



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# **Cost Benefit & Least Burdensome Analyses**

Chapter 173-303 WAC

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*Dangerous Waste Regulations*

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# **Cost Benefit And Least Burdensome Analyses**

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Chapter 173-303 WAC

*Dangerous Waste Regulations*

Hazardous Waste and Toxics Reduction Program  
Washington State Department of Ecology  
Olympia, Washington 98504-7710



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## Introduction

The Washington State Department of Ecology (Ecology) is amending Chapter 173-303 WAC, *Dangerous Waste Regulations*. The Administrative Procedures Act (RCW 34.05.328(d)(e)) requires two types of analyses before adopting a significant legislative rule – a cost-benefit analysis and a least burdensome alternative analysis. This report provides the results of these analyses and shows the potential impacts associated with the adopted rule.

The dangerous waste rule targets a wide variety of wastes that can damage human health and the environment in the event of exposure. Wastes are classified as either ignitable, corrosive, reactive or toxic. Reducing the potential for exposure and damage is a primary reason for the regulation.

RCW 34.05.328 requires Ecology to review the rule amendments to determine whether the probable benefits are greater than the probable costs and that the version adopted is the least burdensome for those who are required to comply.

Based on quantitative and qualitative data, Ecology determines that the probable benefits of the adopted rule are greater than the probable costs. Ecology also determines that the rule being adopted is the least burdensome version of the rule.

## Background

Ecology amended the dangerous waste rules in 2004 to incorporate the federal Environmental Protection Agency's (EPA) hazardous waste requirements into the state's rules. Doing so kept the rule current with the federal program and the regulated community can primarily work with one environmental agency. Other purposes of the 2004 amendments included:

- Implementing recommendations of the Hazardous Waste Facilities Initiative.
- Adding mercury-containing devices to the universal waste rule.
- Updating export requirements.
- Adopting air emission permit rules.
- Updating corrective action rules.

Changes to state-only requirements were primarily technical in nature; however, implementing the Hazardous Waste Facilities Initiative to extend financial requirements to recyclers and used oil processors did impact those who had to comply.

## **Purpose of This Rule Adoption**

The adopted 2009 amendments to the dangerous waste rules will incorporate several federal hazardous waste rules and state-only requirements, including:

- Updating manifest requirements (federal).
- Updates to the biological and chemical testing methods (state-only).
- Merging universal waste rules for mercury-containing devices and mercury thermostats (federal).
- Incorporating some of the Environmental Protection Agency's (EPA) Burden Reduction Initiative rule (federal).
- Deleting the exemption from closure and financial responsibility for chlorofluorocarbon (CFC) recyclers (federal).

## **Comparison of the Current and Adopted Rules**

### **Current rule requirements**

The dangerous waste rules include waste management standards for generators of hazardous waste and for facilities that treat, store, dispose, or recycle those wastes. The rules combine federal and state requirements. Washington is authorized by EPA to implement the federal hazardous waste program. This means the state rule must be consistent with and no less stringent than the federal rules. In some areas, the existing state rules are more stringent than the federal rules. This is necessary for safer waste management, better environmental protection, and moving wastes up the waste management hierarchy- for example, to encourage recycling.

Requirements in the dangerous waste rules include:

- Identifying wastes that are dangerous or hazardous.
- Time limits before wastes must be moved off-site.
- Storage and accumulation standards.
- Recycler and used oil facility requirements.
- Facility permit standards.

### **Description of adopted changes**

Ecology is amending the dangerous waste rules by adding several federal hazardous waste rules. Some of these federal rules, such as the manifest rule, are already in effect in Washington State and were developed as part of federal rule making.

The adopted federal requirements include:

- New manifest requirements; a federal requirement that will also apply to generators of state wastes.
- Coordinated air emission permitting and hazardous waste permitting; a federal requirement, incinerator permitting has been streamlined.
- Combined universal waste rules for mercury-containing devices and mercury thermostats.
- Portions of EPA's Burden Reduction Initiative rules; these federal rule changes are mostly exempt. There is a simplified process for generators needing to do contingency plans. Also, facilities are offered alternatives to Appendix IX sampling.
- Surface impoundments and landfills who actively manage waste are required to submit information on the potential for public exposure to dangerous wastes or dangerous constituents through releases related to the unit.
- Extensive minor corrections throughout the regulation.

Changes to state-initiated requirements consist mainly of technical and editorial corrections and clarifications. Like the existing rules, the adopted state rules are more stringent in some areas than the federal rules. Other changes include:

- Updated chemical and biological testing methods for state wastes.
- No longer exempting CFC recyclers from closure and financial responsibility.
- Used oil processors and recyclers have a new financial assurance option.
- Amended permit pre-application requirements, to include:
  - Clarifying that "twenty-five percent facility expansion" means "storage design capacity." The current regulation refers to "process design capacity."
  - Clarifying that "a significant expansion" is a single or cumulative increase of greater than twenty-five percent of the storage design capacity as described in the facility's original Part A permit application or of the storage capacity approved for the previous significant expansion.
  - Deleting obsolete language that exempted two recycling facilities from siting criteria when the original rule was written, and exempting recycling facilities needing a storage permit from siting criteria and Citizen/proponent negotiations (CPN) if they meet strict limitations.
  - Exempt certain existing facilities applying for a significant expansion from Citizen/proponent negotiations.

## Scope of Analysis

The following changes under the adopted rule will be analyzed relative to the baseline. Adopted federal requirements are exempt from analysis when the rule change solely impacts generators of federal hazardous waste and therefore will not be analyzed here. If the federal rule impacts those generators and waste management facilities that have federal and state wastes, an analysis may be needed.

In addition, the portions of EPA's Burden Reduction Initiative that Ecology chose not to adopt will not be analyzed here as Ecology is not required to analyze existing requirements, or requirements we declined to adopt. For explanations of each aspect of the Burden Reduction Initiative and why it will not be adopted see Appendix 4.

The adopted federal requirements include:

- New manifest requirements, but it is determined there is no cost impact and no analysis is needed.
- Coordinated air emission permitting and hazardous waste permitting; there is a qualitative cost savings due to streamlining.
- Combined universal waste rules for mercury-containing devices and mercury thermostats; a federal exempt requirement so no analysis is needed.
- Portions of EPA's Burden Reduction Initiative rules; these federal rule changes are mostly exempt. There will be qualitative savings from simplifying requirements.
- Surface impoundments and landfills must submit information on the potential for public exposure; possible costs may be incurred by at least one facility and are analyzed.

The adopted changes to state-only requirements consist mainly of technical and editorial corrections and clarifications. Other changes include:

- Updated chemical and biological testing methods for state wastes. A cost savings analysis will be done on biological testing methods but not on chemical testing methods. A new chemical test method has been added as an optional non-mandatory test. A cost savings analysis is not needed because the test is not mandatory. The new method may have potential future cost savings dependent on its further development.
- CFC recyclers are required to have closure and financial responsibility. Costs are incurred by recyclers and the savings to taxpayers and industries are analyzed.
- New financial assurance options for used oil processors and recyclers are analyzed as a cost savings.

- Amended permit pre-application requirements that exempt recycling facilities needing a storage permit from siting criteria and citizen/proponent negotiations, if they meet strict limitations. Cost savings are associated with this change and analyzed.

## Baseline for Analysis

The baseline for this analysis is the existing dangerous waste rules, last updated in 2004. These 2004 updates include federal hazardous waste requirements, new federal requirements developed since then, and updated state requirements.

The *Dangerous Waste Regulations* combine federal and state requirements for waste management standards. Waste management standards apply to generators of hazardous waste and to the permitted facilities that take these wastes for treatment, recycling or disposal. The rules require generators and facilities to identify wastes that are dangerous or hazardous and follow waste storage and accumulation standards. Standards are in place for recyclers and used oil facilities, and for facilities needing Resource Conservation Recovery Act (RCRA) permits.

Dangerous wastes are transported by approved transporters on hazardous waste manifests, a system which ensures proper waste tracking from cradle to grave.

## Analysis of Costs & Benefits

### Costs

**Exposure Information:** Ecology is adopting a federal requirement that also applies to facilities taking state-only waste. The adopted amendment will require any facility that stores, treats or disposes dangerous waste in a surface impoundment or landfill to provide information on the potential for public exposure to the dangerous wastes or dangerous elements through releases from the facility.

Only two facilities in Washington have active landfills. One already requires this type of information with their permit applications. Therefore, there are no costs associated with this facility.

The other landfill is reaching capacity and will close in the next couple of years. Therefore, it is unlikely this facility will have to meet this requirement. However, if they do, they will likely conduct a risk assessment to make the required determinations and their consulting firm has

estimated this assessment at \$100,000<sup>1</sup>. Therefore, to be conservative, Ecology has estimated this requirement at \$100,000.

**CFC Closure and Financial Responsibility:** Ecology removed the exemption for CFC recyclers from closure and financial responsibility. There is only one CFC recycler in Washington. We estimate this facility will need to provide Ecology with a financial assurance guarantee of about \$17,500 and pay 2.5 percent a year for the new requirement. This will cost them \$438 annually. However, the worst-case scenario is the recycler will have to guarantee \$43,000 and pay 4 percent per year, which will cost \$1,700 annually.<sup>2</sup> Again, to be conservative, Ecology estimates this requirement at \$1,700 a year.

**Manifesting:** EPA and the federal Department of Transportation created a new hazardous waste manifest form that all generators are required to use. States are required to adopt the manifest rule to ensure all states are manifesting federal and state-only waste consistently. This is only a change in manifest requirements and will not change the amount of time needed to fill out the form. This change imposes no costs.

## **Benefits and Cost Savings**

**Biological Testing Methods:** Ecology is eliminating the “percentage solid determinations” for generators submitting waste for bioassay testing. Currently, Ecology’s toxicity bioassay method requires each sample to undergo a percent solid determination. This value is reported in the final data summary. The original intent of this requirement was to adjust the sample amount used in the test, based on water content. Because of technical problems, the percentage moisture is never used in the method and the method cannot be defensively changed to include it. This adopted amendment affects nine facilities currently certified by Ecology to conduct this method, but only one does its own sample and does not run customers’ samples. Ecology conducted a survey of the remaining eight facilities to calculate their savings, which will be primarily from the employee time-costs.

On average, facilities use drying ovens to conduct these tests less than three percent of the time and therefore save very little in drying oven costs and maintenance. It costs an average of \$950 to conduct a fish bioassay, but only \$41 is related to the “percentage solid determination” and only 25 tests are being conducted a year. This will save generators a total of \$1,000. The main savings is employee time for labs not having to run the test. We estimate this savings at about one hour per week. A clinical laboratory technologist makes about

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<sup>1</sup> E-mail, April 30, 2008, Anchor Environmental L.L.C. “If the interim status is terminated, the... (rough estimate) answer is they would need to perform a risk assessment and that might cost around \$100,000.”

<sup>2</sup> See Appendix 2 for financial assurance calculations.

\$24/hour<sup>3</sup> creating a total savings of \$8,700 for all facilities. Therefore, eliminating this requirement will create a total cost savings for generators and labs of \$10,000 a year.

**Siting Criteria:** Ecology is adopting that recycling facilities that need a waste storage permit to support recycling will be exempt from siting criteria and citizen/proponent negotiations (CPN). If the facility is doing any waste treatment, they will lose the exemption. In general, this exemption applies to relatively simple operations that manage a few limited waste streams. Part of CPN is mandatory for non-exempt facilities. A minimum level of public notice and meetings are required. Ecology estimates the initial cost is \$1,000. CPN can end there and usually does. However, if CPN continues after the first public meeting, the local government can apply for a grant from Ecology for up to \$50,000 to cover the cost. If the process needs more funding, the local government can apply to renew the grant for another \$50,000. Therefore, the cost can range from \$1,000 to \$100,000.

It is hard to know how many facilities this will affect, since each recycling facility will make a business decision as to whether they want a storage permit or not. Ecology estimates in the near future no more than three facilities will use this and over the long term about ten facilities. Using the low range estimate of \$1,000, this creates a total savings of about \$3,000 in the first year and at least \$10,000 over time.

**New Financial Instrument:** This adopted amendment adds another financial assurance option for used oil processors and recyclers. They may use assigned security deposits held in a Washington State bank. There are no fees and can only be accessed if Ecology gives permission. Fifteen smaller facilities are expected to be affected. Their closure plan estimates range from \$10,000-\$50,000. This benefits facilities with bad credit or similar situations. This will be an average savings of \$200-\$400 per facility per year for a total of about \$4,500.

**CFC Closure and Financial Responsibility:** Ecology is removing the exemption for CFC recyclers from closure and financial responsibility. Closure and financial responsibility ensures that businesses don't abandon a contaminated site and leave taxpayers with the cleanup costs. Based on the "worst-case" and "most likely" case scenarios and the likelihood that the facility will go bankrupt, the requirement of CFC facilities having financial assurance would save the state an estimated \$450<sup>4</sup> a year. Additional cost savings are realized through avoidance of administrative costs related to closure.

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<sup>3</sup> Bureau of Labor Statistics- [www.bls.gov/oco/ocos096.htm](http://www.bls.gov/oco/ocos096.htm)

<sup>4</sup> Cost to the State = ("Worst case" cost estimate) x (50% chance of occurrence) x (probability of facility bankruptcy) + ("Most likely" cost estimate) x (50% chance of occurrence) x (probability of facility bankruptcy) = (42,722.45) x (.5) x (.015) + (17,453.39) x (.5) x (.015) = **\$451.32**

The Tacoma Cleancare site is a good example of this. This site was orphaned and to date Ecology has spent \$350,000<sup>5</sup> over ten years. EPA absorbed most costs and spent \$4.3 million<sup>6</sup> in the first year to close out the site. An orphan site is the worst-case scenario, but the main motivator for requiring financial assurance. Therefore, the total potential 20-year present value cost savings for industry taxpayers for this requirement is \$4,600,000. Using the average real rate on treasury bills of 1.88 percent, this will be an annual savings of \$280,000 a year.

## Qualitative Cost Savings

**Incinerator Permitting:** This adopted requirement gives Ecology and facilities more options on how to permit a dangerous waste incinerator by streamlining the permitting process. If a facility gets a Maximum Achievable Control Technology (MACT) air permit, the dangerous waste program will still issue a separate permit to address waste issues, but will not need to write the part of the permit that covers air issues already covered by the MACT permit. This is a cost savings because it reduces duplication and the administrative process for the part of the permit that is already covered by a different set of regulations (air program).

**Contingency Plan:** Ecology is allowing owners and operators to develop one contingency plan that meets all regulatory requirements for use in emergencies or sudden or nonsudden releases, which threaten human health or the environment. Ecology suggests the plan be based on the National Response Team's Integrated Contingency Plan Guidance<sup>7</sup>, which can be found online. This creates a cost savings by allowing facilities to consolidate requirements for contingency planning from different programs into one plan.

**Burden Reduction:** Ecology is adopting another option for facilities that have to conduct Appendix IX Sampling. Appendix IX is a groundwater monitoring list created by EPA for large Treatment, Storage and Disposal facilities (TSDs). Facilities may consult with Ecology on a case-by-case basis for more specific and less expensive sampling. The analysis of one Appendix IX groundwater sample is \$2,400.

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Bankruptcy rate comes from ([www.usatoday.com/money/smallbusiness/columnist/abrams/2004-05-06-success\\_x.htm](http://www.usatoday.com/money/smallbusiness/columnist/abrams/2004-05-06-success_x.htm)) where it says that 2-3% of businesses older than 5 years go under every year. Based on the above article and the growth and longevity of this business, Ecology estimated a bankruptcy rate for them of 1.5%.

<sup>5</sup> From 8/1/98 – 9/30/08 Ecology has spent a total of \$350,050.89: \$234,327.87 in staff charges, \$113,717.66 in goods and services, \$1,987.00 in lab costs and \$18.36 in travel.

<sup>6</sup> EPA Superfund Fact Sheet Tacoma, WA CleanCare-

[http://yosemite.epa.gov/R10/CLEANUP.NSF/9f3c21896330b4898825687b007a0f33/41acf49d06cb975a88256856005e40f2/\\$FILE/1100cleancare+Final.pdf](http://yosemite.epa.gov/R10/CLEANUP.NSF/9f3c21896330b4898825687b007a0f33/41acf49d06cb975a88256856005e40f2/$FILE/1100cleancare+Final.pdf)

<sup>7</sup> [www.nrt.org/Production/NRT/NRTWeb.nsf/AllAttachmentsByTitle/A-26IntegratedContingencyPlan\(ICPorOnePlan\)Guidance/\\$File/NRT%20ICPG.pdf?OpenElement](http://www.nrt.org/Production/NRT/NRTWeb.nsf/AllAttachmentsByTitle/A-26IntegratedContingencyPlan(ICPorOnePlan)Guidance/$File/NRT%20ICPG.pdf?OpenElement)

**Additional Toxicity Data Sources:** The adopted rule identifies the use of two new data sources generators can use to identify dangerous waste in their waste stream:

- ECOTOXicology database (ECOTOX).
- Hazardous Substance Data Bank (HSDB).

The current data source used by most generators is the Registry of Toxic Effects of Chemical Substances (RTECS), which has a major limitation in that it does not include any data on aquatic toxicity. In the past, generators have designated their waste using RTECS only to find the waste would not have designated if fish toxicity had been used.

ECOTOX has extensive aquatic toxicity along with much of the same information as RTECS. HSDB has both types of toxicity, although not in as much detail. Also, ECOTOX and HSDB are free, so allowing these data sources means that generators don't have to pay for access to RTECS and they can access both over the Internet.

There are 4,356 generators who either have or should have registered a Site Identification number with Ecology in 2006. Ten percent of these have to do state-only evaluation and half of those currently need to pay for RTECS. On average RTECS costs about \$600 a year.<sup>8</sup> Ecology realizes that some generators may continue subscribing to RTECS and therefore we cannot estimate the exact savings that will be realized.

In addition to increased cost savings, this inclusion will result in better waste management. Generators, who in the past were not able to pay for RTECS, especially small businesses, most likely did not designate their waste for state-only criteria. These free services will lead to less dangerous waste being inappropriately disposed of.

## Health Costs

Health effects from potential chemical exposure depend on the chemical and nature of the exposure. The Agency for Toxic Substances and Disease Registry (ATSDR)<sup>9</sup> developed a list of priority health conditions to evaluate potential health risks. This list gives an idea of the

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<sup>8</sup> Ecology looked at 5 other sources for costs of RTECS subscriptions, in addition to what Ecology pays for RTECS. Ecology- Email, August 29, 2007, "RTECS costs Ecology \$500 per year but that is for 5 links, i.e. 5 people from Ecology could access RTECS simultaneously, one from each region and HQ... [therefore we estimate to] pay for RTECS at a conservative cost of \$100."

ECIS- [www.nisc.com/cis/RTECS\\_Analysis\\_June\\_2007.pdf](http://www.nisc.com/cis/RTECS_Analysis_June_2007.pdf)

Symyx- [www.mdl.com/products/pdfs/rtecs\\_orderform.pdf](http://www.mdl.com/products/pdfs/rtecs_orderform.pdf)

CCOHS- [www.ccohs.ca/products/rtecs/](http://www.ccohs.ca/products/rtecs/)

CAS- [www.cas.org/ASSETS/9EDAD1B59C9442F6AFE411322726DEE0/stnprice.pdf](http://www.cas.org/ASSETS/9EDAD1B59C9442F6AFE411322726DEE0/stnprice.pdf)

NISC- Email, April 24, 2008, NISC, "Our pricing starts with single user on a network. Single Site Access- Single concurrent user (one user at a time access): US\$480.00 [www.nisc.com](http://www.nisc.com)

<sup>9</sup> [www.atsdr.cdc.gov/mrls/compendium\\_of\\_papers\\_on\\_mrls\\_and\\_health\\_effects.html](http://www.atsdr.cdc.gov/mrls/compendium_of_papers_on_mrls_and_health_effects.html)

affects on human health that Ecology is working to avoid, as well as some of the associated costs; not all effects have estimates. Many of the following health costs reported in this analysis are from the EPA Cost of Illness Handbook<sup>10</sup>. The Handbook gives inflation data based on the Consumer Price Index Medical Care Services and the costs reported here are in 2007 dollars. The health conditions that ATSDR identifies include:

- Birth defects and reproductive disorders
- Cancer
- Immune function disorders
- Kidney dysfunction
- Liver dysfunction
- Lung and respiratory diseases
- Neurotoxic disorders

**Birth defects and reproductive disorders:**

The EPA Cost of Illness Handbook estimates lifetime costs for seven of these disorders:

| <b>Disorder</b>      | <b>Estimated Lifetime Cost</b> |
|----------------------|--------------------------------|
| Low birth weight     | \$128,000 to \$550,000         |
| Cleft palate         | \$35,000 to \$40,000           |
| Upper limb reduction | \$48,000 to \$57,000           |
| Lower limb reduction | \$76,000 to \$106,000          |
| Heart defects        | \$180,000 to \$600,000         |
| Spina bifida         | \$321,000 to \$420,000         |
| Cerebral palsy       | \$1.1 million                  |
| Down syndrome        | \$1.2 million                  |

**Cancers:**

The EPA Cost of Illness Handbook identifies and lists lifetime medical costs for different types of cancers:

| <b>Type of Cancer</b> | <b>Estimated Lifetime Cost</b> |
|-----------------------|--------------------------------|
| Cancers covered       | Average \$131,000              |
| Lung cancer           | \$81,000 to \$170,000          |
| Kidney cancer         | \$71,000 to \$155,000          |
| Stomach cancer        | \$89,000 to \$163,000          |
| Colorectal cancer     | \$165,000 to \$224,000         |
| Bladder cancer        | \$171,000 to \$249,000         |

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<sup>10</sup> [www.epa.gov/oppt/coi/pubs/toc.html](http://www.epa.gov/oppt/coi/pubs/toc.html)

**Kidney Dysfunction:**

Renal failure extensive enough to cause a need for dialysis ranges from \$46,000 to \$117,000 per year. Tiredness and weakness has an annual cost of \$20,000. Chronic headaches cost \$31,000.

**Lung and Respiratory Diseases:**

The lifetime cost of asthma ranges from \$24,000 to \$35,000 for an average patient and from \$114,000 to \$160,000 for a patient with more severe asthma.

**Neurotoxic Disorders:**

Minor neural damage, which reduces IQ, reduces the function of the individual in all areas of life. Without retardation, loss of IQ generates a loss of productivity that is valued at \$9,076, in 2005 dollars, with a cost range valued from \$4,053 to \$20,169. A Center for Disease Control and Prevention (CDC) study also estimates the lifetime costs for vision and hearing impairment, which may result from neural damage. Lifetime vision impairment costs are \$683,000 and lifetime hearing impairment is estimated at \$503,000.<sup>11</sup>

**Quantified Net Benefits**

Ecology expects the net value of the law and the rule together will be nearly \$200,000 per year. This value does not including the numerous qualitative savings that will be realized.

| <b>Costs and Benefits of Adopted Changes to Chapter 173-303 WAC <i>Dangerous Waste Regulations</i></b> |                  |
|--|------------------|
| <b>COSTS</b>   |                  |
| Exposure information   | \$100,000        |
| CFC closure and financial responsibility   | \$1,700          |
| <b>Total Costs</b>   | <b>\$101,700</b> |
| <b>BENEFITS</b>  |                  |
| Eliminating % Solid Determination  | \$10,000         |
| Exemptions from siting criteria  | \$3,000          |
| New financial insurance  | \$4,500          |
| CFC closure and financial responsibility   | \$280,000        |
| <b>Total Benefits</b>  | <b>\$297,500</b> |
| <b>Benefits minus Costs = Total Net Benefits</b>   | <b>\$195,800</b> |

**Least Burdensome Analysis**

RCW 34.05.328(1)(e) requires Ecology to “determine, after considering alternative versions of the rule and the analysis required under (b), (c), and (d) of this subsection, that the rule being

<sup>11</sup> [www.cdc.gov/mmwr/preview/mmwrhtml/mm5303a4.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5303a4.htm)

adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection.”

Based on research and analysis required by RCW 34.05.328(d)(e) Ecology determines:

*There is sufficient evidence that the rule is the least burdensome version of the rule for those who are required to comply, given the goals and objectives of the law.*

Most of the amendments to the dangerous waste rule create cost savings.

| <b>COST SAVINGS</b>                      |                  |
|--|------------------|
| Eliminating % Solid Determination        | \$10,000         |
| Exemptions from siting criteria          | \$3,000          |
| New financial insurance                  | \$4,500          |
| CFC closure and financial responsibility | \$280,000        |
| <b>Total cost savings</b>                | <b>\$297,500</b> |

Even though Ecology is not adopting most of EPA’s Burden Reduction Rule, Ecology is adopting some of those changes. An alternative would have been to not adopt any of the federal changes that were part of the EPA’s Burden Reduction Rule. Ecology maintains that this rule is the least burdensome, while continuing to meet the goals of the statute. Ecology believes that by adopting the remainder of EPA’s Burden Reduction Rule we would lessen the current level of human and environmental protection.

Ecology changed the dry weights analysis on the *Biological Test Methods*. If Ecology had not made this change, the requirements would have been more burdensome.

Ecology is giving generators more options for data that they can use for waste designations. The new data will be free to use.

Ecology considered making changes to the list of explosives by including Division 1.4 and 1.6 explosives. It was not clear that explosives in these divisions would be dangerous waste. Because of this reason and because it would cost generators extra for managing non-dangerous waste explosives as dangerous waste, it was not included in the rule changes.

This rule is the least burdensome because Ecology chose to make many cost saving changes that continue to uphold the intention of the statute to protect human health and the environment. A more burdensome alternative would have been to not make these changes.

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## Crosswalk of Amendments to Chapter 173-303 WAC

### Dangerous Waste Regulations - Chapter 173-303 WAC - Amendments List for Economic Analysis

Appendix A- Updated Supplement to Cost/Benefit Analysis and Small Business Economic Impact Statement- June 2007

**Table 1. Codes for Economic Analysis**

| Generators or TSDs | Requirements   |              |
|--------------------|----------------|--------------|
|                    | <i>Federal</i> | <i>State</i> |
| <i>Federal</i>     | FF*            | SF           |
| <i>State Only</i>  | FS             | SS           |

\*Note that a federal requirement that impacts generators of federally regulated hazardous waste is exempt from economic analysis in accordance with 34.05.328 and 19.85.

**Table 2. Codes for Compliance Criteria**

| Code | Explanation                       |
|------|-----------------------------------|
| NA   | Analysis Not Required             |
| #    | Numbering                         |
| E    | Edit Only                         |
| K    | Clarification                     |
| CS   | Cost Savings                      |
| Q    | Analysis Required                 |
| Z    | Consistency                       |
| N    | Necessary to Retain Existing Rule |

**Table 3. Analysis of provisions being adopted**

| <b>WAC 173-303- Amended Section</b> | <b>Federal Requirement (Abbreviated Rule Name)</b> | <b>Notes</b> | <b>Federal or State Requirement Codes</b> | <b>34.05.328 and 19.85 Compliance Criteria</b> | <b>Explanation of changes and analysis needed</b>  |
|-------------------------------------|--|--------------|---|--|--|
| <b>FEDERAL RULES BEING ADOPTED</b>  |  |              |   |  |  |
| 070(8)(c)                           | Used Oil   |              | FF  | NA   | Federal Requirement- exempt  |
| 515(3) IBR                          | Used Oil   |              | FF  | NA   | Federal Requirement- exempt  |
| 515(11) IBR                         | Used Oil   |              | FF  | NA   | Federal Requirement- exempt  |
| 691(1)(g)                           | NESHAPS  |              | FF  | NA   | Federal Requirement- exempt  |
| 400(3)(a)                           | NESHAPS  |              | FF  | NA   | Federal Requirement- exempt  |
| 071(3)(kk)(i)                       | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 071(3)(kk)(iii)                     | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 071(3)(kk)(v)                       | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 140(2)(a)                           | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 9904(1) & (2)                       | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 9905                                | Dyes and Pigments                                  |              | FF  | NA   | Federal Requirement- exempt  |
| 040 Definitions                     | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt- the manifest requirements apply to all generators regardless of whether they have federally regulated waste or state-only waste. EPA created a new form that all generators are required to use and states are required to adopt all of the rule since it was put out by both EPA and Department of Transportation to ensure that all states are manifesting wastes the same way. |
| Designated Facility                 | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| Manifest                            | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| Manifest tracking number            | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 160(2)(a)                           | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 180                                 | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |

| <b>WAC 173-303- Amended Section</b> | <b>Federal Requirement (Abbreviated Rule Name)</b> | <b>Notes</b> | <b>Federal or State Requirement Codes</b> | <b>34.05.328 and 19.85 Compliance Criteria</b> | <b>Explanation of changes and analysis needed</b>  |
|-------------------------------------|--|--------------|---|--|--|
| 180(7)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 180(8)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 190(3)(b)                           | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 190(4)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 200(6)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 230(1)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 230(2)(c)(d)(e)                     | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 180(1)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 250(1) & (9)                        | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 250(6)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 370(1) – (8)                        | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 390(1)                              | Manifest Rule                                      |              | FF, FS                                    | NA   | Federal Requirement- exempt  |
| 083(2)(b)(iii)(A)                   | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted EPA no longer requires the use of SW-846. We are retaining the requirement to use these test methods. Rule changes are necessary to clarify that we are not adopting the federal rule. |
| 083(2)(b)(iii)(B)                   | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 090(5)(a)(i)                        | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 110(3) (d)                          | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 110(3)(f)                           | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 110(3)(g)                           | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 140(2)(a)(i)                        | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 140(4)(b)(iii)                      | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 300(5)(f)                           | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 380(1)(c) and (f)                   | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 400(3)(c)(xiii)                     | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 515(10)                             | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |
| 515(13)                             | SW-846   |              | FF  | NA, N  | Federal Rule- not being adopted  |

| WAC 173-303- Amended Section | Federal Requirement (Abbreviated Rule Name) | Notes | Federal or State Requirement Codes | 34.05.328 and 19.85 Compliance Criteria | Explanation of changes and analysis needed   |
|------------------------------|---|-------|------------------------------------|---|--|
| 515(3)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 515(4)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 515(8)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 515(9)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 640(1)(b)                    | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 645(4)(a)&(b)                | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 645(9)(g)(ii),(iii),&(iv)(A) | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 645(10)(g)                   | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 64610(4)                     | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 690(2)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 690(3)                       | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 806(4)(f)(iii)(A)(III)       | SW-846                                      |       | FF                                 | NA, N, K                                | Federal Rule- not being adopted  |
| 806(4)(xx)(D)(II)            | SW-846                                      |       | FF                                 | NA, N, K                                | Federal Rule- not being adopted  |
| 807(2)(a)(iii)               | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 910(2)(d)                    | SW-846                                      |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 040 Definitions              | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt We already had this category of universal waste in our rules, but we need to make changes because EPA finalized their rule after we adopted our version in 2005 that was based on EPA's proposed rule. |
| Mercury-containing equipment | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| Universal waste              | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| Ampule                       | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| Large quantity handler       | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| Small quantity handler       | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| 077(2)                       | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| 600(3)(o)(ii)                | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| 400(2)(c)(xi)(B)             | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |
| 140(2)(a)                    | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt  |

| WAC 173-303- Amended Section | Federal Requirement (Abbreviated Rule Name) | Notes | Federal or State Requirement Codes | 34.05.328 and 19.85 Compliance Criteria | Explanation of changes and analysis needed  |
|------------------------------|---|-------|------------------------------------|---|---|
| 573(4)(d) deleted            | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(1)(a)(ii)                | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(3)(b)(ii)&(iii)          | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(9)(b)(i)-(iv)            | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(10)(b) (i)&(ii)          | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(19)(b)(iv)&(v)           | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(20)(b)(i)-(iv)           | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 573(21)(b)(i)&(ii)           | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 800(7)(c)(iii)(B)            | UW Mercury                                  |       | FF                                 | NA                                      | Federal Requirement- exempt   |
|                              |   |       |                                    |   |   |
| 110(3)(g)(viii)              | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 400(3)(a)                    | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 510(1)(a)                    | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 670(1)(b)(i)                 | NESHAPS                                     |       | FF, FS                             | NA, K, E                                | Federal Requirement- some of these requirements could apply to facilities that manage state-only wastes, but the requirements themselves don't add costs. |
| 670(1)(b)(v)                 | NESHAPS                                     |       | FF, FS                             | NA, K                                   | Federal Requirement   |
| 806(17)                      | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 806(4) (j)(iv)(C)            | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 806(4) (k)(v)(C)             | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 806(4)(f)(v)                 | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 807                          | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 811                          | NESHAPS                                     |       | FF, FS                             | NA, K                                   | Federal Requirement   |
| 815(2)(b)(iii)               | NESHAPS                                     |       | FF, FS                             | NA, K                                   | Federal Requirement   |
| 840                          | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 840(4)(j)(i)                 | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 840(4)(j)(ii)                | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 840(4)(j)(iii)               | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 840(4)(k)                    | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |
| 841                          | NESHAPS                                     |       | FF                                 | NA                                      | Federal Requirement- exempt   |

| WAC 173-303- Amended Section      | Federal Requirement (Abbreviated Rule Name) | Notes | Federal or State Requirement Codes | 34.05.328 and 19.85 Compliance Criteria | Explanation of changes and analysis needed   |
|-----------------------------------|---|-------|------------------------------------|---|--|
| 017(5)(b)(ii)(B)                  | Burden Reduction                            |       | FF, FS                             | NA, E                                   | Federal Requirement  |
| 017(5)(b)(ii)(B) - (G)            | Burden Reduction                            |       | FF, FS                             | NA, E                                   | Federal Requirement  |
| 040 Definition                    | Burden Reduction                            |       |                                    |   |  |
| Performance Track member facility | Burden Reduction                            |       | FF, FS                             | NA                                      | Federal Requirement- new definition  |
| 140(2)(c)                         | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 140(2)(d)                         | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 140(2)(e)                         | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 140(2)(f)                         | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 140(4)(b)(i)                      | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 140(4)(b)(v)                      | Burden Reduction                            |       | FF                                 | NA, E                                   | Federal Rule   |
| 350(2)                            | Burden Reduction                            |       | FF, FS                             | CS                                      | Federal Rule   |
| 400(3)(c)(xiii)(B)                | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted. Several sub-sub-sub sections are not listed because the only change being made to them was to move them so that all of these are in the same order they appear in the federal rules. So any 400(3)(c) citations that are struck out or underlined in the draft rules that are not listed here were moved/reordered. |
| 400(3)(c)(ix)(B)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(C)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(D)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(E)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(G)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(H)&(I)              | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(J)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(K)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(L)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |
| 400(3)(c)(ix)(L)                  | Burden Reduction                            |       | FF                                 | NA, N                                   | Federal Rule- not being adopted  |

| <b>WAC 173-303- Amended Section</b> | <b>Federal Requirement (Abbreviated Rule Name)</b> | <b>Notes</b> | <b>Federal or State Requirement Codes</b> | <b>34.05.328 and 19.85 Compliance Criteria</b> | <b>Explanation of changes and analysis needed</b> |
|-------------------------------------|--|--------------|---|--|---|
| 400(3)(c)(v)(A)                     | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(v)(B)                     | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(v)(D)                     | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(v)(E)                     | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vi)(C)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vi)(D)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vi)(E)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vii)(C)                   | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vii)(D)                   | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(vii)(E)                   | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(viii)(A)                  | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(x)(A)                     | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xi)(A)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xii)(A)                   | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(A)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(B)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(C)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(D)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(E)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xviii)(F)                 | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xx)(A)&(B)                | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xx)(C)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xx)(C)                    | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xxii)(A)                  | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 400(3)(c)(xxii)(B)                  | Burden Reduction                                   |              | FF  | NA, N  | Federal Rule- not being adopted                   |
| 640(4)(a)(ii),(iii),&(iv)           | Burden Reduction                                   |              | FF, FS                                    | NA, E  | Federal Requirement                               |
| 640(4)(a)(ii)                       | Burden Reduction                                   |              | FF, FS                                    | NA, E  | Federal Requirement                               |
| 640(4)(a)(i)                        | Burden Reduction                                   |              | FF, FS                                    | NA, E  | Federal Requirement                               |
| 640(4)(i)(ii)                       | Burden Reduction                                   |              | FF, FS                                    | NA, N  | Federal Rule- not being adopted                   |
| 645(9)(d)                           | Burden Reduction                                   |              | FF, FS                                    | CS   | Federal Requirement                               |
| 645(9)(g)(ii)                       | Burden Reduction                                   |              | FF, FS                                    | CS   | Federal Requirement                               |
| 645(9)(g)(iii)                      | Burden Reduction                                   |              | FF, FS                                    | CS   | Federal Requirement                               |

| WAC 173-303- Amended Section  | Federal Requirement (Abbreviated Rule Name) | Notes | Federal or State Requirement Codes | 34.05.328 and 19.85 Compliance Criteria | Explanation of changes and analysis needed |
|---|---|-------|------------------------------------|---|--|
| 645(10)(f)  | Burden Reduction                            |       | FF, FS                             | CS                                      | Federal Requirement                        |
| 645(10)(g)  | Burden Reduction                            |       | FF, FS                             | CS                                      | Federal Requirement                        |
| 660(2)(j)   | Burden Reduction                            |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 670(4)(a)(ii)   | Burden Reduction                            |       | FF                                 | NA                                      | Federal Requirement- exempt                |
| 695   | Burden Reduction                            |       | FF                                 | NA                                      | Federal Requirement- exempt                |
|   |   |       |                                    |   |  |
| 040 Definitions   | CFR Corrections                             |       |                                    | NA, E                                   | Federal Requirement                        |
| Incompatible Waste  | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| Personnel or facility personnel   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 071(3)(aa)(ii)  | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement- examples added        |
| 071(3)(g)(i)  | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 082(4)  | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 140(4)(b)(v)(B)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 140(2)(a)   | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 200 (1)(b) (i) -(iv)  | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 300(5)(h)(iii)(B)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 310(2)(b)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 380(2)(c)   | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 400(2)(c)(ii)   | CFR Corrections                             |       | FF, FS                             | NA, K                                   | Federal Requirement                        |
| 645(10)(h)  | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 645(9)(g)(iv)(A)  | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 640(4) (e)(ii)(E)(II)   | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 645(8)(a)(i)  | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 645(8)(a)(i)(A)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 655(12)   | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement                        |
| 650(2)(j)(i)(B)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 650(2)(j)(iii)(B)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 040 definition for Underground source of drinking water(650(2)(l)(ii)(B)) | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |
| 665(11)   | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement                        |

| WAC 173-303- Amended Section     | Federal Requirement (Abbreviated Rule Name) | Notes | Federal or State Requirement Codes | 34.05.328 and 19.85 Compliance Criteria | Explanation of changes and analysis needed  |
|----------------------------------|---|-------|------------------------------------|---|---|
| 665(8)(a)                        | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 665(8)(b)                        | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 665(2)(k)(ii)(B)                 | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 675(4)(a)(i)                     | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement-changed to state citation   |
| 675(4)(a)(iv)(A)                 | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 675(4)(b)                        | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 675(4)(m)(ii) & (iii)            | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 690(1)(c)                        | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |
| 692(1)(c)                        | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |
| 806(12)                          | CFR Corrections                             |       | FF, FS                             | Q,                                      | Federal Requirement- this subsection was missing from our rules. It had been in an earlier version but was deleted. |
| 806(4)(g)(viii)(B)               | CFR Corrections                             |       | FF                                 | NA                                      | Federal Requirement- (A), - (D) all had to be added   |
| 830(3)(c)                        | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I F.2.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I C.4.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I C.6.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I H.6.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I C.7.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I C.7.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 830 Appendix I C.8.              | CFR Corrections                             |       | FF, FS                             | NA, E                                   | Federal Requirement   |
| 9903 P045                        | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |
| 9903 P194                        | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |
| 9903 Comment expanded            | CFR Corrections                             |       | FF                                 | NA, K                                   | Federal Requirement   |
| 9903 Numerical list added        | CFR Corrections                             |       | FF                                 | NA                                      | Federal Requirement   |
| 9903 U227 Added                  | CFR Corrections                             |       | FF                                 | NA                                      | Federal Requirement   |
| 9904 Footnote Added to "F" waste | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |
| 9904 K107                        | CFR Corrections                             |       | FF                                 | NA, E                                   | Federal Requirement   |

| WAC 173-303-<br>Amended Section  | Change   | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria | Explanation of changes<br>and analysis needed  |
|--|--|-------|--|---|--|
| <b>STATE INITIATED RULE AMENDMENT, CORRECTION, CLARIFICATION, or NEEDED FOR CONSISTENCY WITH FEDERAL RULES</b> |  |       |  |   |  |
| 30   | Add new acronyms (PODC, DRE, APTI, MACT, TEQ, CAMU, TU)  |       | SS, SF                                   | NA, K   | Improve clarity of rule.   |
| 40   | Closure- update to reflect closure guidance  |       | SS, SF                                   | NA, K, Z                                      | Clarification that closure is required by others besides TSDs.   |
| 40   | Compliance Procedure- remove the dates   |       | SS, SF                                   | NA, E   | Updated by removing only the years that were cited (rather than including all years), plus added the name of the second chapter that was cited only by number and not title. |
| 40   | Inhalation LC <sub>50</sub> definition added   |       | SS                                       | NA, Z   | Definition moved from section 100.   |
| 40   | Dermal LD <sub>50</sub> definition modified to Dermal Rabbit LD <sub>50</sub>                        |       | SS                                       | NA, K   | Modified for consistency with Toxic Category Table in WAC 173-303-100(5).  |
| 40   | Oral LD <sub>50</sub> definition modified to Oral Rat LD <sub>50</sub>                               |       | SS                                       | NA, K   | Modified for consistency with Toxic Category Table in WAC 173-303-100(5).  |
| 40   | Person   |       | FF, FS                                   | NA, Z   | Updated to correlate to federal rule.  |
| 40   | Staging Pile- Add "must be designated by the director" CL 175  |       | FF                                       | NA, Z   | Updated to correlate to the federal requirement.   |
| 40   | Surface Impoundment- Change language to reflect federal definition then submit SR1 for authorization |       | FF, FS                                   | NA, Z   | The word "dangerous" deleted for consistency with federal rule and authorization (SR1).  |
| 070(7)(c)  | Clarify that counting exclusion applies to PBR   |       | FF, FS                                   | NA, K   | Clarification since this has mistakenly been interpreted to apply to TBG units- reference added to 802(5).   |
| 070(8)(d)  | Used oil burned for energy recovery  |       | FF, FS                                   | NA, #, E                                      | Citations corrected.   |
| 071(3)(cc)(ii)   | NAICS deletions- 487110, 722310, 425110  |       | FF                                       | NA, K   | 3 codes are deleted- the codes are for businesses that would not have the type of waste being excluded.  |
| 081(1), 081(1)(a), & 082(1)  | Link to definition of commercial chemical product for clarity  |       | FF                                       | NA, K   | To provide clarity to the regulated community on which waste codes to use.   |
| 090(5)(a)(i) and (6)(a)(i) & (iii)   | ASTM updates   |       | FF                                       | NA, Z   | Test method update.  |

| WAC 173-303-<br>Amended Section                                | Change   | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria | Explanation of changes<br>and analysis needed  |
|--|--|-------|--|---|--|
| 100(2), (3), (5)(b)(i)   | Toxicity data sources added                            |       | SS                                       | CS  | 100(5)(b) There are two main reasons for including two additional data sources (ECOTOX and HSDB). They are: 1) RTECS has a major limitation in that it includes <b>no</b> data on aquatic toxicity. Ecology has run into several situations where generators have designated their waste using RTECS only to find the waste would have designated if fish toxicity had been used. ECOTOX has extensive aquatic toxicity (along with much of the same data as in RTECS). HSDB has both types of toxicity although perhaps not in as much detail. HSDB has a lot of other information, which may be of use such as PBT status. 2) Both ECOTOX and HSDB are free. Allowing the use of these other sources means that generators don't have to pay hundreds of dollars a year for access to RTECS and can access both over the Internet. |
| 100(5)(c)(i)&(ii)  | Delete reference to category D and category range      |       | SS                                       | E   | Unnecessary phrase- a remnant of earlier requirements.   |
| 104(5) & 180(5)  | Delete lab pack codes- conflict with new manifest rule |       | SS, SF                                   | NA, Z   | Lab pack codes are no longer allowed on manifests and should not be used.  |
| 110(2)(a), (2)(a)(vi), (2)(b), (3)(a), (3)(e), (3)(g), &(3)(h) | ASTM updates, corrections, & clarifications            |       | FF, FS, SS, SF                           | NA, Z   | 110(2) Reference to the AC&D liquid sampler was removed because: The type of samplers that can be used to sample waste streams was expanded to include any device in the ASTM method <u>as long as the method is appropriate to the waste type</u> . The AC& D sampler is one of the devices allowed in the ASTM method so it was no longer necessary to call out that specific device and that specific company.  |

| WAC 173-303-<br>Amended Section | Change   | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria | Explanation of changes<br>and analysis needed   |
|---------------------------------|--|-------|--|---|---|
| 110(3)(b)                       | Biological Test Methods Update                                   |       | SS                                       | CS  | Eliminated the need for generators submitting waste for bioassay to do a % solid determination. Typically a % solid determination wouldn't cost much (probably less than \$25 per sample) but it means the generators don't have to purchase or maintain equipment, SOPs for the procedure, train staff, etc. & could probably reduce staff slightly. |
| 110(3)(g)(x)                    | Duplicate deleted [see (vii)] CL 154 & 158                       |       | FF                                       | NA, E   |   |
| 110(5)                          | Clarify requirement to submit petition for alternate test method |       | FF, FS                                   | NA, K, Z                                      | "may" was changed to "must", the word "testing" was removed, and a citation to section 110 test methods was added to clarify that anyone interested in an alternate test methods must use the petition process.   |
| 120(4)(c)                       | Correct second (c)(vii) to (c)(vix)                              |       | FF, FS                                   | NA, E   | Citation corrected.   |
| 140(4)(b)(iii)                  | Correct test method references                                   |       | FF, FS                                   | NA, E   |   |
| 140(4)(b)(iv)(B)                | Updated for ASTM   |       | FF, FS                                   | NA, E   | Test method update.   |
| 145(2)(b)                       | Add local air authorities in eastern Washington                  |       | SS, SF                                   | NA, E   | This change reflects the presence of local air authorities in eastern Washington.   |
| 200(1)(b)(ii) & (iii)           | See 640 and 675 for "stress of installation"                     |       | FF, FS                                   | NA, E   | This phrase was deleted at 200 and added at 640 & 675.  |
| 200(4)(a)(iv)(A)(II)            | See 640 and 675 for "stress of installation"                     |       | FF, FS                                   | NA, E   | This phrase was deleted at 200 and added at 640 & 675.  |
| 200(1)(b)(iv)                   | Correct the references   |       | FF, FS                                   | NA, E   | Existing references at (B) are to state citations for closure & financial assurance. However, since generators are following the federal rules that have been IBR, a sentence is added to substitute the state citations for the federal citations. The word "shall" was changed to "must".   |
| 200(2)(a)                       | Satellite Accumulation   |       | FF, FS                                   | NA, Z   | Removed "per waste stream" for federal consistency and authorization by EPA (12).   |

| WAC 173-303-<br>Amended Section      | Change  | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria | Explanation of changes<br>and analysis needed  |
|--------------------------------------|---|-------|--|---|--|
| 270(3)                               | 49 CFR 171.16 reference Reworded at 171.16(b) [1] Submit a written Hazardous Materials Incident Report to the Information Systems Manager, PHH-63, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, DC 20590-0001, or an electronic Hazardous Material Incident Report to the Information System Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington, DC 20590-0001 at <a href="http://hazmat.dot.gov">http://hazmat.dot.gov</a> ; |       | FF, FS                                   | NA, Z   | Updated for consistency with federal rule.   |
| 281(4)&(5)                           | Citations corrected from 840 to 830   |       | SS, SF                                   | NA, E   | Citations corrected.   |
| 282(2)(b)(v)                         | Exempts recycling facilities from siting criteria   |       | SS, SF                                   | CS-   | Revised which recycling facilities are exempt from siting criteria.  |
| 282(3)(p)                            | Clarification   |       | SS, SF                                   | NA, K   | Clarifies what is meant by a 25% expansion.  |
| 282(4)(a)                            | Delete obsolete language  |       | SS, SF                                   | NA, E   | Obsolete language deleted.   |
| 310(1)                               | Reworded  |       | FF, FS                                   | NA, Z   | Reworded to be consistent with federal rule.   |
| 380(1)(f)                            | clarified   |       | FF, FS                                   | NA, K, Z                                      | Noted that the requirements are incorporated by reference.   |
| 400(2)(c)(xiv)                       | Federal language added  |       | FF, FS                                   | NA, Z   | For equivalence with federal rule. Consistent with the exclusions for final facilities, industrial waste reference is not included.  |
| 400(2)(c)(xv)                        | Federal language added  |       | FF, FS                                   | NA, Z   | For equivalence with federal rule.   |
| 400(3)(c)(iv) [moved from (3)(c)(x)] | Reference regarding Subpart B modified as it applies only to 265.19   |       | FF, FS                                   | NA, Z, E                                      | This was moved and modified to clarify that not all of subpart B needs to be referenced because interim status facilities are required to comply with WAC 173-303-290 for facility standards (see -400(3)(a)(i). |
| 505(1)(b)(iv)                        | Delete "v"  |       | FF, FS                                   | NA, E   | Citation corrected.  |

| WAC 173-303-<br>Amended Section                                   | Change  | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria  | Explanation of changes<br>and analysis needed  |
|---|---|-------|--|--|--|
| 506(3)(vii)   | CFC delete exception from closure plan, etc   |       | SS, SF                                   | Q, Z It was an oversight during the previous rulemaking not to require CFC recyclers from the requirements | The exemption from closure and financial responsibility requirements is being deleted. An oversight prevented this deletion from taking place in 2004 as part of the Hazardous Waste Facility Initiative that required closure and financial responsibility for used oil and recycling facilities. |
| 510(1)(b)(i)(B)   | Correct internal citation   |       | SS                                       | NA, E  | 100(6)(a)&(b) corrected.   |
| 522(4)  | Correct reference from 24 hour recycling to immediate recycling                               |       | SS, SF                                   | NA, E, Z   | Reference corrected for consistency with DW recycling requirements.  |
| 610(3)(a)(ix),<br>(3)(b)(ii)(D), (8)(b)(iv),<br>and (8)(d)(ii)(D) | Change (1)(d) to (1)(e)   |       | FF, FS                                   | NA, E  | Citation corrected.  |
| 610(6) & (11)   | Add "qualified" to the certification requirement  |       | FF, FS                                   | NA, E, Z   | Consistency with federal rule & other required certifications.   |
| 610(12)(e)  | Change "resource reclamation units" to 'recycling units"                                      |       | SS, SF                                   | NA, E  | Terminology correction for consistency.  |
| 620(1)(e)(ii)   | Change "resource reclamation units" to 'recycling units"                                      |       | SS, SF                                   | NA, E  | Terminology correction for consistency.  |
| 620(3)(a)(v)  | Added clarification that closure cost estimate can not be reduced for net present value, etc. |       |  | NA, K  | Clarification.   |
| 620(3)(c)(iv)   | Add corporate guarantors (see 620(6)(a)(vi))  |       | FF, FS                                   | NA, K  | This clarifies that corporate guarantors are also subject to the \$20M.  |
| 620(4)(c), 620(4)(e)(i)<br>& 620(4)(f)                            | New financial instrument- "assigned security deposit" for used oil processors and recyclers   |       |  | CS   | New option for financial assurance- applies to used oil processors and recyclers only (not TSDs).  |
| 620(4)(d)(i)  | Add "used oil" to clarify that trust funds can be used by UO processors and recyclers         |       | SS, SF                                   | NA   | Clarification that used oil processors may use partially funded trust funds.   |

| WAC 173-303-<br>Amended Section   | Change   | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria                | Explanation of changes<br>and analysis needed   |
|-----------------------------------|--|-------|--|--|---|
| 620(4)(g)                         | Clarification that financial assurance must not be less than the cost estimate and that financial assurance may not be reduced for net present value, etc. |       |  | NA, K  | Clarification.  |
| 620(5)(c), 620(5)(d),<br>& 620(7) | Add hyphen to post-closure   |       |  | NA, E  | Edit.   |
| 640(4)(c)(i) &<br>675(4)(a)(v)    | Add "stress of installation" (moved from 200) Deleted now that it has been added to 640 and 675  |       | FF, FS                                   | NA, E, Z   | This federal requirement is being moved to tanks and drip pads sections (640 & 675), and deleted from 200(1)(b) & (4)(a). Reference was added to section 200 during the previous rulemaking since language did not already exist in sections 640 and 675. It was too late in the previous rulemaking to add it to 640 and so it was temporarily added to 200. |
| 64660(3)(d)(iv)(F)                | Modify "SW846" to "SW-846"   |       | SS, SF                                   | NA, Z, E   | For consistency.  |
| 665(13)                           | Need an analog to 264.314 (used to be at 665(9))   |       | FF, FS                                   | NA, Z  | Addition required by EPA for equivalence with the federal rules. This requirement already exists in DW rules in a separate section.   |
| 806(2)(a)                         | Correct citation from 803(4) to 803(3)   |       | FF, FS                                   | NA, E  | Citation corrected.   |
| 806(4)(h)(iii)                    | Add federal language   |       | FF, FS                                   | NA, Z- this doesn't change a requirement. It is a statement. | For federal equivalence.  |
| 806(8)                            | Updated for federal consistency  |       | FF, FS                                   | NA, E, Z   | Language updated for consistency with federal rule and authorization (17S).   |
| 810(11)(c)                        | Duplicate provision deleted  |       | FF, FS                                   | NA, E  | Provision exists at 810(11)(e).   |
| 810(16)                           | Citation corrected   |       | FF, FS                                   | NA, E  | Citation corrected.   |
| 830(3)(c)                         | Add federal language   |       | FF, FS                                   | NA, Z, K- this is more of a statement than a requirement     | For federal equivalence.  |
| 830(4)(b)(vii)                    | Correct reference (b)(6)(i) – (ii)   |       | FF, FS                                   | NA, E  | Citation corrected.   |

| WAC 173-303-<br>Amended Section | Change  | Notes | Federal or State<br>Requirement<br>Codes | 34.05.328 and<br>19.85 Compliance<br>Criteria | Explanation of changes<br>and analysis needed  |
|---------------------------------|---|-------|--|---|--|
| 902                             | Citizen Proponent Negotiation   |       | SS, SF                                   | NA, Z   | This change coincides with changes to 282(2)(b).   |
| 910(3)                          | Petition to exempt waste  |       | FF, FS                                   | NA, E, K                                      | A note was added to clarify that a generator must also petition EPA to delist their waste. Ecology does not have authority to delist federal wastes and must wait for EPA to grant a petition before the state can also grant a petition to exempt a federally listed waste.   |
| Chemical Testing<br>Methods     |   |       |  |   | Revised.   |
| Biological Testing<br>Methods   | Revised The citation is 110(3)(b); however there is not a rule amendment since no rule change is necessary. |       |  | CS  | For the Biological Testing Method guidance, we are eliminating the need for generators submitting waste for bioassay to do a % solid determination. Typically a % solid determination wouldn't cost much (probably less than \$25 per sample) but it means the generators don't have to purchase/maintain equipment, SOPs for the procedure, train staff, etc. and could probably reduce staff slightly as well. |

**Used Oil** Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Recycled Used Oil Management Standards, July 30, 2003; 68 FR 44659

**Performance Track** National Environmental Performance Track Program; Corrections, October 25, 2004; 69 FR 62217

**NESHAPS** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks, April 26, 2004; 69 FR 22601

**Dyes and Pigments** Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Dyes and/or Pigments Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; CERCLA Hazardous Substance Designation and Reportable Quantities; Designation of Five Chemicals as Appendix VIII Constituents; Addition of Four Chemicals to the Treatment Standards of F039 and the Universal Treatment Standards February 24, 2005, 70 FR 9137

**Dyes and Pigments** Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Dyes and/or Pigments Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; CERCLA Hazardous Substance Designation and Reportable Quantities; Designation of Five Chemicals as Appendix VIII Constituents; Addition of Four Chemicals to the Treatment Standards of F039 and the Universal Treatment Standards; Correction  
June 16, 2005 70 FR 35032

**Manifest Rule** Hazardous Waste Management System; Modification of the Hazardous Waste Manifest System  
March 4, 2005 70 FR 10775

**Manifest Rule** Hazardous Waste Management System; Modification of the Hazardous Waste Manifest System; Correction  
June 16, 2005 70 FR 35034

**SW-846 Test Methods** Waste Management System; Testing and Monitoring Activities; Final Rule: Methods Innovation Rule and SW-846 Final Update IIIB  
June 14, 2005 70 FR 34537

**SW-846 Test Methods** Waste Management System; Testing and Monitoring Activities; Final Rule: Methods Innovation Rule and SW-846 Final Update IIIB  
August 1, 2005 70 FR 146

**Universal Waste Mercury Equipment** Hazardous Waste Management System; Modification of the Hazardous Waste Program; Mercury Containing Equipment  
August 5, 2005 70 FR 45507

**NESHAPS** National Emission Standards for Hazardous Air Pollutants:  
Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II)  
October 12, 2005 70 FR 59402

**Burden Reduction** Resource Conservation and Recovery Act Burden Reduction Initiative  
April 4, 2006 70 FR 16861

**CFR Corrections** Hazardous Waste and Used Oil; Corrections to Errors in the Code of Federal Regulations  
July 14, 2006 70 FR 40253



### CFC Financial Assurance Calculations

The following are calculations for the requirement for chlorofluorocarbon (CFC) recycling facilities to have financial assurance. The firm's costs for complying with the adopted new rule could range from \$0 to approximately \$1700 per year. These figures are calculated as follows:

1. Current regulations already require financial assurance CFC and HCFC recycling. Due to a small oversight, one related rule was not properly amended during the 2004 rulemaking. Because the error was Ecology's, we decided not to pursue the financial assurance requirement for these recyclers at that time. However, technically these firms should already have financial assurance and this rule change would not add any additional cost for them.
2. Assuming a facility does not currently have financial assurance, they will need to get it. There are a number of options available to them, each with varying implementation costs.
  - a. Large, financially stable companies may qualify to use a self-insured option, which does not cost them anything out of pocket. (This option is known as the "financial test.")
  - b. At the other end of the spectrum, a facility could choose an option that allows them to pre-pay these expenses by creating a trust fund or purchasing a Certificate of Deposit (CD). While this is very expensive up-front, there are fewer ongoing costs. If the facility chooses the CD option, there should be no ongoing cost at all. A trust will have annual trustee fees of up to 4 percent, but potentially has a much higher rate of return. (Any "profit" -- funds remaining after closure is finished -- would be returned to the firm.)
  - c. Most facilities choose to use a third-party mechanism. These mechanisms allow a facility to obtain a guarantee from a third party that the funds will be available when needed. These mechanisms usually cost a facility between 1-4 percent of the obligation each year. The fees are based on which mechanism is selected, the facility's creditworthiness, and other site-specific factors.
3. The potential financial liability to the state is about \$17,500 for each facility, but could be as high as about \$43,000 per facility. These are the amounts that need to be guaranteed.
4. The worst-case scenario is a facility that needs to guarantee \$43,000 and has to pay 4 percent per year to do so. This cost will be about \$1,720 a year.
5. The most likely scenario is that a facility needs to guarantee \$17,500 and has to pay 2.5 percent per year to do so. This cost will be about \$438 a year.

6. The best-case scenario is a facility qualifies to use the "financial test" option for self-insurance. This will cost nothing, regardless of the amount of liability being guaranteed. But it is unlikely that any recycler will qualify to use this option.

### Percent Solids Determination Survey

Below is the survey sent to eight laboratories that perform the "percent solids determination" test.

#### Survey Content

Ecology is considering eliminating the need for generators submitting waste for bioassay to do a percentage solid determination. Currently, Ecology's toxicity bioassay method requires each sample to undergo a percent solids determination. This value is reported in the final data summary. The original intent was to adjust the sample amount used in the test based on water content. Because of technical problems, the percentage moisture is never used in the method and the method cannot be defensively changed to include it; therefore Ecology is proposing to eliminate this requirement.

1. How much does a drying oven cost?
2. What are the yearly costs to maintain it?
3. Is the drying oven used for other tests?
4. If so, what percentage of its use is related to conducting percent solid determinations for this specific method?
5. What do you charge for a fish bioassay?
6. How much of this charge is related to conducting the percentage solid determination?
7. How many employees does it take to do one test?
8. How much time a week would an employee save not having to run this test?
9. How many percentage solid determinations do you do a week?
10. Are there any other cost savings you anticipate with the elimination of this requirement?



## Sections of EPA’s Burden Reduction Not Adopted

### Crosswalk

EPA’s Final Rule amendments under the Burden Reduction Initiative, published April 4, 2006 (71 FR 16862), contained 87 specific changes to requirements under the Resource Conservation and Recovery Act. The table below summarizes each of those changes.

Meaning of “Adopted or Not?” column:

“Adopted” = incorporated into rule change; Ecology proposes adopting an equivalent state rule

“Not adopted” = not incorporated into rule change; Ecology does not propose adopting an equivalent state rule and will retain existing rule

“No change needed” = existing Washington State rule already parallels new federal rule

“Not required” = no parallel State rule exists; subject covered under different state rule or regulated by EPA instead of Ecology

| EPA Change # | Brief Summary   | Adopted or Not? | WAC Citation If Adopted          | Reason Code If Not Adopted | LBA/CBA Reasoning          |
|--------------|---|-----------------|----------------------------------|----------------------------|----------------------------|
| 1            | Authority for part 260                                | Not required    | N/A                              | N/A                        | N/A                        |
| 2            | Add definition of “Performance Track member facility” | Adopted         | 173-303-040                      | N/A                        | Not required for edit only |
| 3            | 260.31(b)(2) removed                                  | Adopted         | 173-303-017(5)(b)(ii)(B) removed | N/A                        | Not required for edit only |
|              | 260.31(b)(3) renumbered 260.31(b)(2)                  | Adopted         | 173-303-017(5)(b)(ii)(B)         | N/A                        | Not required for edit only |
|              | 260.31(b)(4) renumbered 260.31(b)(3)                  | Adopted         | 173-303-017(5)(b)(ii)(C)         | N/A                        | Not required for edit only |
|              | 260.31(b)(5) renumbered 260.31(b)(4)                  | Adopted         | 173-303-017(5)(b)(ii)(D)         | N/A                        | Not required for edit only |

| EPA Change # | Brief Summary   | Adopted or Not?  | WAC Citation If Adopted  | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|------------------|--------------------------|----------------------------|--------------------------------------|
|              | 260.31(b)(6) renumbered 260.31(b)(5)                      | Adopted          | 173-303-017(5)(b)(ii)(E) | N/A                        | Not required for edit only           |
|              | 260.31(b)(7) renumbered 260.31(b)(6)                      | Adopted          | 173-303-017(5)(b)(ii)(F) | N/A                        | Not required for edit only           |
|              | 260.31(b)(8) renumbered 260.31(b)(7)                      | Adopted          | 173-303-017(5)(b)(ii)(G) | N/A                        | Not required for edit only           |
| 4            | Authority for part 261                                    | Not required     | N/A                      | N/A                        | N/A                                  |
| 5            | 261.4(a)(9)(iii)(E) amending one-time notice requirements | Not adopted      | N/A                      | "One-time"                 | Not required to retain existing rule |
|              | 261.4(f)(9) amending contents of specified annual reports | Not adopted      | N/A                      | "Substantive"              | Not required to retain existing rule |
| 6            | Authority for part 264                                    | Not required     | N/A                      | N/A                        | N/A                                  |
| 7            | 264.15(b)(4) amending inspection requirements             | Not adopted      | N/A                      | "PT"                       | Not required to retain existing rule |
|              | 264.15(b)(5) added  | Not adopted      | N/A                      | "PT"                       | Not required to retain existing rule |
| 8            | 264.16(a)(4) added  | Not adopted      | N/A                      | "OSHA"                     | Not required to retain existing rule |
| 9            | 264.52(b) amending contingency plan content requirements  | Adopted          | 173-303-350(2)           | N/A                        | Results in facility cost savings     |
| 10           | 264.56(i) removed   | Not adopted      | N/A                      | "Emergency"                | Not required to retain existing rule |
|              | 264.56(j) renumbered 264.56(i)                            | Not required     | N/A                      | N/A                        | N/A                                  |
| 11           | 264.73(b) amending record retention timeframes            | Not adopted      | N/A                      | "Retention"                | Not required to retain existing rule |
|              | 264.73(b)(1) amending record retention timeframes         | No change needed | N/A                      | N/A                        | N/A                                  |

| EPA Change # | Brief Summary   | Adopted or Not?  | WAC Citation If Adopted | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|------------------|-------------------------|----------------------------|--------------------------------------|
|              | 264.73(b)(2) amending record retention timeframes         | No change needed | N/A                     | N/A                        | N/A                                  |
|              | 264.73(b)(6) amending record retention timeframes         | Not adopted      | N/A                     | "Retention"                | Not required to retain existing rule |
|              | 264.73(b)(8) amending record retention timeframes         | No change needed | N/A                     | N/A                        | N/A                                  |
|              | 264.73(b)(10) amending record retention timeframes        | No change needed | N/A                     | N/A                        | N/A                                  |
|              | 264.73(b)(18) added regarding record retention timeframes | Not adopted      | N/A                     | "Retention"                | Not required to retain existing rule |
|              | 264.73(b)(19) added regarding record retention timeframes | Not required     | N/A                     | N/A                        | N/A                                  |
| 12           | 264.98(d) amended regarding detection monitoring          | Adopted          | 173-303-645(9)(d)       | N/A                        | Results in facility cost savings     |
|              | 264.98(g)(2) amended regarding detection monitoring       | Adopted          | 173-303-645(9)(g)(ii)   | N/A                        | Results in facility cost savings     |
|              | 264.98(g)(3) amended regarding detection monitoring       | Adopted          | 173-303-645(9)(g)(iii)  | N/A                        | Results in facility cost savings     |
| 13           | 264.99(f) amended regarding compliance monitoring         | Adopted          | 173-303-645(10)(f)      | N/A                        | Results in facility cost savings     |
|              | 264.99(g) amended regarding compliance monitoring         | Adopted          | 173-303-645(10)(g)      | N/A                        | Results in facility cost savings     |
| 14           | 264.100(g) amending report submission timelines           | Not adopted      | N/A                     | "Frequency"                | Not required to retain existing rule |
| 15           | 264.113(e)(5) amending report submission timelines        | Not adopted      | N/A                     | "Frequency"                | Not required to retain existing rule |
| 16           | 264.115 amended regarding engineer qualifications         | Not adopted      | N/A                     | "Engineer"                 | Not required to retain existing rule |

| EPA Change # | Brief Summary   | Adopted or Not? | WAC Citation If Adopted                  | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|-----------------|--|----------------------------|--------------------------------------|
| 17           | 264.120 amended regarding engineer qualifications           | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 18           | 264.143(i) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 19           | 264.145(i) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 20           | 264.147(e) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 21           | 264.174 amending inspection requirements for PT facilities  | Not adopted     | N/A                                      | "PT"                       | Not required to retain existing rule |
| 22           | 264.191(a) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
|              | 264.191(b)(5)(ii) amended regarding engineer qualifications | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 23           | 264.192(a) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
|              | 264.192(b) amended regarding engineer qualifications        | Not adopted     | N/A                                      | "Engineer"                 | Not required to retain existing rule |
| 24           | 264.193(a)(2) removed because of obsolete language          | Adopted         | 173-303-640(4)(a)(ii) removed            | N/A                        | Not required for edit only           |
|              | 264.193(a)(3) removed because of obsolete language          | Adopted         | 173-303-640(4)(a)(iii) removed           | N/A                        | Not required for edit only           |
|              | 264.193(a)(4) removed because of obsolete language          | Adopted         | 173-303-640(4)(a)(iv) removed            | N/A                        | Not required for edit only           |
|              | 264.193(a)(5) amended to remove obsolete language           | Adopted         | 173-303-640(4)(a)(v) amended             | N/A                        | Not required for edit only           |
|              | 264.193(a)(5) renumbered 264.193(a)(2)                      | Adopted         | Combined to create new 173-303-640(4)(a) | N/A                        | Not required for edit only           |

| EPA Change # | Brief Summary   | Adopted or Not?  | WAC Citation If Adopted      | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|------------------|------------------------------|----------------------------|--------------------------------------|
|              | 264.193(a)(1) amended to include existing tanks         | Adopted          | 173-303-640(4)(a)(i)         | N/A                        | Not required for edit only           |
|              | 264.193(h)(2) amended regarding engineer qualifications | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
| 25           | 264.195(b) amended regarding inspection requirements    | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.195(c) renumbered 264.195(g)                        | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.195(d) renumbered 264.195(h)                        | No change needed | N/A                          | N/A                        | N/A                                  |
|              | New 264.195(c) added                                    | No change needed | N/A                          | N/A                        | N/A                                  |
|              | New 264.195(d) added                                    | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.195(e) added  | Not adopted      | N/A                          | "PT"                       | Not required to retain existing rule |
|              | 264.195(f) added  | No change needed | N/A                          | N/A                        | N/A                                  |
| 26           | 264.196(f) amended regarding engineer qualifications    | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
|              | 264.196(f) amended regarding record submission          | Not adopted      | N/A                          | "Submission"               | Not required to retain existing rule |
| 27           | 264.251(c) amended to remove obsolete language          | Adopted          | 173-303-660(2)(j) amended    | N/A                        | Not required for edit only           |
| 28           | 264.280(b) amended regarding engineer qualifications    | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
| 29           | 264.314(a) removed because of obsolete language         | Adopted          | 173-303-140(4)(b)(i) amended | N/A                        | Not required for edit only           |

| EPA Change # | Brief Summary   | Adopted or Not?  | WAC Citation If Adopted      | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|------------------|------------------------------|----------------------------|--------------------------------------|
|              | 264.314(b) renumbered 264.314(a)                            | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.314(c) renumbered 264.314(b)                            | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.314(d) renumbered 264.314(c)                            | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.314(e) renumbered 264.314(d)                            | No change needed | N/A                          | N/A                        | N/A                                  |
|              | 264.314(f) renumbered 264.314(e)                            | No change needed | N/A                          | N/A                        | N/A                                  |
|              | Renumbered 264.314(a) amended removing obsolete language    | Adopted          | 173-303-140(4)(b)(i) amended | N/A                        | Not required for edit only           |
|              | Renumbered 264.314(e) amended removing obsolete language    | Adopted          | 173-303-140(4)(b)(v) amended | N/A                        | Not required for edit only           |
| 30           | 264.343(a)(2) amended to remove notice requirement          | Not adopted      | N/A                          | "Notice"                   | Not required to retain existing rule |
| 31           | 264.347(d) amended to change record requirements            | Not adopted      | N/A                          | "Retention"                | Not required to retain existing rule |
| 32           | 264.554(c)(2) amended regarding engineer qualifications     | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
| 33           | 264.571(a) amended regarding engineer qualifications        | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
|              | 264.571(b) amended regarding engineer qualifications        | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
|              | 264.571(c) amended regarding engineer qualifications        | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |
| 34           | 264.573(a)(4)(ii) amended regarding engineer qualifications | Not adopted      | N/A                          | "Engineer"                 | Not required to retain existing rule |

| EPA Change # | Brief Summary  | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|--|-----------------|---------------------------|----------------------------|--------------------------------------|
|              | 264.573(g) amended regarding engineer qualifications             | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 35           | 264.574(a) amended regarding engineer qualifications             | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 36           | 264.1061(b)(1) removed   | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 264.1061(d) removed  | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 264.1061(b)(2) renumbered<br>264.1061(b)(1)                      | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 264.1061(b)(3) renumbered<br>264.1061(b)(2)                      | Not required    | N/A                       | N/A                        | N/A                                  |
| 37           | 264.1062(a)(2) removed   | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 264.1062(a)(1) renumbered 264.1062(a)                            | Not required    | N/A                       | N/A                        | N/A                                  |
| 38           | 264.1100 amended removing obsolete language                      | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
| 39           | 264.1101(c)(2) amended removing obsolete language                | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 264.1101(c)(2) amended regarding engineer qualifications         | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 264.1101(c)(4) amended inspection requirements for PT facilities | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
| 40           | Authority for part 265   | Not required    | N/A                       | N/A                        | N/A                                  |
| 41           | 265.15(b)(4) amended inspection requirements for PT facilities   | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
|              | 265.15(b)(5) added   | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |

| EPA Change # | Brief Summary  | Adopted or Not?  | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|--|------------------|---------------------------|----------------------------|--------------------------------------|
| 42           | 265.16(a)(4) added                                   | Not adopted      | N/A                       | "OSHA"                     | Not required to retain existing rule |
| 43           | 265.52(b) amended to add "One Plan" option           | Adopted          | Incorporated by reference | N/A                        | Results in facility cost savings     |
| 44           | 265.56(i) removed                                    | Not adopted      | N/A                       | "Emergency"                | Not required to retain existing rule |
|              | 265.56(i) renumbered 265.56(i)                       | Not required     | N/A                       | N/A                        | N/A                                  |
| 45           | 265.73(b) amending record retention timeframes       | Not adopted      | N/A                       | "Retention"                | Not required to retain existing rule |
|              | 265.73(b)(1) amending record retention timeframes    | No change needed | N/A                       | N/A                        | N/A                                  |
|              | 265.73(b)(2) amending record retention timeframes    | No change needed | N/A                       | N/A                        | N/A                                  |
|              | 265.73(b)(6) amending record retention timeframes    | No change needed | N/A                       | N/A                        | N/A                                  |
|              | 265.73(b)(7) amending record retention timeframes    | No change needed | N/A                       | N/A                        | N/A                                  |
|              | 265.73(b)(8) amending record retention timeframes    | No change needed | N/A                       | N/A                        | N/A                                  |
|              | 265.73(b)(15) added                                  | No change needed | N/A                       | N/A                        | N/A                                  |
| 46           | 265.90(d)(1) amending report submission requirements | Not adopted      | N/A                       | "Submission"               | Not required to retain existing rule |
|              | 265.90(d)(3) amending report submission requirements | Not adopted      | N/A                       | "Submission"               | Not required to retain existing rule |
| 47           | 265.93(d)(2) amending report submission requirements | Not adopted      | N/A                       | "Submission"               | Not required to retain existing rule |

| EPA Change # | Brief Summary   | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|-----------------|---------------------------|----------------------------|--------------------------------------|
|              | 265.93(d)(5) amending report submission requirements        | Not adopted     | N/A                       | "Submission"               | Not required to retain existing rule |
| 48           | 265.113(e)(5) amending report submission timelines          | Not adopted     | N/A                       | "Frequency"                | Not required to retain existing rule |
| 49           | 265.115 amended regarding engineer qualifications           | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 50           | 265.120 amended regarding engineer qualifications           | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 51           | 265.143(h) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 52           | 265.145(h) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 53           | 265.147(e) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 54           | 265.174 amending inspection requirements for PT facilities  | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
| 55           | 265.191(a) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.191(b)(5)(ii) amended regarding engineer qualifications | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 56           | 265.192(a) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.192(b) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 57           | 265.193(a)(2) removed because of obsolete language          | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.193(a)(3) removed because of obsolete language          | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |

| EPA Change # | Brief Summary  | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|--|-----------------|---------------------------|----------------------------|--------------------------------------|
|              | 265.193(a)(4) removed because of obsolete language           | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.193(a)(5) renumbered 265.193(a)(2)                       | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.193(a)(1) amended to include existing tanks              | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | Renumbered 265.193(a)(2) amended to remove obsolete language | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.193(i)(2) amended regarding engineer qualifications      | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 58           | 265.195(a) amended to restructure requirements               | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.195(b) renumbered 265.195(f)                             | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.195(c) renumbered 265.195(g)                             | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | New 265.195(b) added   | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | New 265.195(c) added   | Not adopted     | N/A                       | "Inspection"               | Not required to retain existing rule |
|              | 265.195(d) added   | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
|              | 265.195(e) added   | Adopted         | Incorporated by reference | N/A                        |                                      |
| 59           | 265.196(f) amended regarding engineer qualifications         | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.196(f) amended regarding record submission               | Not adopted     | N/A                       | "Submission"               | Not required to retain existing rule |

| EPA Change # | Brief Summary   | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|-----------------|---------------------------|----------------------------|--------------------------------------|
| 60           | 265.201(c) amended to restructure requirements              | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.201(d) renumbered 265.201(f)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.201(e) renumbered 265.201(g)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 256.201 (f) renumbered 265.201(h)                           | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | New 256.201(d) added  | Not adopted     | N/A                       | "Inspection"               | Not required to retain existing rule |
|              | New 256.201(e) added  | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
| 61           | 265.221(a) amended removing obsolete language               | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
| 62           | §265.223 renumbered §265.224                                | Not required    | N/A                       | N/A                        | Not required for edit only           |
|              | 265.224(a) amended regarding report submission requirements | Not adopted     | N/A                       | "Submission"               | Not required to retain existing rule |
| 63           | 265.259(a) amended regarding report submission requirements | Not adopted     | N/A                       | "Submission"               | Not required to retain existing rule |
| 64           | 265.280(e) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 65           | 265.301(a) amended removing obsolete language               | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
| 66           | 265.303(a) amended regarding report submission requirements | Not adopted     | N/A                       | "Submission"               | Not required to retain existing rule |
| 67           | 265.314(a) removed because of obsolete language             | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |

| EPA Change # | Brief Summary   | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|---|-----------------|---------------------------|----------------------------|--------------------------------------|
|              | 265.314(b) renumbered 265.314(a)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.314(c) renumbered 265.314(b)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.314(d) renumbered 265.314(c)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.314(e) renumbered 265.314(d)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.314(f) renumbered 265.314(e)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.314(g) renumbered 265.314(f)                            | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | Renumbered 265.314(a) amended removing obsolete language    | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | Renumbered 265.314(f) amended removing obsolete language    | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
| 68           | 265.441(a) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.441(b) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.441(c) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 69           | 265.443(a)(4)(ii) amended regarding engineer qualifications | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.443(g) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
| 70           | 265.444(a) amended regarding engineer qualifications        | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |

| EPA Change # | Brief Summary  | Adopted or Not? | WAC Citation If Adopted   | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|--|-----------------|---------------------------|----------------------------|--------------------------------------|
| 71           | 265.1061(b)(1) removed   | Not adopted     | N/A                       | "Notice"                   | Not required to retain existing rule |
|              | 265.1061(d) removed  | Not adopted     | N/A                       | "Notice"                   | Not required to retain existing rule |
|              | 265.1061(b)(2) renumbered<br>265.1061(b)(1)                      | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 265.1061(b)(3) renumbered<br>265.1061(b)(2)                      | Not required    | N/A                       | N/A                        | N/A                                  |
| 72           | 265.1062(a)(2) removed   | Not adopted     | N/A                       | "Notice"                   | Not required to retain existing rule |
|              | 265.1062(a)(1) renumbered 265.1062(a)                            | Not required    | N/A                       | N/A                        | N/A                                  |
| 73           | 265.1100 amended removing obsolete language                      | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
| 74           | 265.1101(c)(2) amended removing obsolete language                | Adopted         | Incorporated by reference | N/A                        | Not required for edit only           |
|              | 265.1101(c)(2) amended regarding engineer qualifications         | Not adopted     | N/A                       | "Engineer"                 | Not required to retain existing rule |
|              | 265.1101(c)(4) amended inspection requirements for PT facilities | Not adopted     | N/A                       | "PT"                       | Not required to retain existing rule |
| 75           | Authority for part 266   | Not required    | N/A                       | N/A                        | N/A                                  |
| 76           | 266.102(e)(10) amended regarding record retention requirements   | Not required    | N/A                       | N/A                        | N/A                                  |
| 77           | 266.103(d) amended regarding record submission requirements      | Not required    | N/A                       | N/A                        | N/A                                  |
|              | 266.103(k) amended regarding record retention requirements       | Not required    | N/A                       | N/A                        | N/A                                  |
| 78           | Authority for part 268   | Not required    | N/A                       | N/A                        | N/A                                  |

| EPA Change # | Brief Summary  | Adopted or Not?  | WAC Citation If Adopted | Reason Code If Not Adopted | LBA/CBA Reasoning                    |
|--------------|--|------------------|-------------------------|----------------------------|--------------------------------------|
| 79           | 268.7(a)(1) amending requirements related to waste testing | Not adopted      | N/A                     | "LDR"                      | Not required to retain existing rule |
|              | 268.7(a)(2) amending requirements related to notification  | Not adopted      | N/A                     | "Notice"                   | Not required to retain existing rule |
|              | 268.7(b)(6) amending requirements related to notification  | Not adopted      | N/A                     | "One-time"                 | Not required to retain existing rule |
| 80           | 268.9(a) amended regarding waste codes                     | Not adopted      | N/A                     | "One-time"                 | Not required to retain existing rule |
|              | 268.9(d) amended regarding record submission requirements  | Not adopted      | N/A                     | "One-time"                 | Not required to retain existing rule |
| 81           | Authority for part 270                                     | Not required     | N/A                     | N/A                        | N/A                                  |
| 82           | 270.14(a) amended regarding engineer qualifications        | Not adopted      | N/A                     | "Engineer"                 | Not required to retain existing rule |
| 83           | 270.16(a) amended regarding engineer qualifications        | Not adopted      | N/A                     | "Engineer"                 | Not required to retain existing rule |
| 84           | 270.26(c)(15) amended regarding engineer qualifications    | Not adopted      | N/A                     | "Engineer"                 | Not required to retain existing rule |
| 85           | 270.42(l) added  | Not adopted      | N/A                     | "PT"                       | Not required to retain existing rule |
|              | § 270.42 Appendix I entry O added                          | No change needed | N/A                     | N/A                        | N/A                                  |
| 86           | Authority for part 271                                     | Not required     | N/A                     | N/A                        | N/A                                  |
| 87           | 271.1(j) amended by adding to Table 1                      | No change needed | N/A                     | N/A                        | N/A                                  |

## Explanations

Reasons are given below for the federal rules Ecology declined to adopt. "Reason Codes" are taken from the Burden Reduction Crosswalk table."

| Reason Code | Explanation   |
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| Emergency   | Ecology does not believe that it is overly burdensome to require facilities to notify Ecology that they have returned to compliance. Facilities are more careful to ensure a situation has actually been remedied if it must report that the problem has been fixed.  |
| Engineer    | <p>Ecology did not concur with EPA's decision to replace requirements for engineering certification by an "independent qualified registered professional engineer" with a "qualified professional engineer." Ecology is concerned that there may be a trust issue associated with company in-house PEs when historical previous work is inadequate. EPA's position is that allowing a company in-house PE to certify engineering documents as complete will provide significant financial relief. Ecology does not believe this to be the case. In fact, under ordinary situations, the company is required to hire consultants, who are PEs, to perform engineering document work plan and reports. The cost of an independent PE certification under ordinary circumstances is small compared to the consulting services paid to perform engineering document, work plan, data analysis and report development. Note that facilities are still permitted to use qualified in-house engineers who may not be independent professional engineers in performing (or assisting to perform) the analyses that underlie these certifications and facilities can potentially lower their costs by using this specific flexibility.</p> <p>Independent review and certification further reduces or minimizes the potential for conflict of interest between the certifying independent qualified registered professional engineer and the RCRA regulated company. An independent qualified registered professional engineer, after certifying the engineering work, will not continue to be a full-time employee of the RCRA regulated company full-time, versus the in-house professional engineer who continues to be employed by the RCRA regulated company. Therefore, the independent qualified registered professional engineer will not have potential internal pressures to certify an inadequate engineering document with negative long-term consequences if such erroneous certification is not made. Even though the independent professional engineer is hired and paid by the RCRA regulated company, there is less potential for the company management to force certification of inadequate work by an independent qualified registered professional engineer compared to the potential pressures by the company on an in-house professional engineer. Ecology also believes that the public would have reduced confidence in the accuracy and meaning of the engineering review and certification if it were conducted by an employee of the facility. They may also more likely suspect a conflict of interest and possibly demand a more rigorous review by state agencies (especially during RCRA permit decision public comment periods).</p> <p>EPA stated that the terms "registered" and "professional" are redundant and therefore both terms are not necessary.</p> |

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|            | Ecology disagrees and believes that use of both terms clarifies the intent and interpretation of the requirements for the certifying engineer. Ecology also believes this will remove potential misinterpretations or confusion by some parts of the regulated community that a license or "registration" is required by the certifying independent qualified registered professional engineer.  |
| Frequency  | Ecology does not support amending rules to allow facilities to submit reports less frequently. The submittal of a semi-annual report provides Ecology with the opportunity to address and correct the facility inadequacies in the program before additional sampling or cleanup work is conducted.  |
| Inspection | Ecology does not agree with reducing inspection frequencies. Fewer inspections would unnecessarily increase the risk of waste being stored in excess of the allowed time and the risk of undetected spills or leaks and could result in increased releases of dangerous waste. Ecology does not believe that regular inspections are an onerous and burdensome issue for facilities. Frequent inspections are a proactive way to address and prevent problems.   |
| LDR        | <p>Ecology did not support EPA's elimination of this requirement. In our experience, the TSDs in the hazardous waste management industry often provide this information to the generators that they are providing service to. These generators are, in essence, already "relieved" of this burden by the TSD. In addition, the generator knows the underlying constituents in the waste. It is extremely difficult and expensive to discover all of the underlying constituents in a waste stream via laboratory analysis. No one does laboratory analysis to determine all the underlying constituents in the waste because of this expense. It is also our experience that in cases where hazardous wastes become secondary materials which may be "used in a manner constituting disposal" the generators often have much better knowledge of RCRA requirements than the subsequent recipients of the secondary materials (for example, fertilizer manufacturers). There is generally less incentive for LDR requirements to stay with the hazardous waste in this reuse scenario.</p> <p>Generator LDR recordkeeping requirements are extremely important to retain. The existing requirement supports the need for generators to obtain and document their acceptable knowledge of a waste stream and take responsibility for knowing what is in their waste that they send for storage or treatment. It also helps to ensure safe storage by knowing what they have at the time it is generated. It also promotes the movement of LDR waste through to treatment and disposal, rather than long-term storage, by requiring generators to know what they have and the treatment technology needed. Viable treatment options can more easily be determined when records are maintained. At Hanford, this requirement has been instrumental in encouraging Department of Energy (DOE) to have better information before they send waste for treatment, such as; 1) what waste they are generating, 2) how they are storing it, and 3) the waste profile. Also applicable at Hanford is the Federal Facility Compliance Act (FFCA), which dictates requirements for management of mixed waste, many of which include recordkeeping and reporting requirements that support LDRs. Section 268.7(a) fits with the FFCA requirements to support generator recordkeeping requirements.</p> |
| Notice     | Ecology does not support the elimination of the notice requirement and actually urged EPA to make notices more available. Receiving these notices provides Ecology the opportunity to more closely track activities that may cause dangerous   |

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|            | chemicals to be released to the environment. Notifications left on-site tend to disappear, and without receiving these notices, Ecology would not be aware of dangerous waste activities that have occurred at these sites.  |
| One-time   | Instead of eliminating these notifications, Ecology urged EPA to make them more available and useful to the states and public by storing them in searchable databases on the Internet. When reports are retrievable by activity, they are useful for workload planning, targeting inspections, creating stakeholder lists, and finding wastes in commerce.   |
| OSHA       | <p>Ecology does not support replacing the site-specific RCRA training requirements with the more general OSHA requirements. We will not be able to enforce OSHA requirements and they do not provide the same level of protection. As an example, at Hanford, the Department of Energy (DOE) is “self-regulating” for OSHA requirements. Ecology’s only authority for regulating training requirements is through RCRA. We have a history of problems at Hanford with DOE/contractors following the RCRA training requirements.</p> <p>We are increasing attention on training at our commercial TSD facilities. In fact, we have been requiring more training because of noncompliance at the facilities. Lack of training seems to be a major contributing factor to noncompliance. We note that the supporting document, "RCRA-OSHA Training Requirements Overlap", identifies several key RCRA requirements as “more stringent” than OSHA standards. Specifically, 264.16(a)(3)(i), “the scope of training on standard operating procedures” and 264.16(a)(3)(ii) “the scope of training on waste feed cutoff systems.” In addition, OSHA standards apparently do not cover response to ground-water contamination incidents, 264.16(a)(3)(v) and shutdown of operations, 264.16(a)(3)(vi). These provisions are important for the protection of human health and the environment.</p> |
| PT         | Ecology believes that reducing inspection frequencies for Performance Track facilities may increase threats to human health and the environment. Ecology does not believe that regular inspections are an onerous and burdensome issue for facilities. Frequent inspections are a proactive way to address and prevent problems. In addition, EPA has discontinued Performance Track and is closing out the program. Previous participants will no longer be allowed to identify themselves as “members” and the burden reduction rule changes will no longer be applicable to any facility.   |
| Retention  | Ecology believes that information the facility would need to identify the source and identity of contamination at the site needs to be kept until closure. For example, to monitor changes in groundwater monitoring parameters over time, facilities need to keep records on soil and groundwater investigations and monitoring results for the life of the facility. Our experience at Hanford indicates that waste analysis information is valuable as long as the waste remains on-site potentially subject to subsequent management needs. Furthermore, our state RCRA Corrective Action rules require, “Unless otherwise required by the department, records shall be retained for at least ten years from the date of completion of compliance monitoring or as long as any institutional controls (including land use restrictions) remain in effect, whichever is longer.”  |
| Submission | Ecology disagreed with EPA’s justification/explanation that the report or record “can be kept onsite where it will be available for regulators to inspect” and that “there is no need to submit plan to Regional Administrator.” Ecology believes the proposed changes regarding interim status groundwater monitoring reporting requirements ( <i>i.e.</i> , 265.90(d)(1), 265.90(d)(3), 265.93(d)(2), and 265.93(d)(5)) rely on regulators inspecting facility records. To delete and/or reduce  |

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|             | <p>groundwater reporting and recordkeeping requirements places a tremendous additional burden on the Washington State Department of Ecology and reduces the state’s ability to ensure environmental protection.</p> <p>Reports submitted for “notification” purposes serve to provide a regulatory notice and status. This notice and status also serve to reduce an administrative burden on Ecology. If the notices and statuses were not provided, it would be necessary for Ecology to access the databases and generate reports and/or visit the site to review the reports. Failure to submit response action plans to Ecology also reduces the state’s ability to ensure environmental protection. A release from a land-based unit is a significant noncompliance and could pose serious impacts to people and the environment. Ecology views leaks from land-based units to be unusual circumstances that require decisive action. It is important for the facility to have a clear plan in advance to respond to releases. Because of the importance of controlling these releases, it is appropriate that response action plans be submitted to Ecology for review.</p> |
| Substantive | EPA’s burden reduction rulemaking did not change the substantive requirements of this section. However, Ecology previously declined to adopt these requirements when the requirements were originally proposed.  |