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State of Washington

Small Business Economic Impact Statement

Chapter 173-186 WAC
Oil Spill Contingency Plan – Railroad

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For more information contact:

Spill Prevention, Preparedness, and Response Program
P.O. Box 47600
Olympia, WA 98504-7600

Phone: 360-407-7455

Washington State Department of Ecology - http://www.ecy.wa.gov

- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Union Gap 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

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Oil Spill Contingency Plan – Railroad

By
Kasia Patora

For the

Spill Prevention, Preparedness, and Response Program
Washington State Department of Ecology
Olympia, Washington

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Executive Summary

Based on research and analysis required by the Regulatory Fairness Act (RFA) – RCW 19.85.070 – Ecology has determined the proposed rule (Chapter 173-186 WAC; Oil Spill Contingency Plan – Railroad) is likely to have a disproportionate impact on small business. Therefore, Ecology included disproportion-minimizing features in the rule where it is legal and feasible to do so.

Increased crude-by-rail transport has changed the risk picture for oil spills in Washington State. During the 2015 legislative session, RCW 88.46.010 and RCW 90.56.010 were amended to include railroads (not owned by the state) that transport bulk oil as cargo in the definition of "facility", and RCW 90.56.210 was amended to expand Ecology's authority to require state contingency plans for rail.

Ecology was directed to develop rules establishing contingency planning requirements for railroads transporting oil in bulk. Contingency plans for railroads ensure that that environmental and economic damages from oil spills are reduced and that public health and safety is protected through immediate notifications of spills and threats of spills, coordination with first responders, pre-staged oil response equipment, and personnel trained to respond to incidents in a rapid, aggressive, and well-coordinated manner. The regulations also require regularly scheduled oil spill drills to test and strengthen the plans through implementation. Proposed contingency planning requirements for rail are intended to be consistent with existing contingency planning requirements for vessels and other facilities regulated under Chapter 173-182 WAC.

The proposed rule:

- Describes the purpose and use of the contingency plans for rail.
- Describes the applicability and authorities of the rule, and timing for compliance.
- Includes definitions for terms used in the rule.
- Defines authority and process for contingency plan submittal and review.
- Establishes a process for plan updates and notification of significant changes.
- Develops a signature authority for binding plan holders to the use of their plans.
- Establishes contingency plan content requirements.
- Describes the required elements of the contingency plan field document.
- Establishes notification requirements and call out procedures.
- Defines training and personnel resources to fill roles in oil spill management teams.
- Identifies resources at risk from rail spills.
- Establishes equipment planning standards for responding to railroad oil spills.
- Establishes Best Achievable Protection planning requirements for railroads.
- Establishes a drill program and drill evaluation criteria for railroad plan holders.
- Establishes recordkeeping, noncompliance, and compliance information.

The average small business (railroad) likely to be covered by the proposed rule employs approximately 36 people. The largest ten percent of the nine covered businesses are represented by one largest business, employing over 47 thousand people. Assuming that smaller businesses

will have simpler contingency plans and require a lower degree of coverage from PRCs, we estimated the following costs per employee under the proposed rule.

	Cost per employee	
	Small Businesses	**Largest Ten Percent of Businesses**
Internal Plan Development	$6,848	$9
Contracted External Plan Development	$11,562	$17

Ecology included elements in the proposed rule that reduce costs, but may be available to small and large businesses. Exempting, or reducing the requirements for, small businesses would not have provided the rapid and comprehensive response to oil spills from rail that is required by the authorizing statute. However, many disproportionate costs may be mitigated by smaller, simpler operations requiring less contingency planning, if those operations are correlated with businesses employing fewer people. Elements of the proposed rule that reduce compliance costs include:

- Ability to submit federal plans as state plans if they meet the proposed requirements.
- Ability to submit a single plan for multiple rail carriers to share and reduce costs (more significantly for small operations).
- Phase-in of required compliance dates relating to railroad class (size) and cargo type. (Small railroads may have up to two years to comply with planning standards.)
- Flexibility in drill requirements, including conducting drills together or out of state for credit in Washington.
- Ability to reference the Northwest Area Contingency Plan rather than reproducing and maintaining the information in the plan, including:
  - Requirements for environmental sensitivities (GRPs).
  - Incident Command System (ICS) job descriptions.
  - ICS processes.
  - Descriptions of relationships with other plans.
- Ability to reference spill response equipment lists from PRCs or the Northwest Area Equipment website (the WRRL) rather than being repeated and maintained in the plan.

During implementation, Ecology will:

- Provision many of the spreadsheets and forms covered railroads would need to use.
- Provide easy-to-use boilerplate plans for rail plan holders transporting exclusively biological-based oils.

Ecology involved small businesses and local governments in its development of the proposed rule. Depending on how rail plan holders comply with the proposed rule, it could result between a loss of two jobs and a gain of five jobs across the Washington economy.

Chapter 1: Introduction and Background

Based on research and analysis required by the Regulatory Fairness Act (RFA) – RCW 19.85.070 – Ecology has determined the proposed rule (Chapter 173-186 WAC; Oil Spill Contingency Plan – Railroad) is likely to have a disproportionate impact on small business. Therefore, Ecology included disproportion-minimizing features in the rule where it is legal and feasible to do so.

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

- Background for the analysis of impacts on small business relative to other businesses.
- Results of the analysis.
- Cost-mitigating action taken by Ecology.
- Expected net impact on jobs statewide.

This document is intended to be read with the associated Cost-Benefit Analysis (Ecology publication #16-08-010), which contains more in-depth discussion of the analyses, as well as references.

A small business is defined by the RFA as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the way oil spill contingency planning would be regulated 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.

1.1 Description of the proposed rule

The proposed rule:

- Describes the purpose and use of the contingency plans for rail.
- Describes the applicability and authorities of the rule, and timing for compliance.
- Includes definitions for terms used in the rule.
- Defines authority and process for contingency plan submittal and review.
- Establishes a process for plan updates and notification of significant changes.
- Develops a signature authority for binding plan holders to the use of their plans.
- Establishes contingency plan content requirements.
- Describes the required elements of the contingency plan field document.
- Establishes notification requirements and call out procedures.
- Defines training and personnel resources to fill roles in oil spill management teams.
- Identifies resources at risk from rail spills.
- Establishes equipment planning standards for responding to railroad oil spills.
- Establishes Best Achievable Protection planning requirements for railroads.
- Establishes a drill program and drill evaluation criteria for railroad plan holders.

- Establishes recordkeeping, noncompliance, and compliance information.
- Addresses other issues to ensure consistency and clarity is maintained throughout the rule.

1.2 Reasons for the proposed rule

Increased crude-by-rail transport has changed the risk picture for oil spills in Washington State. During the 2015 legislative session, RCW 88.46.010 and RCW 90.56.010 were amended to include railroads (not owned by the state) that transport bulk oil as cargo in the definition of "facility", and RCW 90.56.210 was amended to expand Ecology's authority to require state contingency plans for rail.

Ecology was directed to develop rules establishing contingency planning requirements for railroads transporting oil in bulk. Contingency plans for railroads ensure that that environmental and economic damages from oil spills are reduced and that public health and safety is protected through immediate notifications of spills and threats of spills, coordination with first responders, pre-staged oil response equipment, and personnel trained to respond to incidents in a rapid, aggressive, and well-coordinated manner. The regulations also require regularly scheduled oil spill drills to test and strengthen the plans through implementation. Proposed contingency planning requirements for rail are intended to be consistent with existing contingency planning requirements for vessels and other facilities regulated under Chapter 173-182 WAC.

1.3 Regulatory baseline

In most cases, the regulatory baseline for analysis is the existing rule. Where there is no existing rule, federal and state regulations are the baseline. In the case of the proposed rule, the existing state statutory and federal requirements comprise the baseline. See the associated Cost-Benefit Analysis for extensive discussion of the baseline.

During the 2015 legislative session, RCW 88.46.010 and RCW 90.56.010 were amended to include railroads (not owned by the state) that transport bulk oil as cargo in the definition of "facility", and RCW 90.56.210 was amended to expand Ecology's authority to require state contingency plans for rail. Directives for contingency plans are set out primarily in RCW 90.56.210.

The federal component of the baseline consists of requirements for oil spill response plans in 49 CFR Parts 130 and 174.[1] There are two types of plan required, depending on the capacity of packaging of oil shipments.

- Basic Federal Plan: Required for oil shipments in a packaging having a capacity of 3,500 gallons or more.
- Comprehensive Federal Plan: Required for oil shipments in a package containing more than 42,000 gallons (1,000 barrels).

[1] There is currently a rulemaking pending at the federal level (PHMSA) that could ultimately impose more stringent requirements than the current federal regulations. As this rulemaking is currently pending, it is not part of the baseline for this analysis. Were it part of the analysis, it could affect the difference between the baseline and the proposed rule, potentially reducing both costs and benefits of the proposed rule. While it is not part of the baseline for this analysis, readers should be aware of this pending rulemaking.

A limited number of rail tank cars in use would be able to transport a volume of 42,000 gallons in a single package.[2] Most, if not all, rail tank cars being used to transport crude oil have a capacity greater than 3,500 gallons. Few railroads are likely to be required to have a Comprehensive Federal Plan. If any affected railroads have Comprehensive Federal Plans, this analysis overestimates the impact of the proposed rule on those railroads in terms of costs and benefits resulting from contingency planning requirements.

[2] Pipeline and Hazardous Materials Safety Administration (2014). Rulemaking for Hazardous Materials: Oil Spill Response Plans for High-Hazard Flammable Trains. https://www.regulations.gov/#!documentDetail;D=PHMSA-2014-0105-0001.

Chapter 2: Compliance Costs

Ecology evaluated the following elements of the proposed rule:

- Contingency plan submittal
- Contingency plan contents
- Compilation of field document
- Retention of maintenance records
- General planning standards
- Group 5 oil planning standard
- In-situ burning planning standard
- Shoreline cleanup planning standard
- Protection of responders and the public planning standard
- Wildlife protection planning standard
- Documentation of planning standards
- Drill requirements

Ecology estimated present value compliance costs over 20 years.

Based on the results of a survey sent to railroads operating in the state in December 2015, Ecology identified nine railroads operating in Washington that are likely to be covered by the proposed rule.[3] The likely covered railroads include:

- BNSF Railway Company
- Central Washington Railroad (c/o Columbia Basin Railroad)
- Columbia Basin Railroad Company Inc.
- Great Northwest Railroad, Inc. (parent company WATCO)
- Portland Vancouver Junction Railroad
- Puget Sound & Pacific Railroad (Genesee & Wyoming)
- Tacoma Rail
- Union Pacific Railroad
- Western Washington Railroad, LLC

Five of these railroads informed Ecology through the survey that they have a federal oil spill response plan. Ecology assumed, conservatively, that these plans met at least the basic federal plan requirements and had access to the necessary supporting assets. In quantitative cost estimates, however, Ecology made the additional conservative overestimation assumption that none of these plans would be sufficient to be submitted as a complete state plan.

[3] Information available on one additional railroad made it uncertain whether it would be covered.

We also identified 14 approved primary response contractors (PRCs) that may need to acquire or relocate additional spill response assets in locations currently not equipped to meet the proposed rule's planning standards.

- Able Clean-up Technologies, Inc.
- Ballard Marine Construction
- Big Sky Industrial
- Clean Harbors Environmental
- Clean Rivers Cooperative, Inc.
- Cowlitz Clean Sweep, Inc.
- Focus Wildlife
- Global Diving and Salvage
- Guardian Industrial Services
- Islands' Oil Spill Association
- Marine Spill Response Corp.
- NRC Environmental Services
- NWFF Environmental Inc.
- Tidewater Barge Lines / Tidewater Terminal Company

Ecology assumed that entities would reduce compliance costs by:

- Sharing assets to the maximum extent practicable, via contracts with approved PRCs.
- Using existing equipment that is available in locations that meet the proposed rule's planning standards.

This would include the costs of:

- Up to 9 railroads incurring costs of developing, writing, and submitting a contingency plan and creating a field document, internally or via consultant contract.
- Up to 9 railroads incurring costs of contracting with a PRC for spill response coverage and required drills.
- Possible additional costs (to a PRC, if any) of acquiring additional assets to meet the proposed rule's planning standards, in locations that are currently unsupported. These costs would likely be passed on to rail plan holders through increased fees.

Ecology estimated the likely costs of the proposed rule to be:

Table 1: Total 20-Year Present Value Costs

Cost		Low	High
Assuming internal plan development	Plan development	$34,664	$52,872
	Plan review	$136,974	$154,712
	PRC contracts	$72,624	$225,941
	TOTAL	**$244,262**	**$433,525**
Assuming contracted plan development	Plan development	$202,797	$405,594
	Plan review	$136,974	$154,712
	PRC contracts	$72,624	$225,941
	TOTAL	**$412,395**	**$786,247**

Chapter 3: Quantification of Cost Ratios

Ecology calculated the estimated per-entity costs to comply with the proposed rule. Cost estimates and ranges are for the average or typical plan holder. This causes inherent estimation of disproportionate costs across differently-sized businesses. Similarly, different compliance costs for different entity types also inherently generate non-uniform costs.

In this section, Ecology summarizes compliance cost per employee at plan holders of different sizes.

The average small business (railroad) likely to be covered by the proposed rule employs approximately 36 people. The largest ten percent of the nine covered businesses are represented by one largest business, employing over 47 thousand people. Assuming that smaller businesses will have simpler contingency plans and require a lower degree of coverage from PRCs, we estimated the following costs per employee under the proposed rule.

Table 2: 20-Year Present Value Costs per Employee

	Cost per employee	
	Small Businesses	**Largest Ten Percent of Businesses**
Internal Plan Development	$6,848	$9
Contracted External Plan Development	$11,562	$17

We conclude that the proposed rule is likely to have disproportionate impacts on small businesses, and must therefore include elements in the proposed rule to mitigate this disproportion, as far as is legal and feasible.

Chapter 4: Action Taken to Reduce Small Business Impacts

The above disproportionate impacts are mitigated by basic business behaviors and characteristics:

- Smaller, less-complex oil-by-rail operations are more likely to be able to perform plan-development tasks internally, or incur smaller contracting costs for plan development. Large, complex operations are more likely to require more specialized services, and incur larger external contract costs.
- Smaller PRCs perform limited or specialized tasks, and may not incur the costs of many of the new requirements under the proposed rule – simply because that PRC does not perform those contracted tasks. The large PRCs, on the other hand, perform a broader range of contracted tasks, and are likely to incur more of the new requirements under the proposed rule than small PRCs are. Ultimately, one can argue that no PRC is required to take on any of the prospective new costs under the proposed rule, since none of them are required to be a PRC, and can instead focus on other contracted response tasks. This would mean that those costs would, instead, be borne directly by individual rail plan holders.

Ecology included elements in the proposed rule that reduce costs, but may be available to small and large businesses. Exempting, or reducing the requirements for, small businesses would not have provided the rapid and comprehensive response to oil spills from rail that is required by the authorizing statute. However, many disproportionate costs may be mitigated by smaller, simpler operations requiring less contingency planning, if those operations are correlated with businesses employing fewer people. Elements of the proposed rule that reduce compliance costs include:

- Ability to submit federal plans as state plans if they meet the proposed requirements.
- Ability to submit a single plan for multiple rail carriers to share and reduce costs (more significantly for small operations).
- Phase-in of required compliance dates relating to railroad class (size) and cargo type. (Small railroads may have up to two years to comply with planning standards.)
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  - Requirements for environmental sensitivities (GRPs).
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  - ICS processes.
  - Descriptions of relationships with other plans.
- Ability to reference spill response equipment lists from PRCs or the Northwest Area Equipment website (the WRRL) rather than being repeated and maintained in the plan.

During implementation, Ecology will:

- Provision many of the spreadsheets and forms covered railroads would need to use.
- Provide easy-to-use boilerplate plans for rail plan holders transporting exclusively biological-based oils.

Chapter 5: Small Business and Government Involvement

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

- Rule development phase announcements:
  - Letter to tribes
  - Spills listserv (mailing list for those interested in Spills program work (including rulemakings)
  - Press release
  - WAC Track listserv
- Railroad survey, contacting the following 43 railroads to determine applicability of the rule:

- Amtrak
- Ballard Terminal Railroad
- Battle Ground Yacold & Chelatchie Prairie Railroad Association
- BNSF Railway Company
- Cascade & Columbia Railroad
- Central Washington Railroad c/o Columbia Basin Railroad
- Chehalis-Centralia Railroad & Museum
- Clark County Railroad, Portland Vancouver Junction Railroad
- Columbia & Cowlitz Railway LLC
- Columbia Basin Railroad Company Inc.
- Eastside Freight Railroad
- Eastside Community Rail
- Eastern Washington Gateway Railroad
- Genesee & Wyoming Inc.
- Great Northwest Railroad, Inc.
- Kettle Falls International Railway
- Lake Whatcom Railway Co.
- Lewis & Clark Railway Co.
- Longview Switching Company
- Meeker Southern Railroad
- Mount Rainier Scenic Railroad
- Mount Vernon Terminal RR LLC
- Northwest Railway Museum
- Palouse River & Coulee City Railroad
- Patriot Woods Railroad
- Pend Oreille Valley Railroad
- Port of Chehalis
- Port of Royal Slope Line/Royal Slope Line
- Portland Vancouver Junction Railroad
- Puget Sound & Pacific Railroad
- Puget Sound Railway Historical Assn.
- Simpson Lumber Company, LLC
- Sound Transit, Sounder Commuter Rail
- Tacoma Rail
- Tri-City & Olympia Railroad (Port of Benton)
- Union Pacific Railroad
- Washington & Idaho Railway Inc.
- WATCO
- Western Rail Switching
- Western Washington Forest Industrial Museum (dba Mount Rainier Scenic Railroad)
- Western Washington Railroad, LLC
- YCR Corporation (legal name), Yakima Central Railway (YCR) (brand name)
- Yakima Valley Trolleys (former Yakima Electric Railway Museum)

Rule workshop announcements:

- Spills listserv –
- Press release
- Email to Tribes
- Interested parties

- Washington Environmental Council
- Western States Petroleum Association
- Association of Washington Cities
- OR Department of Environmental Quality
- Planning Association of Washington
- Washington Public Ports Association
- Washington State Association of Counties
- CA DFW Office of Spill Prevention and Response
- ID Department of Environmental Quality
- Utilities and Transportation Commission
- U.S. DOT, Pipeline and Hazardous Materials Safety Administration (PHMSA)
- Federal Railroad Administration (FRA)
- Environmental Protection Agency (EPA)
- The Pipeline Safety Trust
- Citizens Committee on Pipeline Safety
- Pacific States/BC Task Force

- Industry
  - Railroads operating in Washington – Ecology attempted to email all on the above list of surveyed railroads
  - Other entities regulated by the Spills Program
- Local Emergency Planning Committee (LEPC) contacts – County Emergency Managers

- Public workshops – two workshops, one with webinar
  - Spokane attendees (1/27/16):

- Justin Piper – BNSF
- Mary Benham – community and CIS
- Allison Beard – Gonzaga Law School
- Laura Ackerman – The Lands Council
- Lisa Jameson – Emergency management
- Quanah Spencer - BNSF

  - Olympia attendees (2/1/16):

- Chris Stadiem – MSRC
- Jason Potts – NRC
- Lovel Pratt – Mulno Cove Consulting
- Kyle Mittan – Aberdeen Daily World
- Ernie Quesadu – Clean Rivers
- Michael Zollitsch – Oregon DEQ
- Tiffany Gallo – NRC
- Hal Stockbridge – self
- Shayne Cothern – DNR
- Lance Lindgren – TRG
- Jeffrey Johnson – AES
- Thomas Johnson – AES
- Pat Holm – self, Sierra Club member
- Sue Langhans – self, Sierra Club member

  - Webinar attendees (2/1/16):

- Cg
- Don Clabough (left)
- Mike
- Lisa Willis
- Stephen Eldred
- Jan Aarts
- Stephanie
- Mark Babineck
- Bill
- Beloso
- Laura Badgley
- Mike O'Leary
- E. Mayberry

Chapter 6: NAICS Codes of Impacted Industries

The Standard Industry Classification (SIC) system required in the RFA has long been replaced by the North American Industry Classification System (NAICS).

The proposed rule is likely to impact covered railroads in NAICS 4821 (Rail Transportation).

If PRCs incur costs, they (at the parent company level) are classified as:

- NAICS 2371 (Utility System Construction)
- NAICS 3366 (Ship and Boat Building)
- NAICS 4883 (Support Activities for Water Transportation)
- NAICS 5417 (Scientific Research and Development Services)
- NAICS 5619 (Other Business Support Services)
- NAICS 5629 (Remediation and Other Waste Management Services)
- NAICS 8139 (Business, Professional, Labor, Political, and Similar Organizations)

Chapter 7: Impact on Jobs

Ecology used the Washington State Office of Financial Management's 2007 Washington Input-Output Model[4] to estimate the impact of the rule on jobs in the state. The model accounts for inter-industry impacts and spending multipliers of earned income and changes in output.

The proposed rule will result in transfers of money within and between industries; plan holders and PRCs complying with the rule amendments will pay employees or businesses providing equipment or services.

Under the asset-sharing estimates, assuming contingency plans are constructed internally, the Washington State economy could experience a net loss of one to two jobs over 20 years, as compliance costs incurred internally are not fully offset by transfers of funds to entities providing response assets and personnel.

Assuming contingency plans are constructed by contracted consultants, the Washington State economy could experience a net gain of two to five jobs over 20 years, as compliance costs transfer funds from complying entities to those providing physical assets by contract, and to outside consultants developing contingency plans.

These prospective changes in overall employment in the state are actually the sum of multiple small increase and decreases across all industries in the state.

[4] See the Washington State Office of Financial Management's site for more information on the Input-Output model. http://www.ofm.wa.gov/economy/io/2007/default.asp