CR-102 (December 2017)  
(Implements RCW 34.05.320)  
Do NOT use for expedited rule making

| Hearing location(s): | Date: September 26, 2018 | Time: 1 PM | Location: Webinar only | Comment: The hearing begins at 1:00 PM with a brief presentation and question and answer session, followed by the formal hearing and testimony.

A webinar is an online meeting forum that you can attend from any computer using internet access. To join the webinar, click on the following link for more information and instructions. 
[https://watech.webex.com/watech/onstage/g.php?MTID=e464688ca558538c344ce4f32b28d72b7](https://watech.webex.com/watech/onstage/g.php?MTID=e464688ca558538c344ce4f32b28d72b7)

Event Number: 802 585 936
Event Password: Ecology1

For audio only, call US toll number 1-650-479-3208 or toll free 1-877-668-4493 and enter access code 802 585 936. Or to receive a free call back, provide your phone number when you join the event. |

| | Date: September 28, 2018 | Time: 10:00 AM | Location: In Person Meeting Ecology Northwest Regional Office 3190 160th Ave. SE Bellevue, WA. 98008 Ecology Eastern Regional Office | Comment: The hearing begins at 10:00 AM with a brief presentation and question and answer session, followed by the formal hearing and testimony. You may attend in person at either of the listed locations. The Spokane location will be connected to the Bellevue hearing location by video conference. |
### Date of intended adoption:
January 16, 2019 (Note: This is NOT the effective date)

### Submit written comments to:
Name: Robert Rieck  
Address: PO Box 47600, Olympia, WA 98504-7600 (US mail)  
300 Desmond Dr. SE, Lacey, WA 98503 (parcel delivery services)  
Email: Please submit comments online, by mail, or at one of the public hearings  
Fax: N/A  
Other: Online form: [http://wt.ecology.commentinput.com/?id=4AbZi](http://wt.ecology.commentinput.com/?id=4AbZi)  
By (date) October 5, 2018

### Assistance for persons with disabilities:
Contact Hanna Waterstrat  
Phone: 360-407-7668  
Fax: 360-407-6137  
TTY: 877-833-6341  
Email: hanna.waterstrat@ecy.wa.gov  
Other: Washington Relay Service 711  
By (date) September 21, 2018

### Purpose of the proposal and its anticipated effects, including any changes in existing rules:
Chapter 173-303 WAC implements Chapter 70.105 RCW and Subtitle C of the federal Resource Conservation and Recovery Act (RCRA). Chapter 70.105 RCW gives the Department of Ecology (Ecology) Hazardous Waste program authority to adopt regulations for dangerous waste management. Ecology is required to adopt certain federal hazardous waste rules to maintain its authorization by the Environmental Protection Agency (EPA) and remain consistent with EPA regulations. Ecology is planning to adopt some optional EPA rules in order to provide regulatory relief or make the regulations easier to comply with. Amendments will also include several minor state-initiated technical and editorial corrections and clarifications. Ecology had previously (in the preproposal statement of inquiry CR-101) indicated we would include rules for dangerous waste pharmaceuticals, but decided not to propose these rules and wait for EPA to adopt final hazardous waste pharmaceutical rules.

Ecology plans to amend specific sections of the dangerous waste regulations to incorporate new federal hazardous waste rules, including:

1. Conditional Exclusions for Solvent-Contaminated Wipes
2. Definition of Solid Waste: Revisions to Solid Waste Variances and to the Definition of Legitimacy
3. Revisions to the Export Provisions of the Cathode Ray Tube (CRT) Rule
4. Hazardous Waste Generator Improvements Rule
5. Hazardous Waste Export-Import Revisions
6. Hazardous Waste Electronic Manifest Rule

Effects of adopting federal rules required by EPA:

- The electronic manifest rule, revisions to import-export rules and revisions to the export provision of the cathode ray tube rule will improve the transport and tracking of dangerous waste.
- The definition of solid waste rule will help ensure the legitimacy of dangerous waste recycling.
- Parts of the generator improvement rule fix regulatory gaps, clarify how the regulations work and make technical corrections. New hazard label rules for tanks and containers will help ensure labels are readable and understandable by workers and the public, leading to increased safety awareness.

Effects of adopting optional federal rules:

- Parts of the generator improvement rule will benefit generators by reorganizing the regulations to be more user-friendly. Rules that give more compliance flexibility include an exemption for episodic generation and consolidation of small quantity generator waste by large quantity generators.
- The solvent-contaminated wipes rule reduces regulatory requirements to safely manage and recycle solvent-contaminated wipes.

Effects of state-initiated changes

- State-initiated amendments include changes to the PCB waste exclusion, which should help reduce duplicative regulation of state-only PCB wastes also regulated under the Toxic Substance Control Act 40 CFR Part 760.
- Another state-initiated change includes above-ground signage requirements for underground dangerous waste tanks, leading to increased safety awareness.

See the proposed language for more details on all changes.
**Reasons supporting proposal:** See “Purpose of the proposal” and its anticipated effects, above.

**Statutory authority for adoption:** Chapter 70.105 Revised Code of Washington (RCW) Hazardous Waste Management Act

**Statute being implemented:** Chapter 70.105 RCW

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<tr>
<th>Question</th>
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<td>Is rule necessary because of a:</td>
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<td>Federal Law?</td>
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<td>If yes, CITATION: 40 CFR Parts 260-279</td>
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**Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:** N/A

**Name of proponent:** (person or organization) Washington State Department of Ecology

<table>
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**Name of agency personnel responsible for:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Location</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Drafting:</td>
<td>Robert Rieck</td>
<td>360-407-6751</td>
</tr>
<tr>
<td>Implementation:</td>
<td>Darin Rice</td>
<td>Lacey</td>
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<tr>
<td>Enforcement:</td>
<td>Darin Rice</td>
<td>Lacey</td>
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**Is a school district fiscal impact statement required under RCW 28A.305.135?**

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If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

- **Name:**
- **Address:**
- **Phone:**
- **Fax:**
- **TTY:**
- **Email:**
- **Other:**

**Is a cost-benefit analysis required under RCW 34.05.328?**

- ☒ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
  - **Name:** Robert Rieck
  - **Address:** PO Box 47600, Olympia, WA 98504-7600
  - **Phone:** 360-407-6751
  - **Fax:** N/A
Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, may be exempt from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☒ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

☐ RCW 34.05.310 (4)(b) (Internal government operations)

☐ RCW 34.05.310 (4)(c) (Incorporation by reference)

☒ RCW 34.05.310 (4)(d) (Correct or clarity language)

☐ RCW 34.05.310 (4)(e) (Dictated by statute)

☐ RCW 34.05.310 (4)(f) (Set or adjust fees)

☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☒ RCW 34.05.310(4)(c) and (d).

Explanation of exemptions, if necessary: We are incorporating by reference federal import/export regulations for excluded cathode ray tubes. We are also correcting or clarifying language.

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is not exempt, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency’s analysis showing how costs were calculated. ______

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

WA Department of Ecology
Small Business Economic Impact Statement:
Relevant Information for State Register Publication

Proposed amendments to WAC 173-303 Dangerous Waste Regulations

This Small Business Economic Impact Statement (SBEIS) presents the:

- Compliance requirements of the proposed rule.
- Results of the analysis of relative compliance cost burden.
- Consideration of lost sales or revenue.
- Cost-mitigating action taken by Ecology, if required.
- Small business and local government consultation.
- Industries likely impacted by the proposed rule.
- Expected net impact on jobs statewide.

A small business is defined by the Regulatory Fairness Act (chapter 19.85 RCW) as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the rule. The SBEIS only considers costs to “businesses in an industry” in Washington State. This means that impacts, for this document, are not evaluated for non-profit or government agencies.

The existing regulatory environment is called the “baseline” in this document. It includes only existing laws and rules at federal and state levels.
This information is excerpted from Ecology’s complete set of regulatory analyses of the proposed rule. For complete discussion of the likely costs, benefits, minimum compliance burden, and relative burden on small businesses, see the Regulatory Analyses (Ecology publication no. 18-04-021, August 2017)

COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING PROFESSIONAL SERVICES

Baseline
The baseline for our analyses generally consists of existing rules and laws, and their requirements. This is what allows us to make a consistent comparison between the state of the world with and without the proposed amendments. The regulatory baseline for this analysis is the existing state rule: Dangerous Waste Regulations chapter 173-303 WAC. This chapter consists of both federal provisions and state-only requirements. Ecology analyzed the elements of the proposed rule amendments that are different than the existing state rule. However, we are not analyzing amendments that incorporate RCRA without state modification.

Federal laws and rules
The Resource Conservation and Recovery Act (RCRA) is the federal law that regulates hazardous waste at the federal level. RCRA gives EPA the authority to regulate hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of nonhazardous solid wastes. In 1984, Congress adopted amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action procedures for releases of hazardous waste. The 1986 amendments to RCRA enabled EPA to address environmental problems that will result from underground tanks storing petroleum and other hazardous substances.

The primary set of federal rules related to management of hazardous waste is found in Title 40 of the Code of Federal Regulations, Part 260 through Part 279. EPA has authorized Washington and other states to operate their state hazardous waste programs in lieu of the federal RCRA program. As a condition of authorization, the EPA requires states to incorporate certain mandatory provisions of the federal rules and laws in the state dangerous waste rules. In some situations, states must adopt certain of these mandatory provisions of the federal rule, without modification. In other cases, the state might make changes to the federal rule, as long as the state rule is consistent with and as least as stringent as the federal rule.

State laws and rules
The authorizing statute for chapter 173-303 WAC, is chapter 70.105 RCW, Hazardous Waste Management. Chapter 70.105 RCW provides a comprehensive framework for the planning, regulation, control, and management of dangerous waste which helps prevent land, air, and water pollution while conserving natural, economic, and energy resources of the state. The statute provides for the prevention of problems related to improper management of dangerous wastes. Note, the federal rule uses the term hazardous waste and the state uses the term dangerous waste. Another purpose of the statute is to ensure that dangerous waste management facilities are operated safely, and sited to minimize harm to people and the environment. Another major goal of chapter 70.105 RCW is to promote waste reduction and to encourage other improvements by generators in waste management practices. To accomplish these goals, the statute gives the Department of Ecology the authority to enact and enforce regulations relating to management of hazardous wastes and releases of hazardous substances. Ecology implements federal and state laws through chapter 173-303 WAC, Dangerous Waste Regulations, which is the baseline for this analysis. Chapter 173-303 WAC includes the provisions of the federal rules required by RCRA for authorized states, certain federal provisions adopted by Ecology at its discretion, and provisions initiated by Ecology under state authority. Specifically, chapter 173-303 WAC includes provisions related to:

- Designation of dangerous waste.
- Generator management of dangerous waste.
- Reporting of dangerous waste.
- Transport of dangerous waste.
- Treatment, storage, disposal, and recycling of dangerous waste.
- Standards for closure and post-closure of facilities that handle dangerous waste.
- Financial assurance requirements.

Proposed amendments
The proposed amendments make the following changes:

- Amendments based on federal rules:
  - Hazardous Waste Generator Improvements Rule.
  - Hazardous Waste Export-Import Revisions.
  - Revisions to the Definition of Solid Waste.
  - Conditional exclusions from Solid Waste and Hazardous Waste for solvent contaminated wipes.

- State-initiated proposed amendments:
  - Secondary containment.
  - Used oil facility reporting.
  - Treatment, storage, and disposal container labeling.
  - Tank system labeling.
  - Reduce duplicative regulation of waste.
  - Clarifications and revisions with no material impact on requirements.
Amendments based on federal rules
Hazardous Waste Generator Improvements Rule (GIR)
Baseline
The baseline for these proposed amendments is the existing state rules and existing RCRA.
Optional portions of the RCRA GIR where the state proposed rule is different:
• Including examples of acceptable labeling systems for hazard labels on containers, tanks, and containment buildings.
• Allowing local fire authorities to waive the 50-foot property line setback requirement for LQGs containers holding ignitable and reactive wastes.
• Allowing MQGs and LQGs to accumulate wastes on drip pads for 90 days, then an additional 180 or 90 days accumulation at a central accumulation area, respectively.
• Including “regular maintenance” as a way episodic wastes are generated.
• Requiring any generator who is an LQG for at least one month out of the year to submit a biennial report for entire year.

Proposed
The proposed amendments conform to the RCRA GIR except where they are more stringent and/or already exist in the baseline state rule as described below.
• WA has required hazard labels for many years. The proposed amendments do not include examples of labeling systems. Instead, they give examples of dangerous waste characteristics and criteria. Labels on containers must also be legible from 25 feet or letters must be at least ½ inch in height.
• The proposed amendments maintain the state baseline requirement of referencing International Fire Code (IFC) standards for separation distances for storage of explosives. The baseline state rule currently subjects MQGs to the IFC standards for storage of ignitable and reactive wastes in containers.
• The proposed amendments allow MQG wood treatment facilities 180 days total accumulation time on drip pads and in central accumulation areas, and 90 days total accumulation time for LQGs. These total accumulation times are the same as in the baseline state rule. In addition the wood treatment facility must maintain records of the original start date waste begins to be accumulated on the drip pad.
• “Regular maintenance” is not included as an example of episodic waste generation. This is the same as in the baseline state rule.
• Explicit clarification that annual reporting is required for both MQGs and LQGs generating waste for at least one month of a year.

Expected impact
Comparing the baseline and the proposed amendments, we expect the following impacts:
• The proposed amendments to labeling requirements are likely to result in one-time additional labeling costs for some facilities with inadequate labels, and benefits of staff, public, and environmental safety in being able to recognize the hazards posed by wastes.
• There is no change in fire code requirements from the baseline, and we do not expect costs or benefits to result.
• The drip pad allowance for accumulating dangerous waste is a less stringent federal standard that provides MQGs with an additional accumulation alternative. Currently, MQGs can accumulate dangerous waste in containers, tanks, and containment buildings. Allowance of drip pad accumulation would provide the benefit of an additional accumulation option that is not offered under the baseline. Additionally, the less stringent accumulation time limit allows waste that is removed from a drip pad to be moved to another accumulation unit for the remainder of the MQG’s 180-day or LQG’s 90-day time limit.
• Recordkeeping of drip pad accumulation times is a federal requirement, and is therefore not expected to create costs or benefits as compared to the baseline.
• Episodic “Regular maintenance” waste is not part of the baseline rule, but not including it as an example of episodic waste generation in the proposed amendments is not expected to result in costs or benefits as compared to the baseline.
• The proposed amendment explicitly clarifying that SQGs that generate dangerous waste as MQGs for at least one month to report for the year is not a change from the baseline. Existing dangerous waste rules already require SQGs that generate higher levels of waste as MQGs to report annually via the following pathway:
  o WAC 173-303-060(5) directs generators with an EPA or state identification number to submit an annual report as required under WACs 173-303-070(8), 173-303-220, and 173-303-390.
  o WAC 173-303-070(8)(c) directs SQGs with an identification number to submit an annual report according to WAC 173-303-220.
  o WAC 173-303-220(1)(a) also says that generators with an identification number must submit an annual report, according to the dangerous waste annual report instructions (Ecology publication number 03-04-018).
  o Page 21 of the dangerous waste annual report instructions directs MQGs with an active identification number at any time during the reporting year to complete a generation and management form for each waste stream generated.

Hazardous Waste Export-Import Revisions
Baseline
The baseline for these proposed amendments is RCRA and the existing state rule. EPA amended existing hazardous waste export and import regulations. The rule:
• Makes existing export and import related requirements more consistent with the current import-export requirements for shipments between members of the Organization for Economic Cooperation and Development (OECD).
Enable electronic submittal to EPA of all export and import-related documents (e.g., export notices, export annual reports).
Enable electronic validation of consent in the Automated Export System (AES) for export shipments subject to RCRA export consent requirements prior to exit. The AES resides in the U.S. Customs and Border Protection's Automated Commercial Environment (ACE).

**Proposed**
The proposed amendments include the above RCRA amendments without change.

**Expected impact**
We do not expect any impacts in excess of the baseline as a result of these proposed amendments.

**Hazardous Waste Management System – e-Manifest System**

**Baseline**
The baseline for these proposed amendments is RCRA and the existing state rule. This rule:

- Establishes new requirements authorizing the use of electronic manifests (or e-Manifests) as a means to track off-site shipments of hazardous waste from a generator's site to the site of the receipt and disposition of the hazardous waste.
- Implements certain provisions of the Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195), which directs EPA to establish an e-Manifest system and to impose reasonable user service fees as a means to fund the development and operation of the e-Manifest system.
- Clarifies explicitly that e-Manifest documents obtained from the Agency's national e-Manifest system and completed in accordance with the rule, are the legal equivalent of the paper manifest forms that are currently authorized for use in tracking hazardous waste shipments. Upon completion of the e-Manifest system, the electronic manifest documents authorized by this final regulation will be available to manifest users as an alternative to the paper manifest forms, to comply with federal and state requirements respecting the use of the hazardous waste manifest. Users who elect to opt out of the electronic submittal to the e-Manifest system may continue to use the paper manifest to track their shipments during transportation, which then will be submitted by the designated facility for inclusion in the e-Manifest system.
- Specify how issues of public access to manifest information will be addressed when manifest data are submitted and processed electronically.

**Proposed**
The proposed amendments include the above RCRA amendments without change.

**Expected impact**
We do not expect any impacts in excess of the baseline as a result of these proposed amendments.

**Revisions to the Definition of Solid Waste**

**Baseline**
The baseline for these proposed amendments is RCRA and the existing state rule. EPA revised several recycling-related provisions associated with the definition of solid waste used to determine what is a hazardous waste under Subtitle C of RCRA. These revisions also include exemptions for:

- Solvent remanufacturing.
- Materials recycled under control of the generator.
- Materials transferred for recycling - known as the “transfer based exclusion”.
- Non-waste determination.

**Proposed**
The proposed amendments include multiple recycling-related provisions in line with EPA’s revisions, but do not include the above exemptions.
Definitions associated with exemptions not included in the proposed amendments are therefore not needed, and so the proposed amendments do not include definitions for:

- “Intermediate facility”
- “Land based units”
- “Non-waste determination”
- “EPA’s amended definition of “reclaim”

**Expected impact**
While a few of the proposed amendments are more stringent than RCRA, the federal exemptions we are not proposing are also not part of the baseline state rule. We therefore do not expect these proposed amendments to result in impacts as compared to the baseline.

**Conditional exclusions from Solid Waste and Hazardous Waste for solvent contaminated wipes**

**Baseline**
The baseline for these proposed amendments is the revised RCRA hazardous waste management regulations for solvent-contaminated wipes. The rule revises the definition of solid waste to conditionally exclude solvent-contaminated wipes that are cleaned and reused, and revises the definition of hazardous waste to conditionally exclude solvent-contaminated wipes that are disposed of. The exclusions include solvent-contaminated wipes that are reused or disposed of in:

- Solid waste landfills.
- Solid waste combustors.
- Dangerous waste landfills.
- Dangerous waste incinerators.

**Proposed**
The proposed amendments are consistent with EPA’s rule revisions, except they do not include the conditional exemption for disposal at:

- Solid waste landfills.
- Solid waste combustors.

**Expected impact**
Under the proposed amendments, solvent-contaminated wipes that are laundered do not count toward generator status determination resulting in lessened requirements if generator status is affected. This could result in a cost-savings, and would result in encouragement of recycling of solvent-contaminated wipes (laundering and reuse) rather than them being sent to a landfill or incinerator.

There may be an additional cost-savings associated with the conditional exemption for solvent-contaminated wipes sent to dangerous waste landfills or incinerators. This cost-savings would only exist if generators choose to take advantage of the conditional exemption.

### State-initiated proposed amendments

#### Secondary containment

**Baseline**
Under the baseline state rule, MQG and LQG central accumulation areas built before 1986 do not need secondary containment, unless Ecology determines there is an environmental threat posed from lack of secondary containment.

**Proposed**
The proposed amendments require that all central accumulation areas have secondary containment.

**Expected impact**
The proposed amendments are likely to result in costs to any facilities that have not upgraded facilities and moved their central accumulation areas since before 1986. Benefits of secondary containment would include protection of staff and public health, and environmental health, in the event a spill took place. The number of these facilities needing to comply is likely to be minimal because most would have upgraded in the over three decades since the year of this baseline exemption.

#### Used oil facility reporting

**Baseline**
The annual report instructions for used oil facilities require that they report annually. The baseline state rules do require them to report annually, but the used oil rules reference EPA used oil regulations, which say only report biennially.

**Proposed**
The proposed amendments explicitly require annual reporting for used oil transporters, used oil processors, and used oil burners.

**Expected impact**
We do not expect this proposed amendment to create costs as compared to the baseline, which already requires annual reporting. There is a likely benefit of reducing confusion regarding existing annual reporting requirement and the reference to EPA used oil regulations.

#### Container labeling

**Baseline**
The state rule requires dangerous waste labels and risk labels on dangerous waste containers.

**Proposed**
The proposed amendments alter labeling requirements along with similar changes to RCRA, but set different labeling examples and requirements. The state-only components of the proposed amendments give examples of hazard labels to include dangerous waste characteristics and criteria. Labels must also be legible from 25 feet or letters must be at least ½ inch in height. RCRA includes as hazard label examples hazardous waste characteristics and labeling systems used by US Department of Transportation and other organizations. RCRA does not include the requirement that labels be legible and understandable.

**Expected impact**
The proposed amendments to labeling requirements are likely to result in one-time additional labeling costs for some facilities with inadequate labels, and benefits of staff, public, and environmental safety in being able to recognize the hazards posed by wastes.

#### Tank system labeling

**Baseline**
The baseline requirement under RCRA and the state rule is posting of a label identifying tank contents and major risks, legible at 50 feet.

**Proposed**
The proposed amendments require dangerous waste labels and hazard label that adequately show the hazards for tank systems. Additionally signage is required for aboveground postings for underground tanks.

**Expected impact**
The proposed amendments to signage of underground storage tanks and labels for all other dangerous waste tanks requirements are likely to result in one-time additional signage or label costs for some facilities with inadequate or missing signs or signage at aboveground and underground tanks and tank systems. Benefits include increased environmental safety for staff and the public in being able to recognize the hazards posed by wastes.
The baseline for these rule revisions is the existing state rule and federal RCRA. RCRA excludes PCB dielectric fluid and electric equipment containing such fluid, which are also regulated under 40 CFR part 761. The baseline state rule excludes more materials than EPA, including PCB materials regulated under 40 CFR part 761.60, meaning the exclusion could also exclude contaminated hydraulic equipment and several other items listed in 761.60, and be less stringent than RCRA.

**Proposed**
The proposed amendments align our exclusion with RCRA by narrowing the exclusion to only include PCB dielectric fluid and electric equipment containing such fluid. The proposed amendments add an exemption for state-only PCB wastes that are also regulated under 40 CFR part 761.

**Expected impact**
The proposed amendments are likely to result in a reduction in double regulation of PCB wastes that are also regulated under 40 CFR part 761. This would reduce confusion and potential duplicative compliance requirements for two separate sets of regulations.

**Clarifications and revisions with no material impact on requirements**

**Baseline**
The baseline for clarifications and revisions with no material impact on requirements is the existing state rule.

**Proposed**
The proposed amendments include a number of clarifications that do not change requirements as compared to the baseline, but are intended to eliminate obsolete language, clarify wording, update references, and make other revisions to facilitate understanding of, and compliance with, the rule.

**Expected impact**
We do not expect any impacts in excess of the baseline as a result of these proposed amendments.

**COSTS OF COMPLIANCE: EQUIPMENT**
The proposed amendments are likely to result in costs to any facilities that have not upgraded facilities and moved their secondary containment since before 1986. The number of facilities that have not upgraded their secondary containment is likely to be minimal. In the 32 years since that 1986, facilities have likely updated and moved their central containment areas since, triggering secondary containment requirements under the baseline.

**COSTS OF COMPLIANCE: SUPPLIES**

**Generators**
The proposed amendments to labeling requirements are likely to result in one-time additional labeling costs for some facilities with inadequate labels. It is not clear how prevalent inadequate labels that would need to be replaced are, the number of those labels at facilities, and the degree of updating or replacement needed to bring labels into compliance. We are therefore including this cost qualitatively. Ecology inspectors have observed labels that do not adequately communicate the hazards associated with dangerous wastes, and are not readable at a safe distance. The flexibility provided for under the proposed amendments, and examples of waste characteristics included to facilitate understanding, however, are likely to allow facilities to expend minimal costs to update labels.

The proposed amendments to requirements for signage of underground storage tanks and labeling of aboveground storage tanks are likely to result in one-time additional signage or labeling costs for some generator facilities with inadequate or missing signs at underground tanks and tank systems, and benefits of staff, public, and environmental safety in being able to recognize the hazards posed by wastes. It is not clear how prevalent inadequate or missing signs on underground tank systems are, the number of facilities with underground tanks systems missing signage, and the degree of updating or replacement needed to bring any existing signs into compliance. We are therefore including this cost qualitatively.

**Treatment, Storage, and Disposal**
The proposed amendments to label requirements are likely to result in one-time additional labeling costs for some facilities. It is not clear how prevalent inadequate signs that would need to be replaced are, the number of treatment, storage, and disposal (TSD) containers bearing those labels, and the degree of updating or replacement needed to bring labels into compliance. We are therefore including this cost qualitatively. There are 13 treatment, storage, disposal, and recycling (TSDR) facilities operating in the state. Ecology inspectors have observed signs that do not adequately communicate the hazards associated with hazardous wastes at a safe distance. The flexibility provided for under the proposed amendments, and examples of waste characteristics included to facilitate understanding, however, are likely to allow facilities to expend minimal costs to update labels.

The proposed amendments to requirements for signage of underground storage tanks and labeling of aboveground storage tanks are likely to result in one-time additional signage or labeling costs for some treatment, storage, or disposal facilities with inadequate or missing signs at underground tanks and tank systems, and benefits of staff, public, and environmental safety in being able to recognize the hazards posed by wastes. It is not clear how prevalent inadequate or missing signs on underground tank systems are, the number of facilities with underground tanks systems missing signage, and the degree of updating or replacement needed to bring any existing signs into compliance. We are therefore including this cost qualitatively.

**COSTS OF COMPLIANCE: LABOR**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of labor.

**COSTS OF COMPLIANCE: PROFESSIONAL SERVICES**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of professional services.

**COSTS OF COMPLIANCE: ADMINISTRATIVE COSTS**
Where applicable, Ecology estimates administrative costs (“overhead”) as part of the cost of labor and professional services, above.

**COSTS OF COMPLIANCE: OTHER**
We could not quantify the likely costs of the proposed amendments, due to uncertainty about:

- The number of generator and TSD containers, and aboveground tanks, with currently inadequate labels.
- The number of underground tanks and tank systems with currently inadequate or missing signage.

Small facilities are likely to have fewer containers and tanks than large facilities. If small businesses were also likely to own/operate these small facilities, compliance costs are likely to be smaller at small businesses.

However, it is unclear, whether we can assume the ratio of inadequate labels, or inadequate or missing signs, at small businesses compared to the largest ten percent of businesses is the same as the ratio of employees between small and large businesses. This is further confounded by the inability to quantify whether small or large businesses are more likely to have inadequate signs, or whether the likelihood is the same.

We therefore conclude that it is not clear that the proposed amendments have a disproportionate impact on small businesses. However, because we cannot establish quantitatively that the proposed amendments do not place disproportionate compliance cost burden on small businesses, Ecology included cost-reducing elements in the proposed rule. See Section 7.4 for discussion.

**CONSIDERATION OF LOST SALES OR REVENUE**

Businesses that would incur costs could experience reduced sales or revenues if compliance costs would significantly affect the prices of the goods they sell. The degree to which this could happen is strongly related to:

- Each business’s production and pricing model (whether additional lump-sum costs significantly affect marginal costs).
- The specific attributes of the markets in which they sell goods, including the degree of influence of each firm on market prices.
- The relative responsiveness of market demand to price changes.

The proposed amendments potentially affect a large breadth of businesses and industries. By instituting uniform requirements across industries, the proposed amendments, if significantly costly compared to the size of the affected markets, could raise prices.

There is some potential for reduced compliance costs for users of solvent-contaminated wipes, however, which could result in impacts opposite those discussed above. Those businesses could experience a reduction in production costs, and a resulting increase in profits or pass-through of price reductions to their consumers.

**MITIGATION OF DISPROPORTIONATE IMPACT**

Ecology considered all of the options listed in 19.85.030(2) RCW, and included the following legal and feasible elements in the proposed amendments that reduce costs.

- **Solvent-contaminated wipes:** Adding conditional exemptions for solvent-contaminated wipes that could reduce compliance costs.
- **Labels and signs:**
  - Allowing flexibility in types of hazard labels.
  - Including examples of terms that can be used to describe waste hazards.
  - Setting requirements that could impose costs incrementally based on numbers of labels and signs, of which small businesses (as far as they are correlated with small operations) could have fewer.

In addition, Ecology considered the alternative rule contents discussed in Chapter 6 of the associated Regulatory Analyses document, and excluded those elements that would have imposed excess compliance burden on businesses.

**SMALL BUSINESS AND LOCAL GOVERNMENT CONSULTATION**

Ecology involved small businesses and local government in its development of the proposed amendments, using:

- **2016 Preproposal Statement of Inquiry (CR101) announcement emails to:**
  - DW-Rules listserv: 1098 recipients.
  - TurboWaste generators list: 2124 recipients.
  - Pharmaceutical Stakeholders list: 42 recipients.
- **2017 CR101 announcement emails to:**
  - DW-Rules listserv: 829 recipients.
  - TurboWaste generators list: 2223 recipients.
- **Other listserv messages:**
  - 2016 notice of informal 90 day comment period on draft rules.
  - Notice of 2016 interim pharmaceutical policy availability.
  - Notice of:
    - Interim Pharmaceutical policy webinar.
    - Availability of webinar recording.
  - Notice of:
    - 2016 DW rulemaking informational webinar.
    - Availability of webinar recording.
- Notice of 60 day informal comment period start for second round of draft rules – 2017.
- Invitation and reminders of 2017 DW rulemaking webinar and 2 in-person public meetings.
- Notice of availability of webinar recordings.

- Public meetings:
  - Webinar on DW draft rules - Nov. 2016: 168 attendees.
  - In-person meeting at NWRO on updated DW draft rules - Nov. 2017.
  - In-person meeting at ERO on updated DW draft rules - Nov. 2017.

- ShopTalk article on DW rulemaking - Fall 2016.
- ShopTalk article on DW rulemaking - Spring 2017.

**NAICS CODES OF INDUSTRIES IMPACTED BY THE PROPOSED RULE**
The proposed rule is likely to impact a broad range of dangerous waste facilities. These facilities are primarily in the following North American Industrial Classification System (NAICS) codes.

113310 Logging
115114 Postharvest Crop Activities (except Cotton Ginning)
221111 Hydroelectric Power Generation
221310 Water Supply and Irrigation Systems
236220 Commercial and Institutional Building Construction
238110 Poured Concrete Foundation and Structure Contractors
311513 Cheese Manufacturing
311710 Seafood Product Preparation and Packaging
321113 Sawmills
325320 Pesticide and Other Agricultural Chemical Manufacturing
325510 Paint and Coating Manufacturing
327212 Other Pressed and Blown Glass and Glassware Manufacturing
331313 Alumina Refining and Primary Aluminum Production
331524 Aluminum Foundries (except Die-Casting)
332322 Sheet Metal Work Manufacturing
332710 Machine Shops
332812 Metal Coating, Engraving (except Jewelry and Silverware), and Allied Service
332813 Electroplating, Plating, Polishing, Anodizing, and Coloring
332999 All Other Miscellaneous Fabricated Metal Product Manufacturing
336211 Motor Vehicle Body Manufacturing
336390 Other Motor Vehicle Parts Manufacturing
336411 Aircraft Manufacturing
336612 Boat Building
423120 Motor Vehicle Supplies and New Parts Merchant Wholesalers
423930 Recyclable Material Merchant Wholesalers
424130 Industrial and Personal Service Paper Merchant Wholesalers
424690 Other Chemical and Allied Products Merchant Wholesalers
424910 Farm Supplies Merchant Wholesalers
424950 Paint, Varnish, and Supplies Merchant Wholesalers
441110 New Car Dealers
441222 Boat Dealers
442299 All Other Home Furnishings Stores
444110 Home Centers
444120 Paint and Wallpaper Stores
444190 Other Building Material Dealers
445110 Supermarkets and Other Grocery (except Convenience) Stores
446110 Pharmacies and Drug Stores
447190 Other Gasoline Stations
448310 Jewelry Stores
452210 Department Stores
452311 Warehouse Clubs and Supercenters
452319 All Other General Merchandise Stores
481112 Scheduled Freight Air Transportation
482111 Line-Haul Railroads
484121 General Freight Trucking, Long-Distance, Truckload
488390 Other Support Activities for Water Transportation
493110 General Warehousing and Storage
511210 Software Publishers
531120 Lessors of Nonresidential Buildings (except Miniwarehouses)
532120 Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
IMPACT ON JOBS

We could not quantify the likely costs of the proposed amendments, due to uncertainty about:

- The number of generator and TSD containers, and aboveground tanks, with currently inadequate labels.
- The number of underground tanks and tank systems with currently inadequate or missing signage.

In jobs-impact estimation, Ecology uses the Washington State Office of Financial Management’s 2007 Washington Input-Output Model. The model accounts for inter-industry impacts and spending multipliers of earned income and changes in output, including expenditures by industries that must comply with rules, and the income of industries that receive those payments.

Of the potentially impacted industries listed in Section 7.6, the largest job loss per $1 million of compliance costs is Ambulatory Health Care Services (NAICS 621; loss of 22 jobs per $1 million in costs). If costs were exclusively incurred by Ambulatory Health Care Services (one of a wide breadth of potentially affected industries), and paid to replace labels and signs using services under Commercial Printing (except Screen and Books; NAICS 323111), each $1 million of compliance costs would result in a net loss of 8 jobs statewide. Note that jobs impacts are primarily borne by the industry incurring costs, but net statewide jobs impacts are the sum of multiple smaller increases and decreases across all industries in the state.

In other words, to cause the loss of one job statewide, making the most conservative assumption that costs are borne by the potentially affected industry with the highest jobs impact per dollar of cost, the proposed amendments would need to create a cost of nearly $119 thousand. For example, if 10-inch squared hazard placards cost less than $1 each, the proposed amendments would result in the loss of one job if the amendments resulted in the purchase of over 119 thousand new placards. Label and sign prices would vary depending on the size of the label or sign, as well as the number purchased.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

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Date: 08/09/2018  
Name: Polly Zehm  
Title: Deputy Director

Signature: Polly Zehm