financial assurance. This amount could be lower if the facility owner or operator prepares a detailed closure cost estimate and justification for review and approval by Ecology.

This option would also consider deleting the requirement for pollution liability coverage for third party damages.

Ecology requests comments and input on the above options. Commenters are requested to respond to the following questions:

Q1. Do you have a preference for an option listed above? If so, which option and why?

Q2. Are there other options that Ecology should consider that will help assure safe and orderly closure of hazardous waste management facilities and that owners/operators pay for a significant portion of the cost of closure?

Q3. Are there factors other than closure plans, closure cost estimates, liability coverage, and financial mechanisms for assuring closure funding (e.g., bond, letter of credit, insurance) that Ecology should consider?

Q4. Would you be willing to pay slightly more (e.g., 5%) for waste treatment, disposal or recycling for greater assurance that the facility managing the waste would pay for waste removal and decontamination of its facility in the event of bankruptcy, sale, or closure?

Ecology is also requesting any information that generators or facilities have available on closure cost estimates for hazardous waste recycling or used oil processing operations.

Hervieux, Patricia R.

From: Dumar, Laurie
Sent: Wednesday, February 04, 2004 1:18 PM
To: ECOWACTRACK@listserv.wa.gov
Subject: Amendments to the Dangerous Waste Regulations

Department of Ecology's Laws and Rules Web Site - February 4, 2004

Rule-Making Pre-proposal

Chapter 173-303 WAC - Dangerous waste regulations
http://www.ecy.wa.gov/laws-rules/activity/wac173303.html

Rule Adoption Notification

Chapter 173-434 WAC - Solid Waste Incinerator Facilities
http://www.ecy.wa.gov/biblio/0402001.html

Recently Adopted Rule Text

Chapter 173-434 WAC - Solid Waste Incinerator Facilities
http://www.ecy.wa.gov/biblio/wac173434.html

Chapter 173-26 WAC - State Master Program Approval/Amendment Procedures
http://www.ecy.wa.gov/biblio/wac17326.html

Thank you for using WAC Track!
Have a great day!

Laurie Dumar
Washington State Department of Ecology
(360) 407-6606
ldum461@ecy.wa.gov

Hervieux, Patricia R.

From: Hervieux, Patricia R.
Sent: Tuesday, February 10, 2004 3:22 PM
To: DW-RULES@listserv.wa.gov
Cc: Hervieux, Patricia R.
Subject: Dangerous Waste Regulations to be amended

A rule-making pre-proposal has been filed announcing that the Dangerous Waste Regulations, chapter 173-303 WAC, will be amended to incorporate federal hazardous waste requirements and to update state requirements. Several federal hazardous waste regulations will be proposed for adoption, including adding mercury-containing devices to the universal waste rule, updating export requirements, adopting air emission permit rules, and amendments to corrective action rules. Amendments will also be made to some state-only requirements. Most of these are technical such as updating form names; however, changes are being considered to implement the Hazardous Waste Facilities Initiative to extend financial requirements to recyclers and used oil processors and re-refiners.

As part of this pre-proposal notice, we are asking for comments on options for extending financial requirements to recyclers and used oil processors and re-refiners. Information on the options and contact information for submitting comments can be found at the link below. Please submit comments on the options by March 5, 2004 so that the information can be used in developing rule language for formal proposal.

Draft rule language (not formal rule proposal) for the federal and other state requirements will be available in a few weeks. An announcement will be made on this list serve.

Rule-Making Pre-proposal
Chapter 173-303 WAC - Dangerous waste regulations
http://www.ecy.wa.gov/laws-rules/activity/wac173303.html

Chipper Hervieux
Hazardous Waste and Toxics Reduction Program
Department of Ecology
(360) 407-6756
pher461@ecy.wa.gov

Hervieux, Patricia R.

From: Hervieux, Patricia R.
Sent: Wednesday, March 10, 2004 2:52 PM
To: DW-RULES@listserv.wa.gov
Cc: Hervieux, Patricia R.
Subject: Draft Dangerous Waste Regulation Amendments

Draft rule amendments to the Dangerous Waste Regulations are available for review and comment. This is an informal draft, which will be followed in a few months by formal proposal and public hearings. Comments are due no later than April 2, 2004. The draft rule language and information on submitting comments is available at:

http://www.ecy.wa.gov/laws-rules/activity/wac173303.html

If you need a paper copy, please contact Dave Zink at (360) 407-6752 or dzin461@ecy.wa.gov

Chipper Hervieux
Hazardous Waste and Toxics Reduction Program
Department of Ecology
(360) 407-6756
pher461@ecy.wa.gov

PROPOSED RULE MAKING

CR-102 (June 2004)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

Agency: Department of Ecology A.O. 03-10

☒ **Preproposal Statement of Inquiry was filed as WSR** 04-04-101 ; **or**
☐ **Expedited Rule Making--Proposed notice was filed as WSR** _____; **or**
☐ **Proposal is exempt under RCW 34.05.310(4).**

☒ **Original Notice**
☐ **Supplemental Notice to WSR** _____
☐ **Continuance of WSR** _____

Title of rule and other identifying information: (Describe Subject) Dangerous Waste Regulations, chapter 173-303 WAC The Dangerous Waste Regulations set forth the requirements for determining if solid wastes are dangerous wastes, establish a system for tracking dangerous waste from initial generation to treatment or disposal, and establish requirements for facilities so that all dangerous wastes are managed safely and responsibly in Washington state.

Hearing location(s): Video conference hearings will be held simultaneously at the following locations: See attached.

Date: August 10, 2004 Time: 1 to 4 pm

Date of intended adoption: November 30, 2004
(Note: This is **NOT** the **effective** date)

Submit written comments to:
Name: Patricia Hervieux
Address: PO Box 47600 Olympia, WA 98504-7600

e-mail pher461@ecy.wa.gov
fax (360) 407-6715 by (date) September 10, 2004

Assistance for persons with disabilities: Contact Marnie Black by August 2, 2004

TTY (800) 833-8973 or (360) 407-6759

Purpose of the proposal and its anticipated effects, including any changes in existing rules:

The proposed amendments will bring the state regulations current with federal requirements, and will update other requirements including implementing the Hazardous Waste Facilities Initiative on recycling and used oil facilities.

Reasons supporting proposal: See attached.

Statutory authority for adoption: chapters 70.105, 70.105D, and 15.54 RCW

Statute being implemented: chapter 70.105 RCW

Is rule necessary because of a:

Federal Law?	☒ Yes	☐ No
Federal Court Decision?	☐ Yes	☒ No
State Court Decision?	☐ Yes	☒ No

If yes, CITATION:
40 CFR Parts 260 through 279

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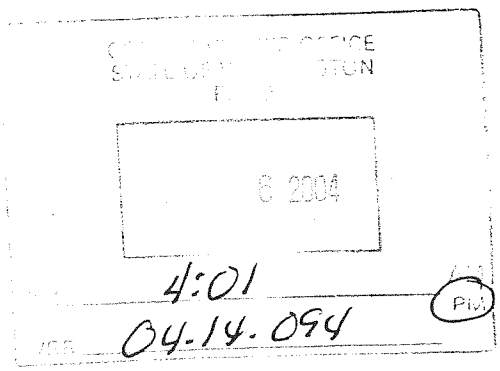


DATE 6/25/04

NAME (type or print)
Polly Zehm

SIGNATURE Polly Zehm

TITLE
Assistant Director

(COMPLETE REVERSE SIDE)

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:
N/A

Name of proponent: (person or organization) Department of Ecology

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting.....	Patricia Hervieux	Lacey, WA	(360-407-6756)
Implementation....	Darin Rice	Lacey, WA	(360-407-6702)
Enforcement.....	Darin Rice	Lacey, WA	(360-407-6702)

Has a small business economic impact statement been prepared under chapter 19.85 RCW?

☒ Yes. Attach copy of small business economic impact statement.

A copy of the statement may be obtained by contacting:
Name: Patricia Hervieux
Address: PO Box 47600 Olympia, WA 98504-7600

phone (360) 407-6756
fax (360) 407-6715
e-mail pher461@ecy.wa.gov

☐ No. Explain why no statement was prepared.

Is a cost-benefit analysis required under RCW 34.05.328?

☒ Yes A preliminary cost-benefit analysis may be obtained by contacting:
Name: Patricia Hervieux
Address: PO Box 47600 Olympia, WA 98504-7600

phone (360) 407-6756
fax (360) 407-6715
e-mail pher461@ecy.wa.gov

☐ No: Please explain:

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Focus on Proposed amendments to the *Dangerous Waste Regulations*

FROM ECOLOGY'S HAZARDOUS WASTE AND TOXICS REDUCTION PROGRAM

Submit comments on the proposed amendments to:
Chipper Hervieux
Dept of Ecology
Hazardous Waste & Toxics Reduction Program
PO Box 47600
Olympia, WA 98504-7600
E-mail: *pher461@ecy.wa.gov*
Fax: 360-407-6715

Submit comments on publication #97-407 to:
Alex Stone
Dept of Ecology
Hazardous Waste & Toxics Reduction Program – SWRO
PO Box 47775
Olympia, WA 98504-7775
E-mail: *alst461@ecy.wa.gov*
Fax: 360-407-6305

Comments on the proposed amendments and the changes to the Chemical Testing Methods publication are due by 5 p.m., September 10, 2004.

Proposed amendments to the *Dangerous Waste Regulations* (Washington Administrative Code, chapter 173-303) are available for public review and comment until September 10, 2004.

Most of the proposed changes are requirements the state Department of Ecology (Ecology) must adopt to remain current with the federal rules. Other changes update state requirements and make technical corrections.

A more significant change, which resulted from the Hazardous Waste Facilities Initiative, will extend financial-responsibility requirements to recycling and used-oil facilities. Highlights of the proposed rules are:

- Mercury-containing equipment will become "universal waste" with simpler handling requirements.
- "Knowledge," as used for waste designation, will be defined to help generators know when they can use knowledge instead of testing their waste.
- Ecology's publication, *Chemical Testing Methods for Designating Dangerous Wastes,* (#97-407) is being updated for clarity on persistence testing.
- Financial-responsibility requirements will be extended to recyclers and used oil processors.
- Some wastewater-treatment unit operators will be able to accept more wastes from off-site for treatment at their facility.
- Used oil testing requirements are being modified to make it easier for Ecology to request a chlorinated-compounds test instead of requiring full-designation testing.
- The rule will clarify that conditionally exempt small-quantity-generator used oil that is to be burned for energy recovery or re-refined must be managed under the used oil management standards in WAC 173-303-515.
- New corrective action management unit (CAMU) requirements, including the provision that allows "CAMU-eligible" waste to be managed off-site, will be adopted.
- SIC (U.S. Standard Industrial Classification) codes are being changed to NAICS (North American Industry Classification System) codes.
- References to the Uniform Fire Code are being changed to the International Fire Code.

- Spill reporting for tanks will be changed so it is consistent with spill-reporting requirements for all dangerous wastes.
- The "once listed, always listed" rule will change and some listed-waste residues that no longer exhibit the characteristic for which they were listed may be exempt.
- Performance Track facilities will be allowed longer accumulation times.

A draft revision of the *Chemical Testing Methods for Designating Dangerous Wastes*, publication #97-407 is available for review at *http://www.ecy.wa.gov/laws-rules/activity/wac173303.html* or contact Alex Stone at 360-407-6305, or by e-mail at *alst461@ecy.wa.gov*, or Leatta Dahlhoff at 425-649-7281, or by e-mail at *leda@ecy.wa.gov*.

State Environmental Policy Act and Economic Analysis
A State Environmental Policy Act (SEPA) checklist was prepared for these regulation amendments and a determination of non-significance was issued on July 7, 2004. A small business economic impact statement was prepared and filed with the rule proposal, and cost benefit analysis was drafted. The cost benefit analysis will be finalized prior to adoption. Comments are welcome on the cost benefit analysis and may be sent to Chipper Hervieux. Copies are available with other rule information on the Web site or paper copies are available from Dave Zink at 360-407-6752, or e-mail him (*dzin461@ecy.wa.gov*).

Public Involvement
Your comments on the proposed rule amendments are welcome and will be considered before adoption. Adoption is scheduled for Nov. 30, 2004. You may submit written comments or attend a public hearing.

For a copy of the proposed amendments to the *Dangerous Waste Regulations*, go to *http://www.ecy.wa.gov/laws-rules/activity/wac173303.html* or call Dave Zink at 360-407-6752 for a paper copy. For more information about the proposed rules, contact Chipper Hervieux at 360-407-6756 or by e-mail at *pher461@ecy.wa.gov*.

A public hearing will be held by simultaneous video conference on Tuesday, August 10, 2004 from 1-4 p.m. You can participate at any of the following locations:

- **University of Washington, Tacoma**
  Administration Building, Room BHS107, 1900 Commerce Street, Tacoma, WA 98402-3100. First floor above street-level businesses (Starbucks).

- **University of Washington, Seattle**
  Magnuson Health Sciences Center, Computing and Communications, UWTR T-Wing, Room 239. Second floor, near the Health Sciences Center Library. NE Pacific Street near 15th Avenue, Seattle, WA 98195-7150.

- **Spokane Community College**
  1810 North Greene Street, Spokane, WA 99207-5399, in the Instructional Media Laboratory

- **Yakima Valley Community College**
  16th Street and Nob Hill Boulevard, Yakima, WA 98907

If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at (360) 407-6700. If you are a person with a speech or hearing impairment, call 711, or (800) 833-6388 for TTY.

Hervieux, Patricia R.

From: Dumar, Laurie
Sent: Wednesday, July 07, 2004 1:15 PM
To: ECOWACTRACK@listserv.wa.gov
Subject: Department of Ecology - Proposed amendments to Chapter 173-303 WA C - Dangerous Waste Regulations and Public Review of the Revised Sand and Gravel Permit

Department of Ecology's Laws and Rules Web site - July 7, 2004

Proposed amendments to Chapter 173-303 WAC - Dangerous Waste Regulations

The Dangerous Waste Regulations will be amended to incorporate several federal hazardous waste regulations, including adding mercury-containing devices to the universal waste rule, updating export requirements, adopting air emission permit rules, and amendments to corrective action rules. Changes to state-only requirements are primarily technical in nature; however, changes are being considered to implement the Hazardous Waste Facilities Initiative to extend financial requirements to recyclers and used oil processors and re-refiners.
http://www.ecy.wa.gov/laws-rules/activity/2004/wac173303.html

Public Workshops and Hearings to Accept Comments on the Revised Sand and Gravel General Permit
http://slc.leg.wa.gov/wsr/2004/13/04-13-178.htm
http://www.ecy.wa.gov/programs/wq/sand/index.html

Ecology's Rule-making Agenda for July 2004 through December 2004
http://www.ecy.wa.gov/laws-rules/misc/wsr0414095.pdf

Thank you for using WAC Track!

Have a great day!

Laurie Dumar
Washington State Department of Ecology
(360) 407-6606
ldum461@ecy.wa.gov

Hervieux, Patricia R.

From: Hervieux, Patricia R.
Sent: Tuesday, July 13, 2004 1:35 PM
To: DW-RULES@listserv.wa.gov
Cc: Hervieux, Patricia R.
Subject: Proposed Amendments to the Dangerous Waste Regulations

Proposed amendments to Chapter 173-303 WAC - Dangerous Waste Regulations

Amendments are being proposed to the Dangerous Waste Regulations to incorporate several federal hazardous waste regulations, including adding mercury-containing devices to the universal waste rule, updating export requirements, adopting air emission permit rules, and amendments to corrective action rules. Changes to state-only requirements are primarily technical in nature; however, changes are being considered to implement the Hazardous Waste Facilities Initiative to extend financial requirements to recyclers and used oil processors and re-refiners. Detailed information is available at the following website.

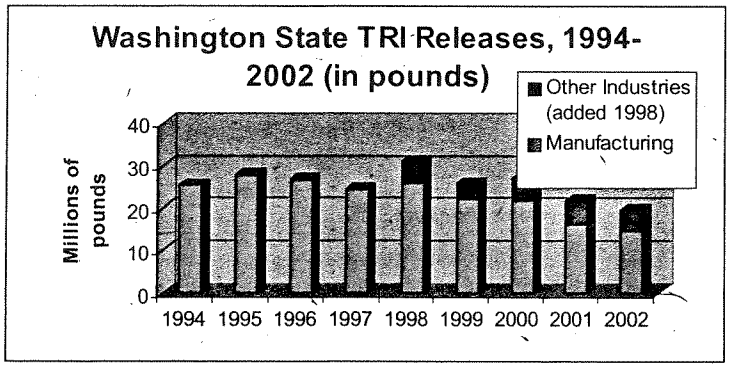
http://www.ecy.wa.gov/laws-rules/activity/2004/wac173303.html

TRI Reports Show Toxic Releases Continue to Decline

The *Chemicals in Washington State Summary Report 2002* (Ecology publication #04-04-020) is now available. The data in the report shows a continuing decrease in the amount of toxic chemicals reported released by the 323 industrial facilities in Washington that are required to file the federal Toxics Release Inventory report. In the year 2002, 19.8 million pounds of toxic chemicals were reported released to the air, land and water in the state. This was a decrease of 2.5 million pounds from 2001. Since 1994, total releases of all reported chemicals by manufacturing sectors decreased by over 42%. (See following chart.)

Of the 323 facilities filing TRI reports in Washington, 126 reported decreases for 2002 as compared to 2001. Eighty-four facilities showed increases from 2001 to 2002. The remainder either showed no change or did not report in 2001.

The *Chemicals in Washington State Summary Report 2002* also summarizes the information filed under Section 312 of the federal Emergency Planning and Community Right-to-Know Act. Section 312, also known as the Tier Two - Emergency and Hazardous Chemical Inventory report, covers hazardous chemicals that are stored statewide.



Facilities that are required to file the federal Toxics Release Inventory (TRI) report are those that meet certain criteria for number of employees, industry category and use of listed chemicals. A report must be filed for each of over 650 toxic chemicals or chemical categories used in amounts above threshold quantities.

A facility may show changes in its annual reported amounts for a variety of reasons. Washington TRI reporters are required to develop pollution prevention plans. In many cases, implementing pollution prevention options result in a decrease in releases. Changes in measurements of releases at a facility or changes in methods for estimating releases may result in changes. Economic factors, such as those affecting the aluminum industry, may also impact releases.

The report is available at (*http://www.ecy.wa.gov/biblio/0404020.html*). A printed copy can be requested by calling 1-800-633-7585. Also available through this number is the Toxics Release Inventory Display System or TRIDS. TRIDS is an educational graphic display of the TRI data by facility and chemical produced, supported by a grant from EPA. TRIDS is preloaded with Washington's data, but data for any state can be downloaded from EPA's Web site (*http://www.epa.gov/tri/*)

Upcoming Changes to the *DW Regulations*

Proposed amendments to the *Dangerous Waste Regulations* are available for public review and comment through September 10. Most of the changes are federal requirements that Ecology must adopt to remain current with the federal rules. Other changes update state requirements and make technical corrections. Highlights include:

- ✓ Mercury-containing equipment will become "universal waste" with simpler handling requirements.
- ✓ "Knowledge" as used for waste designation will be defined to help generators know when they can use knowledge instead of testing their waste.
- ✓ Financial responsibility requirements will be extended to recyclers and used oil processors.
- ✓ *Chemical Testing Methods* is being modified to clarify when persistent wastes designate as dangerous wastes.
- ✓ Some wastewater treatment unit ("PBR" units) operators will be able to accept more off-site wastes for treatment at their facility.
- ✓ Used oil testing requirements are being modified to make it easier for Ecology to request a chlorinated compounds test instead of requiring full designation testing.
- ✓ The rule will clarify that used oil generated by conditionally exempt small quantity generators that is to be burned for energy recovery or re-refined must be managed under the used oil rules in WAC 173-303-515.
- ✓ New corrective action management unit (CAMU) requirements, including the provision that allows "CAMU-eligible" waste to be managed off-site, will be adopted.
- ✓ SIC codes are being changed to NAICS codes.
- ✓ The "once listed, always listed" rule will change, and some listed waste residues that no longer exhibit the characteristic for which they were listed may be exempt after proper treatment.

For a copy of the proposal go to *http://www.ecy.wa.gov/laws-rules/activity/wac173303.html* or call Dave Zink at (360) 407-6752 for a paper copy. For more information about the proposed rule changes, contact Chipper Hervieux at (360) 407-6756 or *pher461@ecy.wa.gov* Comments on the proposed amendments are due on September 10, 2004.

Shoptalk

PROPOSED RULE MAKING

CR-102 (June 2004)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

Agency: Department of Ecology A.O. 03-10

☒ **Preproposal Statement of Inquiry was filed as WSR** 04-04-101 ; **or**
☐ **Expedited Rule Making--Proposed notice was filed as WSR** _____; **or**
☐ **Proposal is exempt under RCW 34.05.310(4).**

☐ **Original Notice**
☐ **Supplemental Notice to WSR** _____
☒ **Continuance of WSR** 04-14-94

Title of rule and other identifying information: (Describe Subject) Dangerous Waste Regulations, chapter 173-303 WAC

Hearing location(s):

Date: _____ Time: _____

Submit written comments to:
Name: Patricia Hervieux
Address: PO Box 47600 Olympia, WA 98504-7600

e-mail pher461@ecy.wa.gov
fax (360) 407-6715 by (date) September 24, 2004

Assistance for persons with disabilities: Contact Marnie Black by September 21, 2004
TTY (800) 833-8973 or (360) 407-6759

Date of intended adoption: November 30, 2004
(Note: This is **NOT** the **effective** date)

Purpose of the proposal and its anticipated effects, including any changes in existing rules:

Ecology is extending the public comment period for the proposed amendments due to comments received and requests for additional time to submit comments.

Reasons supporting proposal:

Statutory authority for adoption: chapters 70.105, 70.105D, and 15.54 RCW

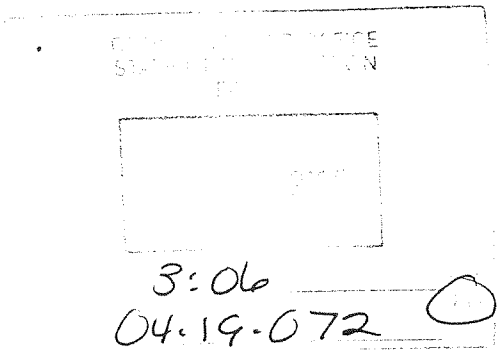
Statute being implemented: chapter 70.105 RCW

Is rule necessary because of a:

Federal Law?	☒ Yes	☐ No
Federal Court Decision?	☐ Yes	☐ No
State Court Decision?	☐ Yes	☐ No

If yes, CITATION:
40 CFR Parts 260 through 279

CODE REVISER USE ONLY



3:06
04-19-072

DATE 9/15/04

NAME (type or print)
Polly Zehm

SIGNATURE Polly Zehm

TITLE
~~Assistant~~ Director
Deputy

(COMPLETE REVERSE SIDE)

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:

Name of proponent: (person or organization) Department of Ecology

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting.....	Patricia Hervieux	Lacey, WA	(360-407-6756)
Implementation....	Darin Rice	Lacey, WA	(360-407-6702)
Enforcement.....	Darin Rice	Lacey, WA	(360-407-6702)

Has a small business economic impact statement been prepared under chapter 19.85 RCW?

☐ Yes. Attach copy of small business economic impact statement.

A copy of the statement may be obtained by contacting:
Name:
Address:

phone
fax
e-mail

☐ No. Explain why no statement was prepared.

Is a cost-benefit analysis required under RCW 34.05.328?

☐ Yes A preliminary cost-benefit analysis may be obtained by contacting:
Name:
Address:

phone
fax
e-mail

☐ No: Please explain:

Hervieux, Patricia R.

From: Hervieux, Patricia R.
Sent: Thursday, September 16, 2004 5:31 PM
To: DW-RULES@listserv.wa.gov
Cc: Hervieux, Patricia R.
Subject: Public Comment Opportunity Extended for Dangerous Waste Regulation Proposed Amendments

A continuation was filed to extend the public comment period on proposed amendments to the Dangerous Waste Regulations, chapter 173-303 WAC, until September 24, 2004 based on the number of requests and on comments received thus far. For information on the proposal, submitting comments, or to see the continuance, go to: http://www.ecy.wa.gov/laws-rules/activity/2004/wac173303.html

Chipper Hervieux
Hazardous Waste and Toxics Reduction Program
Department of Ecology
(360) 407-6756

Hervieux, Patricia R.

From: Dumar, Laurie
Sent: Friday, September 17, 2004 9:36 AM
To: ECOWACTRACK@listserv.wa.gov
Subject: Department of Ecology - Extended Comment Period for the Dangerous Waste Regulation

Department of Ecology - Laws and Rules Web Site - September 17, 2004.

Extended Comment Period:

Proposed rule making continuance for Chapter 173-303 WAC, Dangerous Waste Regulation
http://www.ecy.wa.gov/laws-rules/activity/2004/wac173303.html

Public Hearing Notice:

Public hearing notice for state implementation plan for Wallula PM10 nonattainment area
http://www.ecy.wa.gov/laws-rules/misc/wsr0419056.pdf

Thank you for using WAC Track!
Have a good day!

Laurie Dumar
Washington State Department of Ecology
(360) 407-6606
ldum461@ecy.wa.gov