
Small Business Economic Impact Statement for Proposed Oil Transfer Rules

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**Prepared for
State of Washington Department of Ecology
Spill Prevention, Preparedness, and Response Program**

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Executive Summary

The Spill Prevention, Preparedness and Response Program of the Washington State Department of Ecology is proposing revisions to the rules governing oil transfer operations that occur over state waters. The proposed rule changes will create standards for safe oil transfer operations as a strategy to meet a zero spill goal established by the Washington State legislature. The rules proposed in WAC 173.180 and WAC 317-40 introduce new oil transfer standards that focus on (1) preventing spills first and foremost, (2) the spread of product in the event of a spill, and (3) standardizing the response capability of the delivering facility or vessel in the event of a spill.

Since the proposed rules will impose more than minor costs on businesses, a Small Business Economic Impact Statement (SBEIS) is required by law (RCW 19.85.030). This study has been developed to analyze the compliance costs of the proposed rule to small and large businesses, in order to determine whether small businesses will bear a disproportionate share of these costs.

The analysis in this SBEIS compares the cost of compliance per employee between large and small businesses that are involved in over-the-water oil transfers. Based on the number of employees, five oil refineries classified as Class 1 facilities provide a cost basis for the analysis. The number of employees in each of these operations is over 300. Establishments within Class 2, Class 3, and Class 4 facilities make up the small business category, with an average employment of about eight employees.

The average annual statewide compliance costs for the five largest companies is close to \$6 million, with a cost per employee of \$3,520. The compliance cost per employee for small businesses is \$1,188, or about 34 percent of the per employee cost of refineries. Therefore, since the potential compliance cost per employee in the small facilities is 66 percent less than those in the five large refineries, the impact of the proposed rule is not likely to impose a disproportionate burden on small businesses compared to large companies.

Section I Introduction

Background

The Spill Prevention, Preparedness and Response Program of the Washington State Department of Ecology (DOE) is proposing revisions to the rules governing oil transfer operations that occur over state waters. The proposed rule changes will create standards for safe oil transfer operations as a strategy to meet a zero spill goal established by the Washington State legislature. Since the proposed rules will impose more than minor costs on businesses, a Small Business Economic Impact Statement (SBEIS) is required by law (RCW 19.85.030). This study has been developed to analyze the compliance costs of the proposed rule to small and large businesses, in order to determine whether small businesses will bear a disproportionate share of these costs.

Objective of the SBEIS

The objective of the SBEIS, as established in RCW 19.85.040, is to identify and evaluate the various requirements and costs that the rule might impose on businesses. In particular, the purpose is to determine whether a disproportionate impact of the compliance costs is borne by the State's small businesses. The legislative purpose of the Regulatory Fairness Act (RCW 19.85) is set out in RCW 19.85.011:

“The legislature finds that administrative rules adopted by state agencies can have a disproportionate impact on the state's small businesses because of the size of those businesses. This disproportionate impact reduces competition, innovation, employment, and new employment opportunities, and threatens the very existence of some small businesses. The legislature therefore enacts the Regulatory Fairness Act with the intent of reducing the disproportionate impact of state administrative rules on small business.”

The specific purpose of the SBEIS is identified in RCW 19.85.040:

“A small business economic impact statement must include [1] a brief description of the reporting, recordkeeping, and other compliance requirements of the proposed rule, and [2] the kinds of professional services that a small business is likely to need in order to comply with such requirements. [3] It shall analyze the costs of compliance for businesses required to comply with the proposed rule adopted pursuant to RCW 34.05.320, including costs of equipment, supplies, labor, and increased administrative costs. [4] It shall consider, based on input received, whether compliance with the rule will cause businesses to lose sales or revenue. [5] To determine whether the proposed rule will have a disproportionate impact on small businesses, the impact statement must compare the cost of compliance for

small business with the cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:

- (a) Cost per employee;*
- (b) Cost per hour of labor; or*
- (c) Cost per one hundred dollars of sales.*

(2) A small business economic impact statement must also include:

- (a) [6] A statement of the steps taken by the agency to reduce the costs of the rule on small businesses as required by RCW 19.85.030(3), or reasonable justification for not doing so, addressing the options listed in RCW 19.85.030(3);*
- (b) [7] A description of how the agency will involve small businesses in the development of the rule; and*
- (c) [8] A list of industries that will be required to comply with the rule. However, this subsection (2)(c) shall not be construed to preclude application of the rule to any business or industry to which it would otherwise apply."*

For purposes of the SBEIS, the terms "business", "small business", and "industry" are defined by RCW 19.85.020:

(1) "Small business" means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, and that has fifty or fewer employees.

(2) "Small business economic impact statement" means a statement meeting the requirements of RCW 19.85.040 prepared by a state agency pursuant to RCW 19.85.030.

(3) "Industry" means all of the businesses in this state in any one four-digit standard industrial classification as published by the United States department of commerce.

Summary of Proposed Rule Changes

The proposed rule changes will affect both facilities and vessels that transfer oil over navigable waters of Washington State. Costs of compliance will vary for each of five different affected business types: facilities, marine fueling terminals, mobile facilities, marine fuel outlets, and vessels. Most of these sectors are currently complying with federal regulations enforced by the U.S. Coast Guard, and with existing State regulations. The Federal regulations (46 U.S. Code) were strengthened by the Oil Pollution Act of 1990 requiring greater numbers of personnel for oil transfers, and 33 Code of Federal Regulations (CFR) requiring more and stronger steps be taken to prevent oil spills by commercial handlers and shippers of oil products. Parts 154, 155, and 156 of 33 CFR apply to vessels and facilities that conduct bulk oil or hazardous material transfers. These rules provide flexibility for the Coast Guard Captain of the Port to impose additional requirements

depending on port-specific needs. These regulations define the standards for safe oil transfer that include topics such as transfer procedures, emergency shutdown, transfer restrictions, communication, watch-standers, recordkeeping, personnel qualifications, advance notice of transfers, and transfer containment and response standards.

In general, all oil transfers that will occur at greater than 500 gallons per minute (gpm) are termed Rate A transfers, while lower speed transfers are termed Rate B. For all Rate A transfers, pre-booming will newly be required as long as it is both safe and effective to do so. This will include a majority of the transfers at Class 1 facilities and most vessel to vessel transfers. If it is not safe and effective to do so, different vessel and facility classes will need to be ready to deploy boom in the event of a spill, and are required to have additional boom available and on the scene within one hour. In all cases, personnel conducting transfers will need to have appropriate training in oil transfer safety, hold pre-transfer conferences, and ensure that loading procedures and adequate communication between vessel and facility is established prior to and during a transfer. Furthermore, Rate A deliverers must develop and submit for approval to Ecology the threshold environmental determining factors at each location. This threshold analysis will be used to determine whether or not it is safe and effective to pre-boom.

Rate B transferors will need to either comply with the pre-booming as described in the new regulation, or with the alternative measures outlined therein. In general, the alternative measures involve having boom available to be deployed, and all equipment needed to deploy and clean up a spill if one occurs.

All affected parties will also have the option to develop their own alternatives to compliance with regard to the alternative measures used when pre-booming is not safe and effective. A plan for alternative compliance may be submitted to DOE for approval if it is either impractical or economically infeasible to comply with the regulations as is.

Industries Required to Comply

The only industries to which these rules will apply are those involved in over-the-water oil transfers. The rule proposed for facilities in WAC 173.180 categorizes facilities engaged in over-the-water transfers into four Classes. Table 1 identifies these Classes and provides brief descriptions of the kinds of industries that comprise each Class. A brief description of firms affected by the proposed vessel rule (WAC 317.40) is also shown in the table.

Table 1
Industries Affected by Proposed Regulations

Category	Category Name	Description	Number of Firms	Number of Employees per Firm
Class 1	Refineries	Firms that operate oil refineries within the State	5	> 300
Class 1	Non-refinery Facilities	Large industrial plants such as pulp and paper mills, fuel distributors, and some marine fueling terminals that receive fuels via pipelines	12	7-600
Class 2	Mobile Facilities	Mostly mobile tank trucks	35	12
Class 3	Marine Fueling Terminals	Facilities that provide fueling services to fishing vessels and other smaller commercial vessels	3	21
Class 4	Transfer Sites	Small marinas and dock	125	7
Vessels	Vessels	Typically barges that transport oil products to and from terminals and refineries	5	38-120

Methods of Analysis

This analysis compares the cost of compliance per employee between large and small businesses involved in over-the-water transfers, in order to determine whether small businesses will bear a disproportionate share of these costs. Based on the number of employees, the five refineries in Class 1 are considered the largest businesses in this analysis. Small businesses, including those from all facility classes, are aggregated and the total per employee cost is compared with that for the largest businesses to assess whether or not a disproportionate impact is expected for small businesses. The majority of Class 1 “non-refineries” are neither independently owned, nor are they small in terms of the number of employees. This category presents a mixed bag of companies since some are very large paper mills and some are small facilities. Thus, this class is excluded from the analysis in order to avoid discrepancies in the results.

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The proposed oil transfer rules developed through this rulemaking process are evaluated further in the following sections as required in RCW 19.85. **Section II** discusses the

compliance costs for businesses in Washington. The section provides [1] a brief description of the reporting, record keeping, and other compliance requirements, [2] the kinds of professional services that a small business is likely to need in order to comply, [3] the costs of compliance for businesses required to comply with the proposed rules, including costs of equipment, supplies, labor, and increased administrative costs, and [4] whether compliance with the rules will cause businesses to lose sales or revenue. **Section III** evaluates [5] whether the proposed rules will have a disproportionate impact on small businesses. **Section IV** considers [6] actions taken to reduce the impact of the rules on small businesses, [7] how small businesses were involved in the development of these rules, and provides [8] a list of industries required to comply with the rules.

Section II Compliance Costs for Washington Businesses

The majority of costs associated with the proposed regulations will be borne by the largest firms, those that operate oil refineries within the State (Class 1 “Refineries”). In most cases (but not all), the initial costs are associated with establishing a full-circle permanent boom at the dock that can be operated on a regular basis. Costs include such associated items as boats to maintain the boom, dock lighting, and other equipment. The boom operation will also incur additional costs to these companies due to the labor required to conduct pre-booming. In subsequent years, this extra labor plus equipment maintenance comprise the majority of additional costs.

Non-refinery facilities within Class 1 include large industrial plants such as fuel distributors, and some marine fueling terminals that receive fuels via pipelines. These facilities are expected to respond to the regulations in one of three ways depending on a variety of factors. The first way to respond is to reduce the pumping rate below 500 gallons per minute which would avoid the requirement to pre-boom. This action would require the facility to provide response containment and recovery equipment and the personnel in-house at the facility in case of a spill. The next way is to provide pre-booming equipment and personnel in-house at the facility. The last expected way to respond is to contract an oil spill response organization (OSRO). If an OSRO is used, it is assumed that a typical transfer would cost approximately \$2,500 on average for the services of the OSRO to pre-boom.

Mobile tank trucks (Class 2 facilities) are expected to pool resources and share the costs of equipment purchases, so that boom will be available at docks where mobile trucks fuel ships. Some firms are expected to comply via in-house provision of a “runner” truck that will carry boom to the transfer dock, and have the driver of the runner truck be trained to meet the new requirements. The latter is a more expensive option.

Facilities that meet Class 3 standards are expected to experience additional costs associated with either pre-booming or having boom readily available. These facilities provide fueling

services to fishing vessels and other smaller commercial vessels. There are four firms identified so far in this category in the State of Washington. Class 4 facilities are the many marinas that typically fuel recreational vessels and some smaller commercial and public boats.

The primary compliance costs of the vessel regulation are associated with pre-booming during vessel to vessel bunkering and lightering operations. Compliance costs to tugs and barges that transport oil products to and from terminals and refineries are primarily covered in part through the costs estimated for facilities, as most transfers in this industry are between a facility and a tank barge or tank ship. It is assumed that a firm that conducts a large number of bunkering operations at sea will provide compliance in-house at a significant cost. However, most firms that bunker or lighter infrequently are expected to comply with the new regulations via the assistance of an OSRO.

In accordance with RCW 19.85, a discussion of required cost categories is provided below:

Reporting and Recordkeeping: The additional recordkeeping/reporting rules are not expected to incur additional costs to facility or vessel businesses.

Additional Professional Services: Some businesses that will be required to pre-boom all transfers will contract firms that specialize in oil spill recovery and response (OSRO) for compliance. OSROs perform all necessary measures for a business to be in compliance during a transfer.

Compliance Costs: All facility and vessel businesses are expected to incur new costs in equipment compliance. Some facilities, except Class 4 facilities, may require additional employees to operate in compliance. Additional labor represents the greatest cost for all facility and vessel businesses. No additional administrative costs are anticipated for any facility or vessel business.

Loss of Revenues: It is possible that several types of businesses could lose sales as result of the regulation. For example, within the Class 2 and Class 3 sectors, fueling may become more desirable in other locations such as Oregon or Canada. Also, these facilities service the resident fishing boat fleet in Puget Sound. Typically, these fishing vessels are all small family businesses and are already vulnerable to a great deal of economic variability due to the uncertainty in fish populations and weather.

The vessel to vessel bunkering industry may also lose revenue if container ships and others elect to re-fuel in other states or countries rather than pay the additional costs. In the Columbia River, it is quite possible that Oregon water bunkers will be preferred to Washington waters not only due to additional costs, but additional time associated with pre-booming. In Puget Sound, many of the large ships have fuel capacities such that they may opt to refuel in Asia as opposed to paying additional costs.

Average costs for each sector described are presented in Table 2 below.

Table 2
Summary of Expected Costs to
State of Washington from Proposed Oil Transfer Regulations

Affected Group	Number in State	Average Annual Cost per Firm (over 20 years in 2006 dollars)	Average Annual Statewide Costs (over 20 years in 2006 dollars)
Class 1 Facilities <i>Refineries</i>	5	\$1,196,892	\$5,984,461
Class 1 Facilities <i>Other Large Facilities</i>	12	\$79,187	\$950,240
Class 2 Facilities <i>(Mobile Tank Trucks)</i>	35	\$29,423	\$1,029,821
Class 3 Facilities <i>(Marine Fueling Terminals)</i>	3	\$72,204	\$216,612
Class 4 Facilities <i>(Marine Fueling Outlets)</i>	50-200	\$2,079	\$259,830
Vessels	5*	\$297,291	\$1,486,454

* Other companies operating vessels may be affected by the new regulations, but compliance costs are anticipated to occur at the facilities where these vessels conduct transfers. Therefore just five companies are included in this analysis.

Section III Analysis of Proportionate Impact on Small Businesses

An analysis of proportionate impact is based on the costs of compliance relative to the number of employees at the facility. The largest businesses affected by the oil transfer rules are the five Class 1 oil refineries. These refineries each employ an average of three-hundred employees. The same companies representing the refineries also own some of the other Class 1 non-refinery facilities, and the rest of the firms in this sector are also expected to be large firms. Four of the five vessel companies are also expected to be large firms, employing more than 50 people each.

Firms within Class 2, Class 3, and Class 4 make up the small business category. The mean number of employees among all small operations is eight. Within the Class 2 facilities, one quarter, or nine of the 35 firms are assumed to be integrated with large companies, and so just

26 firms are included in the analysis. Among the vessel companies, one is a small business and included.

Table 3 presents the average cost per employee for the large refineries and other small businesses involved in over the water oil transfers. The average annual statewide compliance costs for the five largest companies is close to \$6 million, with a cost per employee of \$3,520. The compliance cost per employee for small businesses is \$1,188, about 34 percent of the per employee cost for refineries.

**Table 3
Costs per Employee
in Large and Small Businesses**

Sector Classes	Number of Firms	Employees per Firm	Total Employment	Sector Compliance Cost	Cost per Employee	Percent of Large Costs per Employee
Large	5	300	1,750	\$5,984,461	\$3,520	100
Small	155	8	1,295	\$1,241,452	\$1,188	34

Based on this analysis the potential compliance costs per employee in small firms are almost 66 percent less than that of the largest firms. Thus, the impact of the proposed rules is not likely to be disproportionately larger for small businesses than for large when measured on a cost per employee basis.

Section IV Small Business Involvement and Impact Reduction Efforts

Actions Taken to Reduce the Impact of the Rule on Small Businesses

By separating facilities into four classes with different regulations, the structure of the proposed rules reduces impacts on small businesses. The rules use a scaled, risk based prevention and response approach that sets standards on those facilities and vessels with a higher risk of transfer spills. Additionally, the rules incorporate flexibility to reduce the cost of compliance for smaller businesses; some requirements are only applicable if the facility is doing a larger volume Rate A transfer, and do not apply during Rate B transfers. During Rate B transfers, smaller facilities do not have to pre-boom, and have lower equipment and response capability requirements. Additional flexibility is incorporated into the proposed regulations as facilities have the option to submit an alternative plan to DOE, enabling them to achieve the objectives of the rules through other means.

Involvement of Small Business in the Development of the Proposed Rules

During the development of the transfer rules, DOE communicated regularly with affected small businesses. Electronic correspondence with interested parties was established early in the rule development process in order to maintain communication. DOE remained in regular contact with Class 3 facilities owners, and met individually with several of these businesses. Through the process, Class 4 facilities were informed about the proposed regulations and were given the opportunity to comment on these. Additionally, representatives of small businesses as well as business owners themselves were members of the Oil Transfer Rule Advisory Committee that provided input into the development of the rules.