PROPOSED RULE MAKING

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

Agency: Department of Ecology AO #18-04

- Original Notice
- Supplemental Notice to WSR _____
- Continuance of WSR _____

- Preproposal Statement of Inquiry was filed as WSR 18-24-127; or
- Expedited Rule Making--Proposed notice was filed as WSR _____; or
- Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or
- Proposal is exempt under RCW _____.

Title of rule and other identifying information: (describe subject) Ecology proposes to amend Chapter 173-186 WAC, Oil Spill Contingency Plan - Railroad. This chapter requires railroads carrying oil as cargo to plan for oil spills to include how to make notifications and have the appropriate equipment and trained personnel to respond to spills that may occur.

Hearing location(s):

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/9/2019</td>
<td>1:00 pm</td>
<td>In-person at: Ramada by Wyndham Spokane Airport Hotel 8909 Airport Drive Spokane, WA 99224</td>
<td>Presentation, question and answer session followed by the hearing.</td>
</tr>
<tr>
<td>7/10/2019</td>
<td>6:00 pm</td>
<td>Webinar</td>
<td>We are also holding this hearing via webinar. This is an online meeting that you can attend from any computer using internet access. Join online and see instructions: Chapter 173-186 WAC Rulemaking Hearing Wed, Jul 10, 2019 6:00 PM PDT Please join my meeting from your computer, tablet or smartphone. <a href="https://global.gotomeeting.com/join/123020765">https://global.gotomeeting.com/join/123020765</a> You can also dial in using your phone. United States: +1 (646) 749-3122 Access Code: 123-020-765 Presentation, question and answer session followed by the hearing.</td>
</tr>
<tr>
<td>7/11/2019</td>
<td>1:00 pm</td>
<td>In-person at: Hilton Seattle Airport &amp; Conference Center 17620 International Blvd Seattle, WA 98188</td>
<td>Presentation, question and answer session followed by the hearing.</td>
</tr>
</tbody>
</table>

Date of intended adoption: 11/6/2019 (Note: This is NOT the effective date)

Submit written comments to:
Name: Nhi Irwin
Purpose of the proposal and its anticipated effects, including any changes in existing rules: Ecology plans to amend Chapter 173-186 WAC, Oil Spill Contingency Plan for Railroad. This chapter requires railroads carrying oil as cargo to plan for oil spills to include how to make notifications and have the appropriate equipment and trained personnel to respond to spills that may occur. This rulemaking will:

- Establish three types for railroad planning and streamline requirements according to RCW 90.56.210.
- Establish requirements for citing Spill Management Teams including entities providing wildlife rehabilitation and recovery services.
- Enhance requirements for readiness for spills of oils that may weather and sink.
- Update drill requirements to reflect legislative direction.
- Make other edits to address inconsistent or unclear direction in the rule.

We were in the beginning stages of implementing this chapter when in 2017, the Legislature passed ESHB 1136 (RCW 90.56.210) changing oil spill contingency planning requirements for smaller railroads. The purpose of this rulemaking is to streamline the plan requirements for the smaller railroads who move refined oil products and not crude oil. In addition, this rule update will comply with the passage of E2SSB 626 in 2018 (RCW 90.56.210) directing Ecology to update rules to account for non-floating oils and to require Spill Management Teams to apply and be approved by Ecology in order to be cited in contingency plans.

Reasons supporting proposal: See answer to “Purpose of the proposal…”

Statutory authority for adoption: RCW 90.56.210 Contingency plans.

Statute being implemented: RCW 90.56.210 Contingency plans.

Is rule necessary because of a:

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

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

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

- ☐ Private
- ☐ Public
- ☒ Governmental

**Name of agency personnel responsible for:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting: Nhi Irwin</td>
<td>Department of Ecology – HQ, Lacey, WA</td>
<td>(360) 407-7039</td>
</tr>
<tr>
<td>Implementation: Nhi Irwin</td>
<td>Department of Ecology – HQ, Lacey, WA</td>
<td>(360) 407-7039</td>
</tr>
<tr>
<td>Enforcement: Linda Pilkey-Jarvis</td>
<td>Department of Ecology – HQ, Lacey, WA</td>
<td>(360) 407-7447</td>
</tr>
</tbody>
</table>

**Is a school district fiscal impact statement required under RCW 28A.305.135?**

- ☐ Yes
- ☒ No

If yes, insert statement here:

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

- Name: N/A
- Address: N/A
- Phone: N/A
- Fax: N/A
- TTY: N/A
- Email: N/A
- Other: N/A

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

- ☒ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
  - Name: Nhi Irwin
  - Address: PO Box 47600, Olympia, WA 98502
  - Phone: (360) 407-7039
  - Fax: N/A
  - TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711. To request ADA accommodation for disabilities, or printed materials in a format for the visually impaired, call Ecology at 360-407-7668 or visit [https://ecology.wa.gov/accessibility](https://ecology.wa.gov/accessibility)
  - Email: nhi.irwin@ecy.wa.gov
  - Other: N/A
- ☐ No: Please explain:

**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 clarify 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

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.

Explanation of exemptions, if necessary:

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:

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. 19-08-010, MAY 2019)

COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING PROFESSIONAL SERVICES

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 rule amendments. For this proposed rulemaking, the baseline includes the:
- Existing rule: chapter 173-186 WAC, Oil Spill Contingency Plan – Railroad.
- Authorizing statute: RCW 88.46.160, Refueling, bunkering, or lightering operations – Availability of containment and recovery equipment – Rules.
- Authorizing statute: RCW 90.48.080, Discharge of polluting matter in waters prohibited.
- Authorizing statute: chapter 90.56 RCW, Oil and Hazardous Substance Spill Prevention and Response.
- Any other applicable law or rule.
Proposed rule amendments
The proposed rule amendments make the following changes:

- Expanding applicability.
- Adding definitions.
- Changing plan submittal requirements.
- Phasing in requirements.
- Establishing specific requirements for Type A railroads.
- Establishing specific requirements for Type B railroads.
- Establishing specific requirements for Type C railroads.

Expanding applicability
Proposed
The proposed amendments add Spill Management Teams (SMTs) to the baseline list of applicability.

Expected impact
In and of itself, this change does not create impacts. Impacts to SMTs stem from requirements set for them, and are discussed in the relevant sections below.

Adding definitions
Proposed
The proposed amendments do not change any existing definitions. They add definitions for:

- Spill Management Team (SMT): Representatives and assigned personnel who are qualified and capable of integrating into an incident command system or unified command system and managing a spill. A company internal SMT is approved through the contingency plan and a contracted SMT is approved by Ecology through the SMT application process and is directly responsible to a contingency plan holder, either by a contract or other approved written agreement.
- Type A railroad: Any railroad classification transporting oil in bulk that is crude oil regardless of volume.
- Type B railroad: Any railroad classification transporting oil in bulk that is not crude oil in an amount of forty-nine or more tank car loads per year.
- Type C railroad: Any railroad classification transporting oil in bulk that is not crude oil in an amount less than forty-nine tank car loads per year.
- Worldwide Response Resource List (WRRL): An equipment list established and maintained by spill response equipment owners.

Expected impact
Most of the proposed new definitions do not have costs and benefits in and of themselves, but the definition of an SMT sets the requirement that SMTs must be approved by Ecology. We expect this to have costs and benefits, as part of overall plan update impacts discussed as relevant for each railroad type. (See sections 2.3.6 through 2.3.8, and corresponding estimates and discussion in chapters 3 and 4.)

Changing plan submittal requirements
Proposed
The proposed amendments replace the explicit requirement for two paper copies, with a requirement to submit one electronic and one paper copy.

Expected impact
The proposed amendments would bring the rule into line with current practice. Under the APA – considering only what is written in rules and laws – this is a change that would result in:

- Compared to two paper copies:
  - The cost of electronic submissions.
  - A cost-savings for printing and submitting one less paper copy.
- Compared to one electronic copy:
  - The cost of printing and submitting a paper copy.

Phasing in requirements
Proposed
The proposed rule includes language on which plan updates are due 18 months (instead of immediately when the amended rule is applicable).

- Type A railroads have 18 months to submit updates for:
  - Binding agreement.
  - Reference to incident management handbook or description of planning process.
  - List of resources at risk considering water column and benthic species and habitat, identification of waterways depth and response options based on those factors.
• Adding large scale equipment deployment to frequency of drills.
• Notification information relating to SMTs, contracts or other approved means.
• Personnel listed in Incident Command System (ICS) roles in an organizational table.
• Description of type and frequency of training dependent on ICS position.

• Type B railroads have 18 months to submit updates for:
  o Binding agreement.
  o Reference to incident management handbook or description of planning process.
  o List of resources at risk considering water column and benthic species and habitat, identification of waterways depth and response options based on those factors.
  o Notification information relating to SMTs, contracts or other approved means.
  o Personnel listed in ICS roles in an organizational table.
  o Description of type and frequency of training dependent on ICS position.

• Type C railroads have 18 months to:
  o Submit letter that plan is complete and meets requirements
  o Update plan with missing required info.

Expected impact
We expect these proposed amendments to mitigate the costs created by required plan updates and contracts, as applicable, by railroad type. Costs are mitigated in the sense that plan holders have 18 additional months before they incur some of these costs.

Requirements for Type A railroads

Proposed
The proposed amendments make the following changes to requirements for Type A (crude-carrying) railroads:

• Expanding the binding agreement to all parties authorized to implement the contingency plan.
• Adding a listing of names, addresses, phones, and emails of those implementing the contingency plan.
• Expanding the listing of ICS contact information to include contracted PRC and SMT resources.
• Expanding ICS contract and/or description of terms to include PRCs and SMTs.
• Adding a structured list of SMT positions. Under contracted circumstances, the name of the whole PRC or SMT can be listed instead of an individual’s name.
• Expanding the description of the planning process to include references to the incident management handbook.
• Adding a notification documentation form. (Note that this is part of current practice.)
• Expanding description of sensitive areas to include:
  o Water column and benthic species at risk from sunken, submerged, or non-floating oil spills.
  o Identification of waterway depths, water density, sediment load, sea floor or river bottom types, and response options based on those factors and risks from non-floating oil spills.

• Replacing the planning standard for crude oil with a standard for potentially sinking oils:
  o Include examples: crude oil, Diluted Bitumen ("dilbit"), Group V Residual Fuel Oils (GPVRF0) Low American Petroleum Institute Oil (LAPIO), decant, Asphalt, and Asphalt Products.
  o Replaces 12 hour standard for crude with:
    ▪ 6 hour capability to initiate assessment of potentially sinking oils.
    ▪ 6 – 12 hour resources and equipment to detect and delineate oils, and boom to prevent sinking arrive.
    ▪ 12 – 24 hour resources and equipment to evaluate environmental impact, and equipment to recover from bottom and shoreline arrive.
  o Description of the process to detect, delineate, recover non-floating oils.

• Adding to the wildlife planning standard:
  o Plan for impacts to wildlife (with examples on surface and below).
  o Commit to conduct response per NWACP.
  o Contact information for PRC, SMT, contractors available to be on Wildlife Branch of ICS in 24 hours.
  o Wildlife plan: equipment, personnel, resources, strategies for wildlife response.
  o Contract with PRC with Mobile Wildlife Rehabilitation Unit (MRU) that has (note this is a part of existing contracts):
    ▪ 1,100 square feet of space to treat and house, intake, stabilize, wash/rinse, and dry impacted wildlife.
    ▪ Two wash/rinse stations.
    ▪ Additional 1,000 square feet to support rehabilitation, with food preparation, medical lab, dry storage, morgue, and necropsy space.
    ▪ 600 square feet of pools.
    ▪ Supporting equipment, supplies, and personal spaces for hot and cold work zones.
    ▪ 24-hour planning standard.
  o Identify personnel, source, and training.

• Drills:
  o Removes requirement that wildlife drill be additional unless part of multi-objective drill.
  o Adds multi plan holder deployment drill (per RCW 90.56.275):
- One total (per three-year cycle).
- May involve dedicated and non-dedicated equipment, Vessels of Opportunity (VOO), multiple simultaneous tactics, response to potentially non-floating oils, and verification of operational readiness over multiple operational periods.
- May be incorporated into other drill requirements.

**Expected impact**

We expect the proposed amendments for Type A railroads to result in three types of cost:

- **Plan update costs:** These costs are for staff to add personnel, contact, contracts, and narrative descriptions to the plan. For Type A railroads, we assume this cost will be payments to a planning contractor, based on current practice by three existing railroads that would be classified as Type A.
- **SMT retainer contract costs:** These costs are paid to SMTs to retain their guaranteed services in the event of a spill.
- **Wildlife response retainer contract costs:** These costs are paid to wildlife response providers to retain their services in the event of a spill.

The additional planning and retained available personnel to manage and participate in improved spill response are likely to result in benefits of better and more comprehensive spill response, particularly as it relates to potentially sinking oils and wildlife response.

Based on conversations with Ecology’s Spill Prevention, Preparedness, and Response Program staff, as well as conversations with primary response contractors, we do not expect impacts to the types or locations of spill response equipment in the state. Proposed amendments to the planning standards are designed to correspond to current equipment availability.

**Requirements for Type B railroads**

**Proposed**

The proposed amendments make the following changes to requirements for Type B (non-crude-carrying, more than 49 tank cars per year) railroads. (Note that most of the proposed amendments match changes proposed for Type A railroads. We have italicized proposed changes that differ for Type B railroads.)

- Expanding the binding agreement to all parties authorized to implement the contingency plan.
- Adding a listing of names, addresses, phones, emails of those implementing the contingency plan.
- *Expanding the listing of ICS contact information to include PRC and SMT resources.*
- Adding a structured list of ICS positions. Under contracted circumstances, the name of the whole PRC or SMT can be listed instead of an individual’s name.
- Expanding the description of the planning process to include references to the incident management handbook.
- Adding a notification documentation form. (Note that this is part of current practice.)
- Expanding description of sensitive areas to include:
  - Water column and benthic species at risk from sunken, submerged, or non-floating oil spills.
  - Identification of waterway depths, water density, sediment load, sea floor or river bottom types, and response options based on those factors and risks from non-floating oil spills.
- Replacing the planning standard for crude oil with a standard for potentially sinking oils:
  - Include examples: crude oil, Diluted Bitumen ("dilbit"), Group V Residual Fuel Oils (GPVRF0) Low American Petroleum Institute Oil (LAPIO), decant, Asphalt, and Asphalt Products.
  - Replaces 12 hour standard for crude with:
    - 6 hour capability to initiate assessment of potentially sinking oils.
    - 6 – 12 hour resources and equipment to detect and delineate oils, and boom to prevent sinking arrive.
    - 12 – 24 hour resources and equipment to evaluate environmental impact, and equipment to recover from bottom and shoreline arrive.
  - Description of the process to detect, delineate, recover non-floating oils.
- *Adding to the wildlife planning standard:*  
  - Plan for impacts to wildlife (with examples on surface and below).
  - Commit to conduct response per NWACP.
  - Contact information for PRC, SMT, contractors available to be on Wildlife Branch of ICS in 24 hours.
- **Drills:**
  - One basic tabletop drill every three years.

**Expected impact**

We expect the proposed amendments for Type B railroads to result in plan update costs. These costs are for staff to add personnel, contact, and narrative descriptions to the plan. For Type B railroads, we assume this cost will be wages for internal employee time, based on current practice by three existing railroads that would be classified as Type B.
The additional planning and retained available personnel to manage and participate in improved spill response are likely to result in benefits of better and more comprehensive spill response, particularly as relates to potentially sinking oils and wildlife response.

While the number of drills would also be reduced for these railroads, this reduction is required by the baseline authorizing statute.

Requirements for Type C railroads
Proposed
The proposed amendments replace requirements in the baseline rule, for Type C railroads, with requirements verbatim from the law (RCW 90.56.210).

Expected impact
Since the proposed amendments for the three existing railroads that would be classified as Type C railroads are verbatim from the statute – and therefore make no change from baseline – we do not expect these proposed amendments to result in costs or benefits.

However, Type C railroads are required to submit a letter to Ecology stating that their plan meets the new requirements. We expect this to result in costs of submission, and benefits of having confirmation that Type C railroads meet the new requirements.

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

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

COSTS OF COMPLIANCE: LABOR
We expect the proposed amendments for Type B railroads to result in plan update costs. These costs are for staff to add personnel, contact, contracts, and narrative descriptions to the plan. For Type B railroads, we assume this cost will be wages for internal employee time, based on current practice by three existing railroads that would be classified as Type B.

Based on Spill Prevention, Preparedness, and Response Program experience and observation, we assumed this work would take one week of a full-time employee (FTE) to complete, and the work would be done internally. This smaller estimate is based on the significant difference in proposed wildlife response requirements, and allowance of narrative descriptions. We assumed an hourly average wage of $60.63 for General and Operations Managers.

For the two plan holders that would be classified as Type B railroads, this would result in an immediate one-time cost (with components delayed for up to 18 months as needed; see section 3.2.4) of $7,276.

Future regular plan reviews and updates would be covered by the baseline rule, and are not considered costs of this rulemaking.

Total costs for Type B railroads
We estimate total 20-year present value costs (of only one-time expenditures, in the case of Type B railroads) across the two Type B railroads, of $7,276.

COSTS OF COMPLIANCE: PROFESSIONAL SERVICES
The proposed amendment to plan submittal requirements would bring the rule into line with current practice. Under the APA – considering only what is written in rules and laws – this change would result in:

- Compared to two paper copies:
  - The cost of electronic submissions.
  - A cost-savings for printing and submitting one less paper copy.
- Compared to one electronic copy:
  - The cost of printing and submitting a paper copy.

Since current practice has become the lower-cost option of electronic submittal with one paper submittal, we assume plan holders would have chosen the low-cost plan submittal option of one electronic copy. Under this assumption, and comparing only rule language, plan holders would incur the cost of submitting one paper copy. Based on conversations with planning contractors, we estimate printing a copy of the plan and submitting it by certified mail costs $180, resulting in an estimated $900 in total costs for five Type A and Type B plan holders.
We expect the proposed amendments for Type A railroads to result in three types of cost:

- **Plan update costs:** These costs are for staff to add personnel, contact, contracts, and narrative descriptions to the plan. For Type A railroads, we assume this cost will be payments to a planning contractor, based on current practice by three existing railroads that would be classified as Type A.
- **SMT retainer contract costs:** These costs are paid to SMTs to retain their guaranteed services in the event of a spill.
- **Wildlife response retainer contract costs:** These costs are paid to wildlife response providers to retain their services in the event of a spill.

We do not expect costs or benefits for portions of the updates that are part of the baseline (multi plan holder deployment drill) or part of existing contracts offered by PRCs (MRU).

**Plan update costs**
Based on conversations with planning contractors, we assumed contracted plan updates would cost $40 thousand to $55 thousand each. This cost range reflects two senior-level planners and two-three months of work, and would likely include contract for additional modeling, depending on the railroad. Costs would be highly variable for railroads, because they cut through many different ecosystems. In general, however, smaller railroads (geographically) that operate within a single ecosystem will have smaller costs and require a less complex analysis. Longer railroads and those that cut through many different kinds of ecosystems would experience significant costs for updating their plans, as they would need to account for potential spills in each habitat type they cross, as well as each of the species/types of animals that are likely to be found in these habitats during different seasons.

For the three plan holders that would be classified as Type A railroads, this would result in an immediate one-time cost (with components delayed for up to 18 months as needed; see section 4.2.4) of $120 thousand to $165 thousand. Future regular plan reviews and updates would be covered by the baseline rule, and are not considered costs of this rulemaking.

**SMT retainer contract costs**
Retainer contract costs and types of contract vary across SMTs, and by railroad size and type. Based on conversations with SMTs, we identified that $10 thousand to $100 thousand annually typically covers drills, training, and equipment costs.

One company that provides both SMT and PRC services to railroads does not have retainer costs for their contracts with larger railroads – these contracts are billed directly. The most significant cost for large railroads are drills. These often range between $30 thousand and $50 thousand and occur several times annually. Drills occurring in or near aquatic ecosystems are more expensive than those occurring solely on land.

Assuming all Type A railroads will retain SMT services by ongoing contract, these plan holders would incur annual costs of $10 thousand to $100 thousand annually. Across the three Type A plan holders, this would be a total annual cost of $30 thousand to $300 thousand. The equivalent 20-year present value (future stream of costs converted to current values, based on a risk-free discount rate) would be between $545 thousand and $5.5 million.

**Wildlife response retainer contract costs**
No railroads currently have retainer contracts with wildlife response providers in Washington State. Based on conversations with wildlife response providers, we estimate that this cost would be between $20 thousand and $35 thousand annually. It would include costs of planning, training plan holder staff, drills, and maintaining equipment. Variation in costs would be influenced by the size of plan holder, affecting the level of service and the number of facilities involved.

Across the three Type A plan holders, this would be a total annual cost of $60 thousand to $105 thousand. The equivalent 20-year present value would be between $1.1 million and $1.9 million.

**Total costs for Type A railroads**
We estimate total 20-year present value costs (of one time and annual expenditures) across the three Type A railroads, of between $1.7 million and $7.5 million.

**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**
N/A
COMPARISON OF COMPLIANCE COST FOR SMALL VERSUS LARGE BUSINESSES

Ecology calculated the estimated per-entity costs to comply with the proposed rule amendments, based on the costs estimated in Chapter 3. In this section, Ecology summarizes compliance cost per employee at affected businesses of different sizes.

There are eight railroads covered by the rule. Of these:
- One is owned by a public entity.
- Two are owned by one small business.

The small business likely to be covered by the proposed rule amendments employs 20-49 people. For calculations, we use the low estimate of 20 employees. The largest ten percent of affected businesses (rounded from 0.5 businesses to one business) employ an average of ten thousand or more people. Based on cost estimates from Chapter 3, we estimated the following compliance costs per employee, using the average employment listed.

<table>
<thead>
<tr>
<th>Business Size</th>
<th>Average Employment</th>
<th>Average Cost per Employee</th>
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<tbody>
<tr>
<td>Small</td>
<td>20</td>
<td>$182</td>
</tr>
<tr>
<td>Largest ten percent (low costs)</td>
<td>10,000</td>
<td>$59</td>
</tr>
<tr>
<td>Largest ten percent (high costs)</td>
<td>10,000</td>
<td>$251</td>
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We conclude that the proposed rule amendments may have disproportionate impacts on small businesses. Ecology is therefore required to include elements in the proposed rule amendments to mitigate disproportionate compliance costs, to the extent that is legal and feasible.

CONSIDERATION OF LOST SALES OR REVENUE

Businesses that would incur costs could experience reduced sales or revenues if the proposed amendments 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), as well as the specific attributes of the markets in which they sell goods. This includes the degree of influence of each firm on market prices, and the relative responsiveness of market demand to price changes.

Ecology used the REMI PI+ model for Washington State to estimate the impact during 2019 – 2038 of the proposed rule on directly affected markets, accounting for dynamic adjustments throughout the economy. The model accounts for:
- Inter-industry impacts.
- Price, wage, and population changes.
- Dynamic adjustment of all economic variables over time.

As inputs for the REMI model, we assumed costs estimated in Chapter 3 were incurred by the rail industry (North American Industry Classification System code 4821; NAICS 4821), as either one-time costs or ongoing annual costs. We assumed compliance costs were transferred as:
- Internal wages
- Payments to wildlife response contractors (a subcategory of NAICS 5416)
- Payments to SMTs (a subcategory of NAICS 5416)

The model returns results for aggregate impacts to the state economy, as well as impacts to specific industry groups, by NAICS code. Model results indicated the following impacts to be likely results of the spending necessary to comply with the proposed amendments.

Prices
Under low or high cost assumptions, the REMI model forecasts no significant change (in some years it may be positive but less than 0.001 of an indexed dollar) in the aggregate price index for Washington, or for the final delivered price of rail transportation services. Without a significant change in prices, we would not expect the proposed amendments to impact revenues or sales for covered businesses.

Sales and revenue
Under low cost assumptions, the model forecasts no significant change (in some years it may be negative but less than $1 thousand state-economy-wide; it is not significantly different than zero for the rail transportation industry) in output or demand, as measured in dollar values.

Under high cost assumptions, the model forecasts a $1 thousand reduction in state-economy-wide output. Demand for rail transportation services remains not significantly affected. We examined impacts across all industries, and the impact to the statewide economy is the sum of many very small adjustments across multiple other industries.
MITIGATION OF DISPROPORTIONATE IMPACT

The RFA (19.85.030(2) RCW) states that:

Based upon the extent of disproportionate impact on small business identified in the statement prepared under RCW 19.85.040, the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:

a) Reducing, modifying, or eliminating substantive regulatory requirements;
b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
c) Reducing the frequency of inspections;
d) Delaying compliance timetables;
e) Reducing or modifying fine schedules for noncompliance; or
f) Any other mitigation techniques including those suggested by small businesses or small business advocates.

Ecology considered all of the above options, and included the following legal and feasible elements in the proposed rule amendments that reduce costs. In addition, Ecology considered the alternative rule contents discussed in Chapter 6, and excluded those elements that would have imposed excess compliance burden on businesses.

- Setting requirements based on oil type (crude vs. non-crude) would result in fewer requirements for Type B railroads than Type A railroads. One Type B railroad is owned by the single small business covered by this rule.
- Updating plan submission requirements to be consistent with current practice of electronic submittal reduces costs for all plan holders. This inherently reduces costs per employee by more for small businesses.
- Allowing an SMT member to be listed in two positions in the ICS table reduces the likelihood that a plan holder will need to contract with an external approved SMT.
- While motivated verbatim by statute, the significant proposed reduction in requirements for Type C railroads would decrease costs for one railroad owned by the single small business covered by this rule.

SMALL BUSINESS AND LOCAL GOVERNMENT CONSULTATION

Ecology involved small businesses and local government in the development of the proposed rule amendments, by:

- Sending letters to tribes.
- Communicating via listservs:
  - Spills Program listserv
  - WAC Track listserv
  - Interested Parties listserv
- Holding a workshop with Type C railroads (Vancouver-Portland Junction, Great Northwest, and Central Washington). One of these railroads is owned by the only impacted small business.
- Holding two workshops with Type B railroads (Puget Sound & Pacific and Columbia Basin). One of these railroads is owned by the only impacted small business.
- Holding two workshops with Type A railroads (BNSF, Tacoma Rail, and Union Pacific).
- Meeting with the Washington State Department of Fish and Wildlife Oil Spill Team unit.
- Including the Utilities and Transportation Commission, and Washington Emergency Management Division, in all meetings with railroads.

NAICS CODES OF INDUSTRIES IMPACTED BY THE PROPOSED RULE

The proposed rule is likely to impact only covered railroads. All are classified as North American Industry Classification (NAICS) code 4821, Rail Transportation.

IMPACT ON JOBS

Ecology used the REMI PI+ model for Washington State to estimate the impact of the proposed rule on jobs in the state during 2019 – 2038, accounting for dynamic adjustments throughout the economy. The model accounts for:

- Inter-industry impacts.
- Price, wage, and population changes.
- Dynamic adjustment of all economic variables over time.

As inputs for the REMI model, we assumed costs estimated in Chapter 3 were incurred by the rail industry (NAICS 4821), as either one-time costs or ongoing annual costs. We assumed compliance costs were transferred as:

- Internal wages
- Payments to wildlife response contractors (a subcategory of NAICS 5416)
- Payments to SMTs (a subcategory of NAICS 5416)

The model returns results for aggregate employment impacts to the state economy, as well as impacts to specific industry groups, by NAICS code. Model results indicated the following impacts to be likely results of the spending necessary to comply with the proposed amendments.
Aggregate employment
Under low cost assumptions, the REMI model forecasts the proposed amendments would result in the sustained loss of one aggregate job statewide. Under high cost assumptions, this impact would increase to one aggregate job lost in 2019, increasing to six jobs by 2025 – 2027, then decreasing and stabilizing at five jobs lost. We examined the origin of these total job losses, and found that they are based on multiple small (one job or less) forecast losses across multiple industries, resulting from very small adjustments in prices and wages statewide.

Rail industry employment
Under low cost assumptions, the model forecasts the proposed amendments would not result in significant job losses in the rail transportation industry. Under high cost assumptions, this impact would increase to the sustained loss of one job beginning in 2021.

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

Name: Nhi Irwin
Address: Po Box 47600, Olympia, WA 98502
Phone: (360) 407-7039
Fax: N/A
TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711. To request ADA accommodation for disabilities, or printed materials in a format for the visually impaired, call Ecology at 360-407-7668 or visit https://ecology.wa.gov/accessibility
Email: nhi.irwin@ecy.wa.gov
Other: N/A

Date: June 3, 2019
Name: Polly Zehm
Title: Deputy Director
Signature: [Signature]