



January 20, 2016

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By Mail and Online: <https://ts.efsec.wa.gov>

RE: Port of Vancouver Comment Letter on the Tesoro Savage Vancouver Energy Distribution Terminal Facility Draft Environmental Impact Statement

Dear Mr. Posner:

The Port of Vancouver USA (Port) thanks you for the opportunity to comment on the Tesoro Savage Vancouver Energy Distribution Terminal Facility Draft Environmental Impact Statement (Draft EIS).

Introduction

The Draft EIS is a critical milestone in the process to evaluate the Vancouver Energy Distribution Terminal Facility (Project) comprehensively. It has taken years of work from many people and organizations to advance the Project to this point. The Port appreciates all the hard work and coordination throughout this process and appreciates the opportunity to provide comments to the Energy Facility Site Evaluation Council (EFSEC) on the Draft EIS. We look forward to continuing to collaborate as we all work toward a positive outcome for the community, environment, and economy.

Port of Vancouver History and Mission

The Port of Vancouver USA was created by local voters in 1912 to ensure that prime industrial and marine property on the waterfront was retained for public benefit. In its early days, the Port provided storage space and dockage for companies shipping products such as lumber, prunes, and flax from the Pacific Northwest to the world. It hosted shipyards during both world wars and has been a hub for industry from post-war economic expansion through today.

The Port currently serves as landlord for more than 2,100 acres, with tenants and customers who move more than 6 million metric tons of goods each year. Port businesses employ more than 3,200 people and generate \$2.9 billion in annual economic benefit for the region.

The Port's mission is to provide economic benefit to its community through leadership, stewardship, and partnership in marine, industrial, and waterfront development. The Washington legislature envisioned the value of public ports in 1911 and passed laws authorizing the development of marine terminals, including rail (RCW 53.04.010). Port leadership and staff accomplish this public benefit mission by analyzing business opportunities and providing land and infrastructure to support business needs and attract employers and industry.

The Changing Face of Domestic Energy

One such business need is crude oil. We are a nation and world dependent upon petroleum. While green energy has made significant strides in recent years – and the Port has played a major role in facilitating the growth in wind turbine use in the Pacific Northwest – the majority of our world's energy (as well as countless essential products) is still sourced from petroleum, keeping demand for this product high.

The unprecedented production of the U.S. Midwest shale formations puts our nation in a unique position to be energy-independent for the first time in history. As with other emergent markets throughout our nation's industrial past, this also presents logistical challenges and opportunities. As a nation, we must find a way to move these products safely from source to market. That is what ports do; it is what the Port has been doing exceptionally well for decades.

The Port has strong safety and environmental policies and practices and an excellent record in both areas. It has long been committed to the safe movement of all cargos; over the past decade in particular, the Port has made significant investments in its rail system, including the construction of the West Vancouver Freight Access (WVFA) project. The WVFA project not only addresses existing customer demand for rail capacity and attracts additional customers bringing jobs and revenue to the local community; it also increases capacity and efficiency for the entire regional rail system, estimated to reduce region rail congestion by as much as 40% through the elimination of an important chokepoint on the mainline rail system. Because its benefits stretch far beyond the Port's boundaries, the WVFA project received recognition and millions of dollars in financial support from federal and state agencies. Recent mainline infrastructure improvements also have been made by BNSF Rail Company (BNSF) in the region and in the city of Vancouver, which further allow the rail system to keep products flowing safely and efficiently through Vancouver and beyond. Port leadership have worked closely with state and federal legislators to make the safe movement of crude oil a priority for Vancouver and the nation. These commitments, combined with the Port's advantageous location between the Midwest and West Coast, make it one of the safest and most efficient places through which to move crude oil to meet the needs of West Coast refineries.

It is important to note that the challenge of supporting demand for petroleum and other energy products is not unique to the Port. Ports and communities throughout the country are facing this challenge, particularly along trade arteries like the Columbia River. The changing face of domestic energy is not confined to crude oil; energy projects

involving methanol, liquid natural gas, and other materials are being proposed at ports across the region. These projects also must be safely sited, managed, and supplied as the energy market continues to evolve.

Jobs, Economy, Community: Vancouver Energy Advances the Port's Mission

The Port moves cargo and supports industry so it can create jobs, grow the economy, and support its community. The jobs and economic benefit that would be produced by the Project fit this mission closely. However, the Project's benefits would be much larger than that. By supporting more than 1,000 jobs through construction and operations, providing millions of dollars in state and local tax revenue, and investing heavily in Port infrastructure, the Project has the potential to transform the local and regional economies.

Jobs created by the Project would support thousands of other jobs in the region. Tax revenue would provide more funding for local schools, roads, police, fire, and other public services, and provide significant opportunities for investment in Port infrastructure that would be used to attract more businesses and jobs to Clark County. Based on an economic study commissioned by Vancouver Energy (Schatzki and Strombom 2014), Tesoro and Savage estimate the Project would provide the following economic benefits.

- Create 320 jobs during construction.
- Create 176 direct onsite jobs and 440 direct offsite operations jobs.
- Support more than 1,000 jobs annually in the region once the facility is operational.
- Generate \$2 billion for the local and regional economy through labor income and tax revenues, as well as income and profits from direct, indirect, and induced impacts through the operation of the Project.
- Produce \$1.6 billion in labor income during construction and assumed first 15 years of terminal operation.
- Generate more than \$22 million in state and local taxes during construction.
- Generate more than \$7.8 million in tax revenue annually to state and local governments.

Overview of Comments

To supplement its own expertise, the Port has engaged additional support to evaluate areas of particular concern to the Port and the surrounding communities. This team includes Schwabe Williamson & Wyatt, ICF International (ICF), and the Sawicki Group.

Schwabe Williamson & Wyatt is a regional, multi-service law firm that has represented the Port for more than 25 years and has significant experience understanding and explaining the Port's operations across many different regulatory systems, including environmental, land use, maritime, public agency, and various operation-specific frameworks. Specific comments are attached to this letter.

ICF is an environmental consulting company with more than 40 years of regionally focused experience developing and reviewing EISs in satisfaction of the Washington State Environmental Policy Act (SEPA). ICF has technical expertise conducting environmental impact assessments focusing on Port operations and rail and vessel transportation for a wide variety of resource areas, including air quality, environmental health, risk assessment, noise, socioeconomics, and potential impacts on the human and natural environment.

The Sawicki Group specializes in emergency and crisis program management and has more than 200 years of experience in managing, reviewing, developing, implementing and maintaining emergency and crisis management programs. This expertise includes the development of operational and facility plans, training and leading response teams, conducting internal audits of facility plans, and participation in international and domestic emergency response operations. Specific comments are attached to this letter.

The Port evaluated the Draft EIS for a wide range of issues, including the following concerns.

- Accuracy of the information presented.
- Analysis of likely or reasonably likely impacts.
- Recommended mitigation measures.
- Identification of significant unavoidable adverse environmental impacts.
- Compliance with SEPA and other laws.

More specifically, the Port reviewed the Draft EIS to evaluate whether the information presented was sufficient and accurate for the purposes of informing the public and decision-makers about the likely or reasonably likely and significant environmental impacts and whether the recommended mitigation measures are appropriate and feasible. To this end, the Port has identified the following comments on, and concerns about, the Draft EIS.

- **No Action Alternative.** The Draft EIS lacks an analysis of environmental impacts related to the No Action Alternative. This analysis should include impacts from rail and vessel transportation to and from the proposed Facility site that would otherwise occur unrelated to the Proposed Action.¹ As a result, the potential transportation-related impacts of the Proposed Action can be assessed only in comparison to existing conditions. Existing conditions are not an appropriate baseline for comparison of broader rail and vessel transportation beyond the Port's facilities. As discussed in detail in the following bullets, this result in an oversimplification and misrepresentation of the potential impacts associated with the Proposed Action on rail and vessel capacity in these areas.
- **Rail impacts.** The approach and characterization of impacts from increased rail transport are erroneous. Specifically, the information and conclusions in the

¹ The Draft EIS refers to the Proposed Action and proposed Project interchangeably but does not define either one. For the purpose of this comment letter, the term Proposed Action is used to refer to the discretionary action of approving or denying permits and approvals required to construct and operate the proposed Facility.

Draft EIS are not supported by facts and are overly simplistic. The conclusions imply that the rail infrastructure in Washington could not handle the additional train traffic related to the Proposed Action and that substantial rail congestion and vehicle delay would result.

- **Vessel impacts.** The approach and characterization of impacts from increased vessel traffic are erroneous. The analysis oversimplifies factors that influence vessel-related impacts, misrepresents, or does not support with facts the relative magnitude of the increase in vessel traffic attributed to the Proposed Action. This results in misleading conclusions about the potential impacts of the Proposed Action.
- **Probability of impacts.** The Draft EIS characterizes some potential impacts as *extremely unlikely*. The characterization of some significant unavoidable adverse impacts as *extremely unlikely* (and therefore not *probable*, *likely*, nor *reasonably likely*), such as incidents involving crude oil spills, fires, or explosions, is not consistent with the requirements of SEPA.

These insufficiencies result in the following issues.

- Misleading information for decision makers.
- Insufficient information to support the development of appropriate and reasonable mitigation measures.
- The implication that the Proposed Action should bear the burden of mitigation for impacts that are occurring already and would otherwise continue to occur in Washington, separate and apart from the Proposed Action.

The Port has made detailed comments around these overarching themes as well as comments on other important aspects of the analyses presented in the Draft EIS. These comments are presented by chapter and section of the Draft EIS. Tables 1 and 2 are attached at the end of the letter; Table 1 points out inconsistencies between the Executive Summary and the body of the Draft EIS, and Table 2 lists errors, omissions, and requests clarification from throughout the Draft EIS. The inaccuracies, unclear comments, and omissions contribute to the inadequacy of the Draft EIS (WAC 197-11-400(3)).

Detailed Comments

Executive Summary

The information in the Executive Summary is inconsistent with information in the body of the Draft EIS. This raises concerns about using the Executive Summary as a proxy for the Draft EIS for the purposes of understanding the potential impacts, recommended mitigation, and identification of significant unavoidable adverse impacts. The Port requests that careful attention be given to ensuring consistency between the Draft EIS and the Executive Summary. To this end, Table 1 presents a list of errors and inconsistencies in the Draft EIS, including those in the Executive Summary. SEPA requires a useful summary; to be useful, it must be accurate (WAC 197-11-440(4)).

Chapter 2, Proposed Action and Alternatives

The Port's review identified two primary concerns with Chapter 2.

Description of the Proposed Action

The Port, as landowner of the proposed Facility, has particular insight into the details of the Proposed Action and its relationship to the Port's own infrastructure. To this end, the Port has compiled comments on the accuracy of the information presented in Chapter 2, *Proposed Action and Alternatives*. Corrections described in the Port's comments are necessary to provide a complete and accurate description of the alternatives, the Port's facilities and operations, and the affected environment, all of which form the foundation for the impacts analyses.

Characterization of the No Action Alternative

The incremental impacts of the Proposed Action presented in Chapters 3 and 4 are evaluated against existing conditions. Additional information to assess the relative impacts is presented through the analysis of potential impacts related to the No Action Alternative; however, neither alternative, as described in Chapter 2, acknowledges the broader historical variability of rail and vessel traffic or the additional projects that are reasonably foreseeable in the rail and vessel study areas. To provide an accurate basis for evaluating the relative increase in rail and vessel traffic under the Proposed Action, the Port recommends revisions to both scenarios under the No Action Alternative. Both scenarios should provide a fuller description and evaluation of the rail and vessel traffic that has occurred and would otherwise occur in Washington and beyond, even if the Proposed Action is not approved and the proposed Project were not constructed.

Table 5-2, in Chapter 5, *Cumulative Impacts*, does include a list of projects and related rail and vessels trips planned for the cumulative study area; however, as discussed further in comments on Chapter 5, below, this information does not appear to be evaluated in the Draft EIS separate from analysis of impacts related to the Proposed Action. Because the Draft EIS analyzes a 20-year period, the Port recommends the description of the No Action Alternative include this information for the purposes of more fully analyzing the impacts of the No Action Alternative in Chapters 3 and 4 and analyzing potential impacts under the No Action Alternative. These analyses serve as the baseline for the analysis of cumulative impacts in Chapter 5.

The second no-action scenario of a different industrial facility being built at the project site (page 2-87) should describe more fully the estimated rail and vessel traffic to and from the project site of this different industrial facility. To achieve a reasonable return on the investment in the Port's rail and terminal infrastructure, which are designed to support bulk handling facilities that use unit trains, this different industrial facility would likely result in a similar number of rail and vessel trips to and from the project site. Although it is not possible to determine the specific commodity, inclusion of this information would provide a more reasonable basis for comparing the impacts of this scenario with those of the Proposed Action.

Chapter 3, *Affected Environment, Impacts, and Mitigation Measures*

Section 3.0, Introduction

SEPA establishes the following requirements for an EIS, including the Draft EIS.

- Agencies shall, and the EIS “need analyze...reasonable alternatives and probable adverse environmental impacts that are significant.” WAC 197-11-402(1).
- Probable means likely or reasonably likely to occur, as in “a reasonable probability of more than a moderate effect on the quality of the environment’ (WAC 197-11-794). Probable is used to distinguish likely impacts from those that merely have a possibility of occurring, but are remote or speculative. This is not meant as a strict statistical probability test.” WAC 197-11-782.

Significant is defined as follows.

- *Significant* as used in SEPA means a reasonable likelihood of more than a moderate adverse impact to environmental quality.
- Significance involves context and intensity (WAC 197-11-330) and does not lend itself to a formula or quantifiable test. The context may vary with the physical setting. Intensity depends on the magnitude and duration of an impact.
- The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.
- WAC 197-11-330 specifies a process, including criteria and procedures, for determining whether a proposal is likely to have a significant adverse environmental impact.

The Draft EIS framework for assessing the impacts includes four levels of impact: *negligible*, *minor*, *moderate*, and *major*. The definition of each level of impact is presented beginning on page 3.0-2. Although these definitions account for level of intensity, duration, physical intent, and the significance of the potentially affected resources, they do not consider the relative likelihood with which a particular outcome might occur as required by SEPA (see regulations cited above). This omission results in some instances where the Draft EIS characterizes some impacts that are extremely unlikely as *major*, even though the impact would otherwise be considered remote or speculative under SEPA (WAC 197-11-782) and need not be addressed. Specific examples are provided in the comments by resource.

As further discussed on page 3.0-3, the Draft EIS notes that significant unavoidable adverse impacts are those impacts that have a reasonable likelihood of more than a moderate adverse impact to environmental quality even after all mitigation measures are implemented. However, in general, the Draft EIS does not clearly identify the Applicant’s voluntary measures or clarify how they were factored into the analysis of impacts, what specific regulatory standards would apply and how they factor into the analysis, what the specific level of remaining impact would be, and to what degree additional recommended mitigation would offset the impact. In some instances, the

Draft EIS appears to recommend mitigation when none is needed. Specific examples follow in the comments by resource.

Finally, the Draft EIS text directly contradicts SEPA by concluding that *moderate* impacts can be significant (page 3.0-3). SEPA requires “more than a moderate effect” for an impact to be significant (WAC 197-11-794). Thus, the entire scale around which Chapters 3 and 4 are designed does not comply with SEPA and the conclusions based on the scale are, likewise, improper.

Section 3.1, Earth Resources

On page 3.1-24, the Draft EIS states that the increase in vessel traffic related to the Proposed Action would result in increased vessel wakes that would have a minor impact to shoreline erosion. Compare this finding to conclusions in other sections that vessels wakes would have an impact greater than minor. The minor level of impact is supported by the facts and the later, inconsistent sections should be corrected to match the conclusions of Section 3.4.3.3 (page 3.4-16).

On page 3.1-31, in Section 3.1.6, *Significant Unavoidable Impacts*, the Draft EIS notes a large earthquake could cause moderate to major disruptions to rail transportation and that tsunamis near the mouth of the Columbia River could range from moderate to major; however, the likelihood of these events occurring would be unchanged with the implementation of the Proposed Action. Therefore, identification of these risks leads to misleading conclusions that the Proposed Action would result in significant unavoidable adverse impacts related to earth resources.

Section 3.2, Air Quality

As noted on page 3.2-18 in Section 3.2, *Air Quality*, although mobile source emissions (e.g., exhaust from vehicles, trains, and vessels) are not regulated as part of the air permit applicable to the proposed Facility, the Draft EIS provides an estimate of the toxic air pollutant emissions from mobile sources related to the Proposed Action at the proposed Facility site for the purposes of disclosure. In the absence of an applicable regulatory threshold, the Draft EIS references the State of Washington’s acceptable source impact level (ASIL) criteria (WAC 173-460), which were intended to regulate stationary sources. The ASILs are screening-level thresholds developed for regulatory action for stationary sources to identify levels at which health concerns for the most sensitive individuals are possible. For diesel particulate matter (PM), the ASIL is for chronic exposures over a lifetime (70 years). This screening level threshold value is the first step in a new source review process under WAC 173-460 and is used to assess initially if a project poses any possible health concerns. The Draft EIS should provide further discussion about how the ASIL is used as a first step and how subsequent tiers of analysis use more refined modeling and emission analysis techniques to portray more accurately the potential project risks. This information should be included to provide context as to the meaning of the ASIL and to provide the reader with an understanding of the diesel PM concentrations presented in the Draft EIS.

In footnote 5 on page 3.2-18, the Draft EIS notes that, although ASILs do not apply to mobile sources, they are an indicator of risk of an increase in cancer rates to 1 in 100,000 people exposed for 70 years, and that the ASIL for diesel PM is 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). However, per WAC 173-460-150, the ASIL for diesel PM is 0.00333 $\mu\text{g}/\text{m}^3$. This information should be corrected with additional information as noted above to provide an accurate context for understanding the applicability of the ASIL to the potential diesel PM emissions.

The dispersion modeling results presented in Appendix G and depicted in Figure 3.2-5, indicate that several of the assumptions related to Port operations should be refined to provide a more realistic (or likely) estimate of the emissions as well as a more realistic characterization of the dispersion of diesel PM emissions of the Proposed Action at the proposed Facility site. These assumptions are based on the Port's experience with how trains operate within the Port's existing infrastructure. Refinement to this type of analysis often occurs as the evaluation and understanding of a proposal progresses.

Since January 1, 2012, new locomotive line-haul engines have been equipped with Automatic Emissions Shutoff System (AESS). During unloading operations and some crew switching, extended periods of idling would initiate the AESS. The resulting reduction in idle emissions associated with the operation of these locomotive engines should be included in the analysis.²

The locomotive engines serving the Port will change over the life of the proposed Project as the U.S. Environmental Protection Agency (EPA) establishes emissions standards for newly manufactured and remanufactured locomotives (40 CFR Part 1033). These newer, cleaner locomotive engines will replace older engines and, as a result, the fleet will have lower emissions over the life of the Project.³

In assessing the impacts of diesel PM emissions on increased cancer risk, all size particles of diesel exhaust should be included in the analysis because the ASIL and associated cancer risk method for diesel PM is for all of the exhaust, not just those particles less than 2.5 microns ($\text{PM}_{2.5}$). Thus, in addition to the $\text{PM}_{2.5}$ in the Draft EIS analyses, diesel PM emission analysis also should include particles as large as PM_{10} .

The maximum speed for trains traveling within the Port is 10 miles per hour (mph), and average speeds and notch settings during indexing, idle, and through the transfer process will be lower than the assumption on which the Draft EIS discussion is based, which uses 25 mph. Plume rise would be higher and initial vertical dispersion would be

² This assumes that 15-minute of engine idle occurs before engine shutdown, that no shutdown occurs when ambient temperatures are less than 45° F, and that this applies to 51.6% of the BNSF fleet based on the fraction of the BNSF fleet projected to be equipped with AESS locomotives by 2028 based on projections of BNSF fleet changes as estimated in the Tongue River Draft EIS, Appendix E. (http://www.tonguerivereis.com/documents/draft_eis/appendices/AppE_AirQuality_Emissions_Modeling%20Data.pdf (Tables E.1-6, E.1-7).

³ Assuming a 20-year lifetime operation period starting in 2018, the estimated BNSF fleet lifetime average particulate matter emission will be 54% lower than the 2018 fleet average emission rate.

more dispersed for emissions modeled as volume sources presented in the Draft EIS (Appendix F, Table 5).⁴

The screening level approach, as noted in footnote 9 to Table 5, should be replaced with a more refined approach such as the one described in the State of California Air Resources Board, 2004, Roseville Rail Yard Study. This approach differentiates between daytime and nighttime conditions where substantial differences in plume rise occur from the buoyant exhaust plume into the typical neutral and stable atmosphere. Including this refinement in the screening level approach would better characterize the resulting diesel PM concentrations from the Proposed Action.

Section 3.3, Water Resources

On page 3.3-53, in Section 3.3.3.3, *Vessel Corridor*, the Draft EIS states that the Proposed Action could adversely affect water quality as the result of wave action from deep-draft vessels. The Draft EIS cites Pearson and Skalski (2010) [incorrectly cited as Pearson and Skalinski 2011] and Liedermann et al. (2014) in support of the assertion that vessel wakes could cause turbidity and redeposition of fine sediments. Neither of these cited works discusses this issue. The assertion that vessel wakes would cause turbidity or fine sediment redeposition is unsupported and speculative. This finding has not been identified as an impact in other studies of vessel wakes on the Lower Columbia River (Bauersfeld 1977, Hinton and Emmett 1994, Ackerman 2002, Pearson et al. 2006, ENTRIX 2008).

Waves in general are known to be capable of transporting sediment or causing local short-term turbidity changes; however, such waves already exist all along the Columbia River. There are no data, cited studies, or analyses to support a conclusion that waves associated with vessel traffic, whether or not Project-related, have any water quality impacts incremental to or different from the waves generated by winds, currents, and tides that occur naturally along the river. The Draft EIS acknowledges the strong wave energy present in the river from the current and tides. See pages 3.3-33 and -34 (Section 3.3.2.3, *Vessel Corridor*).

A consideration of the theoretical analysis of vessel wakes on shoreline erosion (Maynard 2004) or of the analysis of vessel wake effects on the Danube River (Liedermann et al. 2014) could bolster the analysis but still would not support any determination of significant adverse impacts to water quality. Statements that vessel wakes could affect shoreline vegetation also are not substantiated in this section or in Section 3.4, *Terrestrial Vegetation*, as noted in the comments below.

On page 3.3-54, in Section 3.3.4, *No Action Alternative*, first bullet, the Draft EIS states that water quality would not otherwise be affected beyond existing conditions; however, as noted in prior comments, the Draft EIS does not provide an assessment of the potential impacts in the study area from increased vessel traffic unrelated to the Proposed Action. This information would provide additional context for interpreting

⁴ See Environ (2006), Air Dispersion Modeling Assessment of Air Toxic Emissions from BNSF Los Angeles/Hobart Railyard Study, Table 4-2, Available at: http://www.arb.ca.gov/railyard/hra/env_hobart_admrpt.pdf.

the relative contribution of impacts from the Proposed Action alone as presented in Chapters 3 and 4 and cumulatively as presented in Chapter 5 of the Draft EIS.

Section 3.3.6, *Significant Unavoidable Adverse Impacts*, identifies a significant unavoidable adverse impact from vessel wakes on wetland vegetation. This conclusion is based on a short analysis on page 3.3-53 that does not present any data or cite any sources. Further review of the available literature on this topic has not identified any sources that support such a conclusion, on the Lower Columbia River or anywhere else.

Section 3.4, Terrestrial Vegetation

Section 3.4.3.2, Rail Transportation

In Section 3.4.3.2, *Rail Transportation*, the Draft EIS states that increased rail traffic to and from the project site could result in moderate impacts to terrestrial vegetation from increased spills and the spread of noxious weeds. However, the discussion on page 3.4-15 does not provide an analysis of the relative magnitude of the potential impact but rather implies that any increase in rail traffic above existing conditions would result in a moderate impact. Additionally, as noted in Appendix E, pages 42-43 and Figure 15, the design of the existing rail infrastructure minimizes exposure of the environment to risks from small spills or leaks, making it unlikely that spills would reach resources along the rail line that are more sensitive.

Section 3.4.3.3, Vessel Transportation

On page 3.4-15, the Draft EIS asserts that vessel wakes could dislodge and facilitate waterborne transport of invasive plants, citing a Washington State Department of Ecology web page in support of this statement. The cited web page says nothing about ship wakes; it is a list of invasive plants. Thus, the statement about wake transport of invasive plants is unsupported and speculative.

The immediately subsequent paragraph on page 3.4-15 also is vague and speculative. The conclusions asserted in Section 3.4.3.3, *Vessel Transportation*, do not consider the full range of vessel traffic on the river both historically and currently, nor the full body of available research on the topic. As discussed further below, the analysis oversimplifies the factors that affect wake distribution and results in incorrect and unsupported conclusions about the nature and magnitude of wake-related impacts attributable to the Proposed Action.

On page 3.4-15, the Draft EIS states that the proposed Project would entail vessels larger than those that have used the Lower Columbia River in the past. However, the primary vessels associated with the proposed Project, Handymax and Panamax vessels, have transited the Columbia River in relatively large numbers in the previous decade, associated with grain transport. Although those vessels were not filled to capacity (because of channel depth constraints at the time), the Columbia River historically has seen both Handymax and Panamax vessel traffic comparable to traffic proposed under the Project. The Draft EIS disregards the fact that, because deep-draft vessels currently on the river are similar in size, their impacts are similar and ongoing, unrelated to the Proposed Action.

The Draft EIS does not cite the full range of appropriate studies to support the conclusions, limiting the analysis to a consideration of the relative increase in tanker traffic as compared to past vessel traffic from a single year (2013). This approach does not consider the more complex factors that influence the analysis, and produces unsupported and incorrect conclusions. The decision to consider data for only a single year disregards the fact that decades of vessel traffic data are available. The use of a longer data time series would allow inferences about long-term trends in vessel shipping on the river, which in turn would allow inference about changing conditions during the environmental baseline period and about foreseeable changes under the No Action Alternative. Neither of these topics is addressed in the Draft EIS. These longer-term data, for instance, would provide quantification of the recognized long-term trend toward use of the river by increasingly larger vessels. Such data also would support the inference that deep-draft vessel traffic has been increasing each decade (with shorter-term fluctuations such as those associated with the recent global economic recession), a trend that is likely to continue under the No Action Alternative.

The decision to focus further on one type of vessel, the tanker, is an oversimplification and appears to have been based on a statement by Pearson and Skalski (2010) that, "Oil tankers comprised the only vessel type for which stranding occurred in more than 50% of the vessel passages." Neither Pearson and Skalski (2010) nor any other author cited in the Draft EIS singles out tankers as a special consideration; rather, all studies of wake effects in the Lower Columbia River cited in the Draft EIS identify deep-draft vessels in general as the primary cause of concern. It does not matter if the vessels are carrying containers, breakbulk, dry bulk, bulk liquids, or some other cargo; the potential impacts to riparian vegetation and organisms that live in the river (addressed in Section 3.6, *Aquatic Species*, which is founded in part on the conclusions of Section 3.4, *Terrestrial Vegetation*) are largely determined by the size of the vessels.

Past work to evaluate the environmental impacts caused by these vessels has been focused on the vessels themselves, as physical objects, regardless of the type of cargo they happen to carry. Ackerman (2002), for instance, recorded a variety of different deep-draft vessel types passing fish stranding sites, but singled out deep-draft vessels as a cause of concern, partly because the next smaller class of vessels, tugs and tug/barge combinations, produced wakes less than a third as large as deep-draft vessel wakes (0.16- versus 0.52-meter wake height). This result and similar results from other studies on the river all show that deep-draft vessels are the principal players in vessel wake effects on the Lower Columbia River, regardless of what type of cargo they carry.

Past studies of vessel wake effects on the Lower Columbia River are also united in showing that the location and types of impact related to deep-draft vessel passage are extremely variable. This subject is acknowledged briefly in statements about the spatial variability of wake effects and in a broad and unsupported assertion on page 3.6-51 that effects would primarily be in the lower 33 miles of the river. However, no effort is made to identify the locations or severity of potential impacts or of the factors that influence vulnerability to impacts, which, among other factors, include the complex interrelation between distance of the navigation channel to the shore and depth of the intervening

river bottom. This omission implies that the potential impacts are pervasive throughout the study area, and this implication is not supported by evidence.

The earliest published work on biological effects of ship wakes on the river (Bauersfeld 1977) found only eight locations of concern along the Lower Columbia River. The NOAA researchers Hinton and Emmett (1994) reexamined those sites and concluded that “various physical factors such as river-surface elevation, beach slope, vessel design and speed, and the distance between the passing vessel and the beach, and biological factors such as fish condition, may need to interact for stranding of juvenile salmonids to occur.” They found substantial risk of fish stranding at only three sites, and even then, concluded that, “stranding of juvenile salmonids is not presently a significant cause of juvenile salmonid mortality in the lower Columbia River.” Ackerman (2002) stated, “We found that wake amplitude was related to distance of vessel from shore, vessel draft and vessel length.” The authors found little evidence of actual effects attributable to wake action.

Pearson et al. (2006; Pearson and Skalski 2010 [incorrectly cited in the Draft EIS as Pearson and Skalinski 2011]) confined their analysis to the three sites identified by Hinton and Emmett (1994) and performed data-rich statistical modeling of fish stranding observed at these sites. The authors found that site, tidal stage, abundance of juvenile salmon, and kinetic energy (a derivative term based on vessel size and speed) were the primary determinants of fish stranding risk, and that risk still varied considerably between the three study sites.

The Draft EIS also speculates that the proposed Project would lead to increases in shoreline erosion in 16% of the lower river where beaches are close to the channel, are not shielded from wave action, and have slopes of less than 10%. Much of the channel is not “close” to the beaches in the lower 33 miles. Measurements in the Pearson and Skalski (2010) study show that two of the three study sites referenced above are 125 to 200 yards from the channel, and the third site, Sauvie Island, is as far as 350 yards from the channel (Figure 1). As shown in Table 3 and in Figure 2, in the lower 35 miles of the Columbia River, the navigation channel ranges from 0.1 to 5.4 miles from the shoreline. By stating that vessel wake impacts would be greatest in areas where the navigation channel is close to the shoreline, the Draft EIS continues to oversimplify the factors that influence wake dynamics and overstates the potential impacts related to the Proposed Action.

Table 3. Columbia Shipping Lane Shore Distances

Shipping Lane Mile Marker <i>Statute Miles</i>	Distance from North Shore <i>Statute Miles</i>	Distance from South Shore <i>Statute Miles</i>
0.75	0.46	1.26
5	1.26 (Sand Island) 3.01 (Port of Chinook)	0.42
11	3.94	0.61
15	4.54	0.41
20	3.87	4.50
25	0.30	3.11 (Seal Island) 5.45 (Oregon Beach)
30	0.35	0.63 (Grassy Island) 1.96 (Oregon Beach)
35	0.33	0.68 (Tenasillahe Island)

Source: NOAA charts 18521, 18523

Figure 1. Study Sites

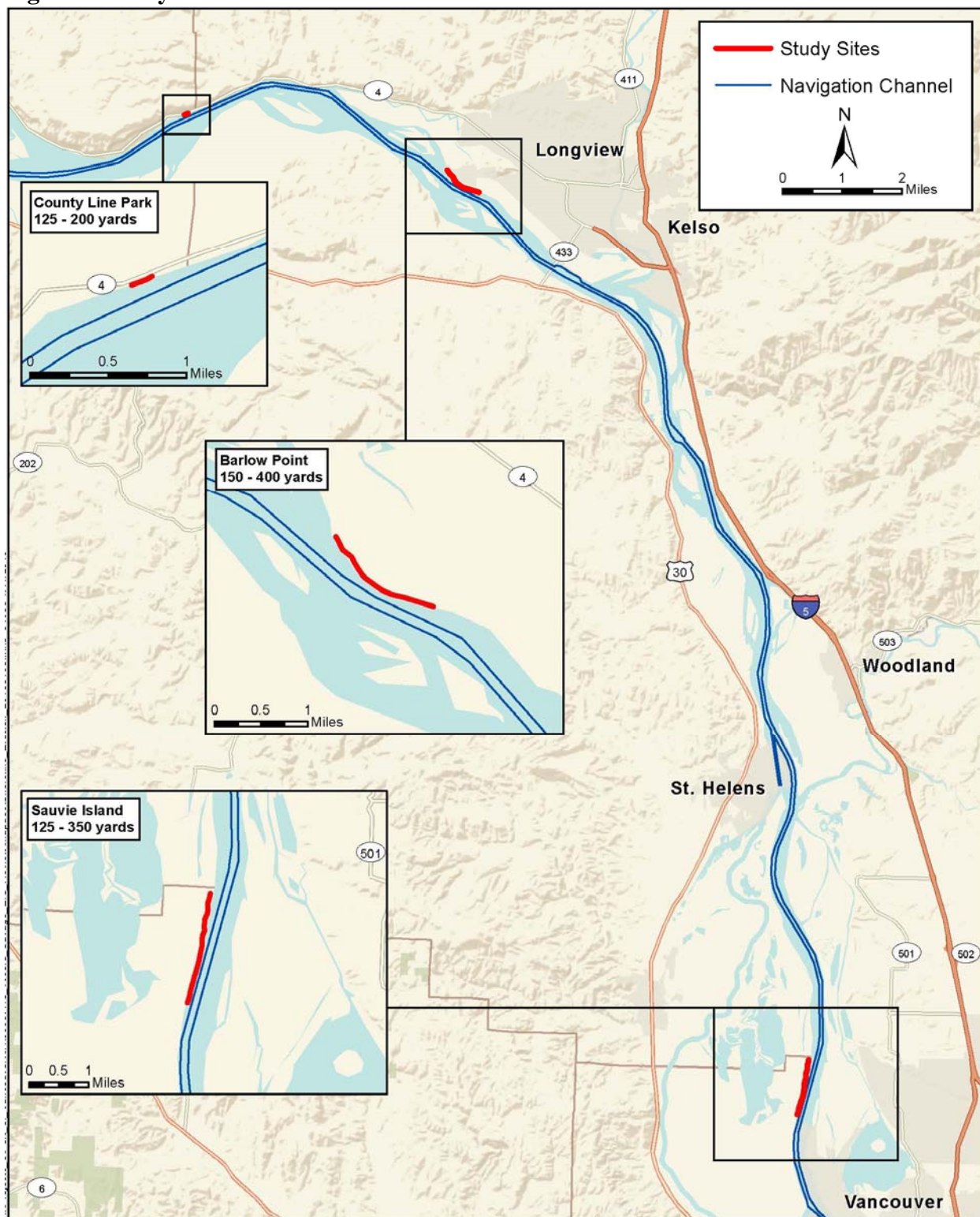
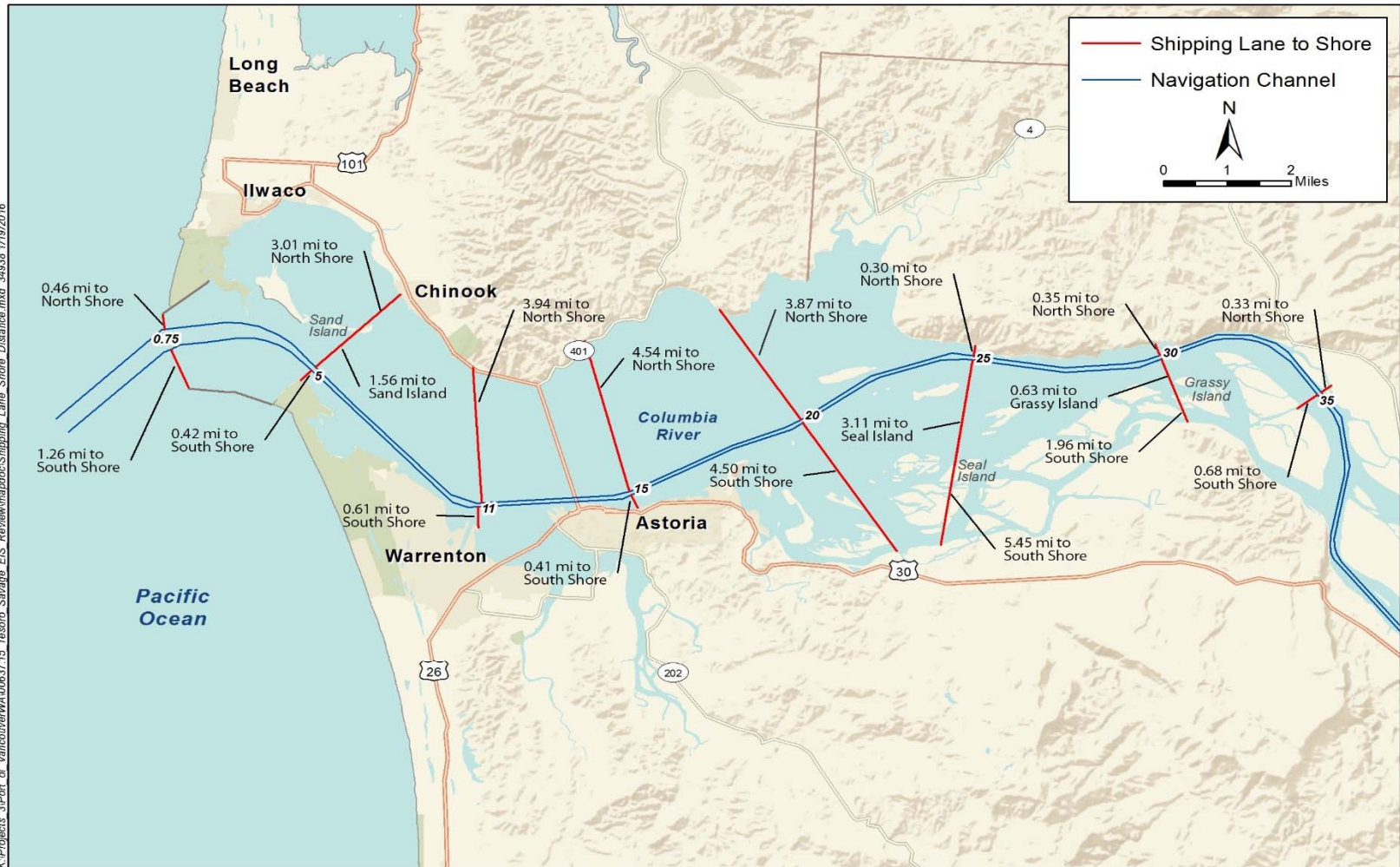


Figure 2. Columbia Shipping Lane Shore Distances



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MacDonald (2003) developed the theory of deep-draft vessel wake generation, demonstrating the importance not only of vessel size and speed but also of channel geometry and distance to shoreline. Maynard (2004) developed the theory of wake effects on shorelines along navigational channels, which enables quantitative evaluation of the potential for effects such as shoreline erosion. ENTRIX (2008) synthesized this information to develop a list of criteria that determine potential wake effects as a function of vessel characteristics and channel geometry, information that could be used to develop detailed maps of potential vessel wake impacts in the Lower Columbia River. In summary, a great deal of work already has defined the locations and potential severity of vessel wake effects on the Lower Columbia River. This information is neither cited nor considered in the Draft EIS, but it is critically important because it shows that wake effects are expected and observed only along a small fraction of the shoreline and that fish stranding effects are especially limited in spatial extent. These are critical points in reaching a significance determination regarding impacts related to vessel wakes.

Section 3.4.4, No Action Alternative

On page 3.4-16, in Section 3.4.4, *No Action Alternative*, first bullet, the Draft EIS does not address the potential for impacts related to existing or increased rail or vessel traffic in the study area unrelated to the Proposed Action. This information would provide additional context for interpreting the relative contribution of impacts from the Proposed Action alone as presented in Chapters 3 and 4 and cumulatively as presented in Chapter 5 of the Draft EIS.

Section 3.4.6, Significant Unavoidable Adverse Impacts

In Section 3.4.6, *Significant Unavoidable Adverse Impacts*, the Draft EIS restates that small spills from rail traffic to and from the proposed Project could result in moderate impacts to terrestrial vegetation. Without additional analysis to support the magnitude of the impact (relative to the No Action Alternative) or an assessment of likelihood of exposure to areas of particular sensitivity, statements that these impacts would be significant unavoidable adverse impacts are not supported. As noted previously, in Appendix E, pages 42-43 and Figure 15, the design of the existing rail infrastructure minimizes exposure of the environment to risks from small spills or leaks, making it unlikely that spills would reach resources along the rail line that are more sensitive.

The analysis of vessel wake impacts is oversimplified and does not support the conclusion that the Proposed Action would result in a significant increase in impacts compared to the No Action Alternative. Inclusion of vessel-wake impacts in the Draft EIS as a significant unavoidable adverse impact is not supported.

Section 3.6, Aquatic Species

Section 3.6.3.3, Vessel Transportation

As noted above in comments on Sections 3.3, *Water Resources*, and 3.4, *Terrestrial Vegetation*, the Draft EIS oversimplifies the factors that influence vessel wake patterns

and misrepresents the resulting potential for wake-related impacts to occur related to the proposed Project. More specifically, the Draft EIS makes the following objectionable conclusions.

- Tankers are the only deep-draft vessels to consider as contributors to wake impacts.
- The analysis clearly identifies the extent to which the proposed Project would result in significantly increased wake damage.
- It is feasible to further lower speeds for deep-draft vessels to reduce wake-related impacts, and implementation of the recommended mitigation measures would reduce wake-related impacts and are within the control of the Applicant to implement.

Comments on Sections 3.3 and 3.4 note that the Draft EIS does not present or use the extensive published information on the causes, locations, and severity of potential vessel wake impacts in the study area. As a result, the Draft EIS cannot conclude that those impacts are significant or unavoidable under SEPA with respect to the discussion presented in Section 3.6, *Aquatic Species*.

Section 3.6.5, Mitigation Measures

On page 3.6-5, Section 3.6.5, *Mitigation Measures*, the Draft EIS suggests two mitigation measures to address vessel wake impacts. One is to “develop mitigation for wake stranding and wake effect impacts in consultation with appropriate state and/or federal agencies,” and the other is to “reduce vessel transit speeds in areas that are more susceptible to wake stranding of juvenile fish.” In the first case, the analysis in the Draft EIS does not support the conclusion that vessel wake impacts are specifically attributable to the Proposed Action alone and, therefore, the requirement of mitigation is not legally sufficient.

In both cases, the measures are not within the Applicant’s authority to implement. The federal agencies are the parties responsible for management of vessel wake effects. For example, the U.S. Army Corps of Engineers (USACE) is responsible for design, construction, and maintenance of the shipping channel, the use of which influences vessel wake patterns and the resulting disturbance along the river. In fulfillment of that responsibility, USACE determines the location, geometry, and disposition of dredged material that comes from deepening or maintenance dredging.

Each of these factors (related to the deposition of dredged material: location, geometry, and deposition) has been recognized as an important determinant of vessel wake impacts by nearly every author who has studied the issue (Bauersfeld 1977, Hinton and Emmett 1994, Pearson and Skalski 2006, ENTRIX 2008). The U.S. Coast Guard regulates navigation on the river, including when vessels may pass and the speed at which they travel, both of which have been recognized as important determinants of vessel wake impacts to the river (Bauersfeld 1977, Hinton and Emmett 1994, Pearson and Skalski 2006, ENTRIX 2008). In permitting, funding, and carrying out these activities, these agencies are required under Section 7 of the Endangered Species Act to consider and address the impacts of their activities on species protected under the Act, which include

certain resources (species of terrestrial wildlife, fish, and marine mammals) addressed in the Draft EIS. In other words, these federal agencies are responsible for designing, maintaining, and regulating the Lower Columbia River navigational channel in a manner that minimizes vessel traffic impacts to protected fish and wildlife resources.

Section 3.6.4, No Action Alternative

On page 3.6-16, in Section 3.6.4, *No Action Alternative*, first bullet, the Draft EIS states that there would be no impacts to aquatic species beyond existing conditions. However, as noted in prior comments, nowhere does the Draft EIS provide an assessment of the potential impacts in the study area from increased rail or vessel traffic unrelated to the Proposed Action. This information would provide additional context for interpreting the relative contribution of impacts from the Proposed Action alone as presented in Chapters 3 and 4 and cumulatively as presented in Chapter 5 of the Draft EIS.

Section 3.6.6, Significant Unavoidable Adverse Impacts

For the reasons discussed above, the Draft EIS does not present sufficient information to support a conclusion that the proposed Project would result in significant unavoidable adverse vessel-induced wake impacts.

Section 3.8, Environmental Health

The analysis of potential impacts from increased rail traffic related to the Proposed Action as presented in Section 3.8.3.2, *Rail Transportation*, is insufficient. Rather than completing an analysis of the increased risks attributable to the Proposed Action, the Draft EIS asserts that any increase in rail traffic above existing conditions would have the potential to result in a moderate impact but only identifies intersections that already have existing safety concerns. On page 3.8-17, the Draft EIS goes on to state that with further diagnostic review of the more vulnerable crossings, and with the addition of signage and other safety measures, the rate of accidents may decrease from current conditions, which again speaks to existing safety concerns rather than identifying any impacts attributed to the Proposed Action. While it is essential to ensure that existing rail operations are safe, these statements imply that existing safety issues are the responsibility of the Applicant to address.

On page 3.8-16, in Section 3.8.4, *No Action Alternative*, first bullet, the Draft EIS states that there would be no environmental health impacts beyond existing conditions. However, as noted in prior comments, nowhere does the Draft EIS provide an assessment of the potential impacts in the study area from increased rail or vessel traffic unrelated to the Proposed Action. This information would provide additional context for interpreting the relative contribution of impacts from the Proposed Action alone as presented in Chapters 3 and 4 and cumulatively as presented in Chapter 5 of the Draft EIS.

As noted previously, the Draft EIS does not consistently present risks related to the Proposed Action and tends to focus on extremely unlikely but clearly significant impacts rather than more likely but relatively less substantial impacts that are required under SEPA. On page 3.8-18, in Section 3.8.6, *Significant Unavoidable Impacts*, the Draft

EIS notes that, while extremely unlikely, events that could result in more substantial environmental health impacts (e.g., boiler or steam pipeline explosion or vessel collision) could result in moderate to major impacts. The Draft EIS should instead describe what more likely events could occur and what types of potential impacts could occur to provide the appropriate information for decision makers and to inform the development of appropriate mitigation.

Section 3.9, Noise

Section 3.9.3.1, Proposed Facility

As described in footnote d of Tables 3.9-6 (typical construction activities) and 3.9-8 (impact pile-driving and jet grouting activities), the construction-related noise impacts were evaluated against the daytime noise limit for a Class A receiving property. However, construction noise during daytime hours is exempt from this noise standard and the footnote should be corrected to say that construction activity between 7:00 AM and 8:00 PM is exempt from otherwise specified noise limits per Vancouver Municipal Code.

The analysis in Section 3.9, *Noise*, also incorrectly applies the Federal Transit Authority (FTA) increase thresholds to construction noise. These thresholds specifically designed for long-term operational noise impacts are not intended for temporary construction noise impacts. A common approach to assessing construction noise where there is a daytime exemption is to apply the daytime general assessment threshold suggested by FTA (90 dBA 1-hour L_{eq}). If detailed hourly and daily information is available regarding when and how different types of construction equipment would be used, the 8-hour and 30-day thresholds suggested by FTA also can be used. The Draft EIS should evaluate the potential increases in construction noise and apply the appropriate threshold.

It is the Port's understanding if outdoor construction is required between 8:00 p.m. and 7:00 a.m., the Applicant would consult with the City of Vancouver, notify EFSEC in advance, and would not conduct the work until EFSEC had reviewed and approved the planned activities. The Draft EIS should be revised accordingly.

The Draft EIS states that the design features and best management practices (BMPs) proposed by the Applicant to avoid or minimize environmental impacts during construction, operations, maintenance, and decommissioning are assumed to be part of the Proposed Action and have been taken into account during the analysis of environmental impacts to noise. The Draft EIS should identify these features and BMPs should be identified and discuss how these features and BMPs were applied. Without this information, it is not possible to identify appropriate mitigation.

Section 3.9.5, Mitigation Measures

The construction noise mitigation measures are too general and are not implementable. For example, the statement "construct noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise-sensitive receptors" provides no specific guidance as to when or where a barrier must be built. The mitigation measure

should be built on or consistent with the appropriate performance standard to be used by the contractor to determine when each of the specified treatments needs to be implemented. The performance standard could be the FTA daytime standard and the Vancouver nighttime standard. By referencing an applicable performance standard and including possible treatment options for reducing noise, the contractor can choose an appropriate and feasible measure to reduce sufficiently any noise impact that is shown to be significant. Mitigation measures also are identified to offset increased rail noise related to the Proposed Action; however, these recommendations are not consistent with WAC 197-11-660, which states that, among other factors, mitigation can be required when the specific impacts in question are adverse, the measures are reasonable, and the mitigation is attributable to the adverse impacts of the Applicant's proposal. As noted on page 3.9-21, in Section 3.9.3.2, *Rail Transportation*, the Draft EIS concludes noise impacts from increased rail traffic would be minor. As discussed in the comments on Section 3.14, *Transportation*, the railroad operates as a common carrier and no single customer of the mainline railroad has control over rail operations. Therefore, it is not reasonable or feasible to suggest that train impacts related to the proposed Project should or could be mitigated.

Section 3.9.6, Significant Unavoidable Adverse Impacts

In Section 3.9.6, *Significant Unavoidable Adverse Impacts*, the Draft EIS states that there would be potentially major noise impacts at the Tidewater office building and Jail Work Center. However, as noted above, the noise analysis does not rely on the applicable thresholds or provide the correct context and evaluation of noise-reducing mitigation measures; therefore, the analysis does not support the conclusion of significant unavoidable adverse noise impacts to these receptors. The analysis in Section 3.9.3.1, *Proposed Facility*, should be revised as recommended above and this section should be revised accordingly.

Section 3.12, Recreation

Section 3.12.5, *Mitigation Measures*, identifies three measures for the Applicant to implement to reduce recreational impacts. However, these recommendations are not consistent with WAC 197-11-660, which states, among other factors, that mitigation can be required when the specific impacts in question are not adverse, the measures are reasonable, and the mitigation is attributable to the adverse impacts of the Applicant's proposal.

On page 3.12-23, the Draft EIS concludes that the potential construction noise impacts to the Shillapoo Wildlife Area – Vancouver Unit would be minor. Similarly, potential impacts to recreational boaters, as discussed on page 3.12-25, also would be minor. Scheduling quiet times during pile driving to correspond to hunting seasons at Shillapoo Wildlife Area – Vancouver Unit is also not feasible because it would essentially mean no in-water pile driving could occur from September 20 through January 25, which directly overlaps the modified in-water work window of September 1 to January 15. The Draft EIS should be revised to clarify that no recreational impacts would rise to the level of requiring additional mitigation of the Applicant.

Section 3.13, Historic and Cultural Resources

On page 3.14-32, in Section 3.14.4, *No Action Alternative*, first bullet, the Draft EIS states that there would be no impacts beyond existing conditions associated with the No Action Alternative. However, as noted in prior comments, nowhere does the Draft EIS provide an assessment of the potential impacts in the study area from increased rail or vessel traffic unrelated to the Proposed Action. This information would provide necessary context for interpreting the relative contribution of impacts from the Proposed Action when considered alone in Chapters 3 and 4 and when considered cumulatively in Chapter 5.

Section 3.13.5, *Mitigation Measures*, identifies mitigation for the Applicant to implement to reduce potential impacts related to usual and accustomed fishing and hunting areas. These recommendations are not consistent with WAC 197-11-660.

On pages 3.13-17 and 3.13-18, the Draft EIS concludes that the potential impacts to usual and accustomed fishing area from increased rail and vessel traffic related to the Proposed Action would be minor. Chapter 5, page 5-33 further states that the potential for cumulative impacts related to increased rail traffic would be minor. As discussed further under comments on Section 3.14, *Transportation*, the broader rail and vessel navigational network serving the project site is dynamic and fluid. With the exception of regularly scheduled passenger service (e.g., passenger trains and the Wahkiakum County ferry), traffic in these areas largely does not operate on a regular schedule. Therefore, it is not possible to determine when a project-related train or vessel would be in any one location on any given day or to alter the schedule of only project-related trains or vessels. Also, mitigation measures addressing potential impacts on usual and accustomed fishing and hunting areas from rail and vessel transportation are not warranted and should not be included.

Section 3.14, Transportation

Section 3.14.3.2, Rail Transportation

In Section 3.14.3.2, *Rail Transportation*, the Draft EIS understates BNSF capacity in Washington and incorrectly concludes that the proposed Project would adversely affect rail traffic within the state, particularly between Pasco and Spokane, as noted in Table 3.14-13. On page 3.14-23, the Draft EIS states that BNSF would dispatch full and empty trains as needed to maintain schedules and capacities in considerations of existing conditions on each route and that travel patterns would likely vary by day and by season. However, the Draft EIS discounts the extent to which operational solutions can and would be used to minimize capacity impacts. Therefore, the Draft EIS should be revised to clarify the following points and to clarify that, based on how BNSF would operate, there is sufficient capacity to accommodate the proposed increase of four loaded and four empty trains per day.

Capacity on that segment may be approximated by a rudimentary blocking time analysis (Pachl 2014:180–190). Line capacity is governed by the longest running time through a segment of the line that may only be occupied by one train (capacity limiting segment of the line) (White 2005: 8-11). When considering single-track line capacity

using this method, the procedure may be simplified to considering only the siding pair (or ends of double track segments) with the longest running time between them.

A single-track line is typically best utilized by alternating train direction through the capacity-limiting segment, arranging traffic in a way that makes use of every movement opportunity through that segment. A rough calculation indicates that the capacity-limiting segment between Pasco and Spokane is between West Lind (milepost 80.5) and Paha (milepost 72.5), an average of about 17 minutes depending upon train type and direction. Using this method, the capacity between Pasco and Spokane is calculated to be 42 trains per day. Capacity between Spokane and Sandpoint is substantially greater.

The rail line capacity calculation represents theoretical capacity, or the maximum number of trains that can be accommodated when every movement opportunity through the capacity-limiting section is used. The basis for theoretical capacity is running time between points along the line, particularly between sidings or double track segments on a single-track line or between block signals and/or crossovers on a line consisting of two or more main tracks. Running time is affected by the type of signal system (or lack thereof), the type of traffic control system, and track geometry (e.g., curves and grades).

Theoretical capacity is not possible to maintain during the course of normal operation. Numerous unpredictable events (e.g., weather, infrastructure maintenance, mechanical failure) can affect running time and therefore capacity. Practical capacity, the number typically used to describe line capacity, is generally 50% of theoretical capacity. A line may be successfully operated for one or more periods during a day at a rate greater than practical capacity. Accommodating this type of variation is the domain of traffic management.

When rail operation is fully scheduled (each train has specific infrastructure and time allocations for the entire route), schedule development is complicated. (Hansen and Pachl 2014:13-46). Capacity determination and traffic management are relatively simple. The U.S. rail freight industry improvises operations. This means that, in contrast to passenger trains that have scheduled events and priority at station stops, freight operations between stations are improvised as traffic dictates. In other words, scheduled freight trains typically have a nominal schedule that can deviate substantially during normal operation depending on the function and need of the customer, market conditions, and seasonal variation. There is no assignment of specific infrastructure and time. Other trains may have a schedule for customer service purposes, but these schedules are typically represented only by the number of hours between origin and destination.

Managing rail traffic and infrastructure in improvised operation is a complicated process involving the principles of timetabling applied repeatedly as the situation changes (White 2003: 55-173). Should traffic exceed capacity for some period, the effect is congestion and delay. Congestion continues until the level of new traffic falls below the maximum capacity rate and all of the accumulated traffic has been accommodated at the maximum capacity rate. This is one of the factors considered in traffic

management planning. The daily variability of traffic makes accurate capacity figures difficult to produce. However, the 50% buffer time allowance (the result of theoretical capacity minus stated practical capacity) provides the basis for a conservative figure.

As noted in the *Washington State Rail Plan* (Washington State Department of Transportation 2014: 49):

“...railroads typically respond to growth in freight demand with concurrent impacts on their infrastructure through a mix of operational strategies and capital improvements including: 1) Operation of longer trains; 2) Schedule and train speed adjustments; 3) Segregation of traffic by direction and/or type (e.g. separate bulk from intermodal, etc.), where multiple routes are available; 4) Application of advanced traffic management systems that improve meet/pass planning, management of train speeds and a reduction in headways; 5) Construction of additional main track, new and/or lengthened passing sidings; and 6) Expansion of industry, yard and terminal facilities; 7) Installation of signals and/or improvements to existing signal systems, including the installation of Centralized Traffic Control.”

Fundamentally, capacity is increased by reducing the time required to traverse the capacity-limiting segment of the line. This may be accomplished by increasing the speed of trains (which may require changing one or more elements of track geometry, by providing trains with additional power, or both), and/or reducing the length of the capacity-limiting segment by constructing additional track (which may be an intervening siding, extending the sidings or ends of double track toward each other, or both). The means of adding capacity must be considered individually for each location. After any individual capacity increase, a different segment of the line (that has the second greatest running time between sidings) becomes the capacity-limiting segment, unless the project results in all segments of the line having equal capacity.

In general, railroads are a capital-intensive business. New capacity to accommodate a specific train or type of train is avoided. New capacity for a specific train or type of train is generally limited to trains that have substantially different characteristics from other traffic on the line. The most common example is passenger trains, which is why infrastructure that is needed to accommodate new passenger service is constructed with public funds.

BNSF employs several people in departments such as Capacity Planning, Operations Research, and Network Strategies, dedicated to studying traffic flows and predicted traffic throughout the system and developing a capital improvement program intended to alleviate projected congestion. BNSF uses simulation (Pachl 2014: 178-179, 190-192) rather than analytic methods as described above for the purpose of speed, flexibility, and accuracy.

BNSF has been engaged in a substantial capacity improvement program in Washington for more than a decade and on the route between Sandpoint, Idaho and Chicago, Illinois, for almost two decades. The greatest improvements in Washington have been made where the greatest necessities lie, between Sandpoint and Vancouver. Additional

projects to apply to this route are each to be implemented as the need is determined (by the capital recovery calculation). For 2015, BNSF allocated \$6 billion for its Capital Improvement Plan, which included \$2.9 billion for 950 miles of rail relay, 3.5 million ties, 1,225 turnouts, 775 miles of undercutting, 6,200 miles of high speed surfacing, Positive Train Control, and heavy bridges and structures, including the replacement of Bridge 24.8 over the Washougal River in Camas (BNSF Railway Company 2015). The trains associated with the proposed Project are merely a part of the traffic considered in developing the capacity plan, not a significant separate consideration.

In addition, misstating there is insufficient capacity on the mainline rail system to support the proposed Project, the approach to calculating the gatedown time is overestimated. More specifically, the Draft EIS applies simple assumptions for calculating gatedown time. These are the periods during which a train obstructs traffic includes a period of at least 20 seconds (and usually less than 30 seconds) of advance warning, the time during which the train occupies the roadway, and the time for the crossing signals to deactivate after the train clears the crossing (usually about 15 seconds). The first and last are constant. The period during which the train occupies the crossing is not. That period is dependent on train speed, which is dependent on track geometry (speed limit and the effect of grade on the speed of the train). The traffic delay of trains described in the Draft EIS is based on incorrect train length (7,800 feet rather than three locomotives at 75 feet each, 120 tank cars at 60 feet each, and two buffer cars at 60 feet each, a total of 7,545 feet), and a train speed of 20 mph across each crossing.

Because the duration of crossing occupancy is dependent on train speed, the calculations should consider the train speed at individual crossings, which varies between 10 and 60 mph in the study area and is dependent on whether a train is loaded or unloaded.⁵ The speed can be determined by calculation (a Train Performance calculator computer program) or estimation. Estimation would be more accurate than the generalized approach used in the Draft EIS. (White 2003: 44). Calculation provides the greatest accuracy. By extension, the approach used to determine vehicle delay is also misleading. As noted in the Draft EIS (page 3.14-24), the amount of additional vehicle delay depends on the length and speed of a train (i.e., gatedown time) and the volume of the affected vehicular traffic. The approach used to calculate gatedown time and vehicle delay both rely on applying the same set of averaged assumptions (for train speed, vehicle counts⁶) to each at-grade crossing when in reality there is much variation at each crossing. Using a generalized set of conditions for train speed and vehicle counts and using overstated train lengths does not provide useful or appropriately representative information about the potential increase in vehicle day related to the Proposed Action.

⁵ The majority of crossings between Sandpoint and Vancouver are located where trains typically move at much greater than 20 mph. The maximum speed for a loaded oil train is 40 mph.

⁶ More specifically, the Draft EIS assumes there would be 138 vehicles at each at-grade crossing between Vancouver and Pasco and 205 between Pasco and the Washington state line, when in reality the average daily traffic ranges from 50 to 13,000 vehicles.

As presented in the Draft EIS, the discussion of potential vehicle delay impacts implies there is a set schedule for freight trains and that any one customer has the ability to influence departure and arrival times on the railroad. As a common carrier, the railroad cannot refuse to provide service, which means the railroad services customers when there is demand, making traffic patterns largely unpredictable and varied from day to day, week-to-week, or year to year. Therefore, picking one set of circumstances and attributing those conditions and the associated outcome to one customer's trains is not representative of the wide variation in vehicle delay that could occur. Instead, the Draft EIS should consider a range of possible gatedown and vehicle delay times and clarify that increased delay could be caused by any and all trains in the mainline system.

On page 3.14-25, the Draft EIS states that in most cases, the delay experienced by an individual motorist at an at-grade crossing would be higher than the estimate gatedown presented in Table 3.14-14. However, for a driver to experience greater delay than what is presented in Table 3.14-14, the same driver would have to be the first vehicle to encounter all four project-related trains just as they began crossing the intersection all on the same day, which would be highly improbable (or, in SEPA terms, *remote*, and, therefore, need not be considered). Characterization of the potential impacts in this manner is not appropriate and misrepresents the probability of impacts.

On page 3.14-15, the Draft EIS relies on this generalized approach to state that the Proposed Action would result in an average daily vehicle delay of 90 hours; however, this is not an accurate nor useful metric, given that no one would be subject to 90 hours of delay. This metric does not provide useful information for the purposes of disclosure or for supporting appropriate mitigation as required by SEPA.

Because of the approach to the analysis noted above, the impacts related to increased vehicle delay cannot be attributed to the Proposed Action. Listing mitigation in Section 3.14.5, *Mitigation Measures*, implies there are project-related impacts that can and should be mitigated.

Section 3.14.3.3, Vessel Transportation

As noted in comments on Sections 3.4 and 3.6, in general, the analysis of vessel traffic in the Draft EIS does not characterize the existing or future vessel traffic sufficiently to provide an appropriate baseline for assessing the impacts of the Proposed Action related to vessel traffic. More specifically, Section 3.14, which serves as the foundation for vessel-related analyses, does not include a description of the types, volumes, and traffic patterns of the vessels that have operated and will continue to operate within the study area or the relevant navigational considerations that influence vessel-related impacts. The evaluation of vessel traffic is further complicated by the inconsistent use of terminology describing important factors such as vessel size/class, draft, and transits. See the attached Table 2 for the complete list of inconsistencies. Without this information, it is not possible to assess the relative magnitude of vessel-related impacts attributable to the Proposed Action.

The Draft EIS compares the increase in vessel traffic under the Proposed Action to a single baseline year, chosen to be 2013,⁷ and focuses only on relative comparisons for a single vessel type (tankers) when other vessels of similar shape and size are relevant to the analyses in the Draft EIS. While it is informative to consider the potential increase in vessel traffic relative to historical data, without providing additional information or analysis, this approach implies that increases in vessel traffic above the baseline year result in significant impacts.

To provide a more complete picture, the Draft EIS should also more fully consider historical trends in vessel calls to provide a representative picture of vessel traffic in the study area. As noted on page 3.14-31, peak vessel transits (occurring in 1999) were substantially higher than in recent years. As further evidenced by recent fluctuations in vessel calls to the Port of Portland (Eiten 2015), the number of vessel transits can be unpredictable and fluctuate widely from year to year. For example, when Hanjin left the Port of Portland in 2015, container traffic to the port was reduced by 80% (Eiten 2015). Therefore, it is more appropriate for the Draft EIS to compare the relative increase in vessel traffic under the Proposed Action to a broader baseline.

The current understanding of vessel traffic impacts to the Lower Columbia River is supported by available data that characterizes the type and volume of vessel traffic on the river and by studies that have been conducted to evaluate the effects of that traffic. The Draft EIS does not cite the full range of appropriate studies to support the conclusions, limiting the analysis to a consideration of the relative increase in tanker traffic as compared to past vessel traffic from a single year (2013). The Draft EIS does not consider the more complex factors that influence the analysis and produce incorrect and unsupported conclusions.

The decision to consider data only for a single year disregards the fact that literally decades of vessel traffic data are available. The use of a longer data timeframe would allow inferences about long-term trends in vessel shipping on the river, which in turn would allow inferences about changing conditions during the environmental baseline period and about foreseeable changes under the No Action Alternative. Neither of these topics is addressed in the Draft EIS. Long-term data could provide quantification of the recognized trend toward use of the river by increasingly larger vessels. The data would also support the inference that deep-draft vessel traffic has been increasing each decade (with shorter-term fluctuations such as those associated with the recent global economic recession), an increase that is likely to continue under the No Action Alternative. Data would also show that Handymax vessels, which are the majority of vessels likely to call related to the Proposed Action, historically have been present on the Columbia River and that the proposed Project does not entail vessels larger than those that have used the Columbia River in the past.

⁷ On page 3.14-31, Section 3.14, *Transportation*, there is a comparison of the potential increase in vessel traffic to vessel calls from a single year (Ecology's VEAT 2013 data).

On page 3.14-32, in Section 3.14.4, *No Action Alternative*, first bullet, the Draft EIS states that there would be no transportation impacts beyond existing conditions. However, as noted in prior comments, nowhere does the Draft EIS provide an assessment of the potential impacts in the study area from increased rail or vessel traffic unrelated to the Proposed Action. This information would provide additional context for interpreting the relative contribution of impacts from the Proposed Action alone as presented in Chapters 3 and 4 and cumulatively as presented in Chapter 5 of the Draft EIS.

On page 3.14-33, in Section 3.14.6, *Significant Unavoidable Adverse Impacts*, the Draft EIS states that increased vehicle delay related to the Proposed Action would be moderate to major and refers to the possibility that a single vehicle could be delayed between 21 and 41 minutes each day if that vehicle encountered all trains in the same day. As noted above, this scenario is highly unlikely and does not meet the intent of SEPA to evaluate only reasonably likely impacts. Further, the Draft EIS states that with the incorporation of mitigation, the impacts could be reduced to minor or negligible; however, as stated on page 3.14-32, the recommended mitigation does not focus on specific intersections that would be affected by the Proposed Action but rather on those with existing issues. As supported by WAC 197-11-660, mitigation can be required of an Applicant only to the extent attributable to the identified adverse impacts of its proposal.

Section 3.15, Public Services and Utilities

On page 3.15-15, in Section 3.15.6, *Significant Unavoidable Adverse Impacts*, the Draft EIS states that there is a potential for the Proposed Action to result in a major impact to public services due to increased gatedown time and the associated potential for increased delay of emergency vehicles. However, as noted in comments on Section 3.14, *Transportation*, this approach does not provide appropriate characterization of the potential impacts attributable to the Proposed Action or evaluate a reasonably likely scenario.

Section 3.16, Socioeconomics

As discussed on page 3.16-6 of Section 3.16.2.1, *Facility*, the Draft EIS notes that no minority populations exceed 50% of the total census tract populations, but two census tracts surrounding the project site have a meaningfully greater proportion of minority and/or low-income populations compared to the state. The Port acknowledges that guidance from the Council on Environmental Quality recognizes that environmental justice populations may not exceed 50% but may constitute a meaningfully greater proportion than a “representative” geographic area; however, the Port suggests that a more appropriate geographic area to use as the baseline for comparison would be the county, not the state. A more focused baseline would provide a more accurate representation of the potential diversity in the localized area around the proposed Facility.

As noted on page 3.16-15, in Section 3.16.3, *Impact Assessment*, the Draft EIS concludes that there would be only minor impacts from increased rail traffic on environmental justice populations and that the impacts would not be disproportionate. However, as noted in Section 3.16.5, *Mitigation Measures*, the Draft EIS identifies mitigation for the

Applicant to reduce potential impacts to environmental justice populations, namely from increased vehicle delay. The argument is not consistent with WAC 197-11-660, which states that mitigation can be required when the specific impacts in question are not adverse, the measures are reasonable, and the mitigation is attributable to the adverse impacts of the Applicant's proposal. Therefore, these measures should not be included.

Not only does the impact analysis conclude that there are not significant disproportionate effects on environmental justice populations within the rail corridor, but as discussed in comments on Section 3.14, *Transportation*, it is not possible to determine whether project-related trains would be solely responsible for conflicts along the rail corridor. Although the Proposed Action would result in net increases in traffic in these areas, the broader rail and vessel navigational network serving the project site is dynamic and fluid and with the exception of regularly scheduled passenger service (e.g., passenger trains and the Wahkiakum ferry) largely does not operate on a regular schedule. Therefore, it is not possible to determine when a project-related train or vessel would be in any one location on any given day or to alter the schedule of only project-related trains or vessels.

For these reasons, the recommended mitigation measures presented in Section 3.16.5, *Mitigation Measures*, are not warranted and are not appropriate or feasible and conclusions presented on page 3.16-17 that these impacts would be significant unavoidable adverse impacts are not supported.

Chapter 4 Crude Oil, Safety Considerations, Potential Release Scenarios, and Impacts Analysis

Section 4.3, Accident Response Planning

On page 4-20, the Draft EIS refers to a worst-case discharge volume of an unabated release for over 72 hours used for planning purposes. It should be noted that a 72-hour unmitigated release is a planning requirement applicable in the state of Alaska. In Washington, the requirement is to plan for a 48-hour unmitigated release. While it is noted that this is a scenario used for planning purposes in the Oil Spill Contingency Plan, the Draft EIS should note that it is extremely unlikely that a 72-hour (or a 48-hour) release would continue unabated. It is more appropriate, within the context of SEPA, for the Draft EIS to evaluate and disclose spill scenarios that are more reasonably likely to occur because there are existing regulations in place that require immediate response action to occur. Also, operational plans and requirements make it reasonably likely that a release would be promptly discovered and addressed.

Section 4.4, Likelihood of Incidents Resulting in a Crude Oil Spill and Range of Potential Spill Volumes

Although the risks related to crude oil transport have been declining over time with the implementation of new regulations and infrastructure improvements, as noted in the *Overview of Comments*, the Draft EIS addresses some impacts that are otherwise *extremely unlikely* and, therefore, are not *probable, likely, or reasonably likely* in the context of SEPA.

As discussed below, this results in incomplete information for the purposes of disclosing the relative risks of the Proposed Action and for developing appropriate mitigation measures.

The analysis of transportation risks, as explained in Appendices E and J, overemphasizes unlikely contingency-based and worst-case discharge scenarios – that, as noted on pages 4-25 and 4-26 for tank failures and 4-31 for vessels, are admittedly unlikely to occur. (SEPA requires analysis of probable impacts; see WAC 197-11-402.) Appendix J even states that such large spills are its focus (page 34). This presentation overemphasizes large-scale consequences, which results in the misperception that all incidents would be large and require large-scale emergency response efforts. While contingency planning is critical, SEPA requires and the Port suggests more emphasis be placed on acknowledging the types of scenarios that are likely or reasonably likely to occur for the purposes of assessing emergency planning, preparedness, and response capabilities to be best prepared to respond to incidents (WAC 197-11-782).

The Draft EIS omits from consideration the following important factors that influence the results.

- **Facility.** The analysis of risks omits consideration of the likelihoods of large and small tank/ pipeline failures, and any size of rail unloading releases. Small releases are more likely than large releases. The relative likelihoods of large and small releases should be added to the analysis for completeness and SEPA context. The analysis also does not include consideration of external hazards as a source or contributor to failures, such as from adjacent facilities. These could be addressed qualitatively.
- **Vessel.** The analysis of risks dismisses allisions (pages 33-34 of Appendix J), which have historically occurred more frequently than groundings and collisions (9 of 14 incidents in the Columbia River in Table 38 of Appendix J are allisions) just because they do not lead to the largest worst case discharges. The associated frequency of smaller releases from allisions should still be included along with those from groundings and collisions. However, it is important to note that, in that same period, none of the 14 incidents resulted in a release. The approach used in Appendix J to determine the likelihood of releases for vessel loading overstates the expected benefits of the implementation of the Washington State regulations given that many changes occurred in the industry between when California implemented its regulations and when Washington implemented its regulations almost 10 years later. As a result, the chance of small releases while loading may be understated.
- **Rail.** The risks of crude by rail transport have declined over time due to various improvements, including but not limited to: increased track inspections, additional speed restrictions, improved tank car design, crude oil testing and labeling, and advanced notification. Although there are notable differences between risks associated with rail traffic at the national level compared with those associated with the Proposed Action, there are important factors that should be considered in the analysis.

The analysis did not consider the specifics of rail car design on release probabilities, which means that the benefits of switching to DOT-117 (or the Applicant's DOT J-120⁸) rail cars could not be included in the analysis. The analysis of the selected FRA derailment rates seem unusually low – possibly because collisions may have been omitted as a cause of derailed cars. They should be included for completeness. The analysis also appears not to have considered the detailed estimation of the number of cars derailed and releasing contents. Using specific rail car release probabilities and considering the ways in which multi-car spills can arise is a more current and project-specific approach than using historic data for all kinds of freight cars. It is also important to recognize that certain past derailments are not possible today due to changes in train and track operations – and that recent regulations would further reduce risks, including requirements established for advance notification of estimated volumes, routes, frequencies, and information related to content and response for crude oil transported by rail (U.S. Department of Transportation 2015). Collectively, the omission from consideration of the required type of rail car, increased track inspections, the reduced volatility of the crude at the source, means that the differences between past accidents and the projection of future accidents cannot be shown. The analysis also did not apply collision/derailment rates that are specific to the track classes and speeds that would be used in the study area. Such data are available from the FRA on a nationwide basis.

The approach to the risk assessment also does not use a standard or similar approach across facility, rail, and vessel risks, so relative risks cannot be compared. By not looking at a range of release sizes and the likelihoods of those releases for the facility, rail, and vessels, the results do not support a determination of reasonably likely or probable releases that can then be reviewed for the significance of their impact. SEPA requires the Draft EIS to facilitate evaluation of various impacts. See WAC 197-11-400(3), -425(1) and -425(3). The subset of probable releases with significant impacts could then be carried forward into the rest of the Draft EIS and used as the basis of the discussion of resource-specific impacts and appropriate mitigation.

The Draft EIS does not provide sufficient information to evaluate the relative contribution of the Proposed Action to increased risks. Conclusions that the proposed Project would result in significant increases in risk, particularly with respect to rail and vessel transportation, are therefore unsupported. The information in Section 4.4, *Likelihood of Incidents Resulting in a Crude Oil Spill and Range of Potential Spill Volumes* (or in Chapters 3 and 5) does not provide an analysis of the risks likely to occur under the No Action Alternative. Therefore, it is not possible to characterize the relative contribution of the Proposed Action to increased risk individually or in combination with other reasonably foreseeable projects (cumulatively significant risks). This

⁸ Tesoro is upgrading its crude oil rail car fleet with the addition of 210 enhanced tank cars that exceed new safe transport standards issued by the U.S. Department of Transportation (<http://www.vancouverenergyusa.com/wp-content/uploads/2015/11/tesoro-dot-120-fact-sheet.pdf>).

information (existing conditions and No Action Alternative) is also lacking in Appendices E and J. By not providing a similar quantitative or semi-quantitative analysis of the No Action Alternative and cumulative scenarios (in Chapter 5, *Cumulative Impacts*), the contribution from the Proposed Action to overall risks is unknown.

The analysis of risks also does not support the evaluation or development of appropriate mitigation. As noted earlier, the recommendations of the Draft EIS are not based on those scenarios that are both probable and with significant impacts. This foundation is needed to comply with SEPA and to ensure that the proposed mitigation is appropriate and that it would actually help reduce risks that are probable or reasonably likely. More comments on mitigation are presented under Section 4.9, *Additional Mitigation Measures to Address the Risks of and Impacts from a Crude Oil Spill, Fire, and/or Explosion*.

Section 4.6, Responding to an Oil Spill, Fire, or Explosion

In Section 4.6, the Draft EIS does not adequately explain the existing regulatory framework or how the system would function if an oil spill were to occur. For example, on page 4-44, the Draft EIS states that the Vancouver Fire Department would serve as the on-scene incident commander for spills at the proposed Facility but does not refer to state or federal on-scene coordinators or their roles and responsibilities. This may suggest that oil spill response is the sole responsibility of the Vancouver Fire Department. This section of the Draft EIS should also describe in detail the much larger and robust existing regulatory framework in place per the applicable state and federal laws.

Oil spill response and contingency plans for oil spills are formalized at the national, regional, state and facility level. At the national level, the federal National Response System is a scalable and flexible framework for responding to oil spills as described within the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP describes the roles of the federal, state, local, and private interests in the case of an oil discharge. The NCP requires that all oil discharges be assessed and investigated by the federal government, and if feasible, that the federal government initiate removal actions. In the case of an incident at the proposed Facility involving risks to the Columbia River, the U.S. Coast Guard (the federal on-scene coordinator for coastal oil spills) would coordinate and direct a response in accordance with the NCP and with regional/local Area Contingency Plans.

Washington State and Oregon State have designated state on-scene coordinators within their legal and regulatory framework who work with the federal on-scene coordinator to respond to oil spills in a Unified Command. Also within that Unified Command is a representative of the spiller (the responsible party) and, potentially, other agencies that have the jurisdiction and resources depending upon incident requirements.

The Vancouver Fire Department could be counted on to be the first responder on scene and would report on the situation to the state and federal response hotlines. The local resources, role, and responsibilities are worked out in the development of the Area

Contingency Plan (referred to as the Northwest Area Contingency Plan). The National Response System provides for the use of various special teams for the federal on-scene coordinator and establishes a response management structure (including the concept of the Unified Command), which includes federal, state, and local on-scene coordinators, and tribal and agency representatives with jurisdiction.

At the state level, the Washington State Department of Ecology response teams are available to respond to incidents within the state of Washington. Teams are located in Bellingham, Bellevue, Olympia, Vancouver, Yakima, and Spokane. In accordance with federal and state preparedness laws and requirements, the applicant must contract with an oil spill response contractor to be available for oil spill response and describe their own response management team and actions within a contingency plan approved prior to operations.

In addition, Section 4.6.1, Emergency Response Notification, provides only a limited discussion of fire suppression capabilities and actions, with no mention of all the design features, practices, and procedures in place to limit the chance of a fire in the first place. Going straight to response gives an incorrect impression that fires and explosions are likely when, in reality, not all oil spills will lead to a fire, with or without an explosion. There are many measures in place in the oil storage and transfer areas, as well as onboard the vessels, to limit the potential for spills to ignite.

Section 4.7, Resource-Specific Impacts

The analysis in Section 4.7 is general and does not provide specific information about the resources most likely to be affected based on risks of the Proposed Action. It states that, "The level of impact is partially dependent on the...volume of crude oil spilled or extent of fire and/or explosion..." yet very little discussion of smaller spills is provided in Section 4.4, *Likelihood of Incidents Resulting in a Crude Oil Spill and Range of Potential Spill Volumes*. Section 4.7 (Tables 4-13 and 4-14) does identify smaller spills and possible causes, but does not provide any context for the relative likelihood for these different spill sizes. Moreover, the schematic of environmental impact ratings given in Figure 10 would leave some readers to assume that it considers both likelihood and consequence. Instead, it considers two elements of the consequences: the duration/intensity of a spill and the occurrence of a spill in relationship to the presence of sensitive resources. It does not consider likelihood. SEPA requires consideration of the likelihood of impacts (WAC 197-11-402(1)).

The resource-specific discussions of impacts of spills, explosions, or fires from transportation-related risks simply describes what might occur if spill or fire/explosion occurs and provides little differentiation between the potential spill sizes or the spill location. It also does not note whether these same risks already exist or could be affiliated with other proposed projects. The reader is left with the impression that these risk arise solely from the Proposed Action, which is not supported by the facts.

Section 4.9, Mitigation Measures to Address the Risks of and Impacts from a Crude Oil Spill, Fire, and/or Explosion

As specified in WAC 197-11-660 and WAC 463-47-110, SEPA requires that mitigation measures meet several prerequisites:

- a) each measure must be related to specific and significant adverse environmental impacts of the proposal;
- b) that are identified in the EIS;
- c) the measure must be reasonable and capable of being accomplished;
- d) measures may be required only to the extent attributable to the identified adverse impacts of the proposal; and
- e) measures cannot duplicate or conflict with existing local, state or federal requirements that would mitigate an identified significant impact.

In general, because of the approach used in the risk analysis of crude oil spills, fires, and explosions, it is not entirely clear which risk scenarios are more likely (in a SEPA context) and which specific impacts are reasonably likely (i.e., what areas or geography might be affected) and, therefore, what contributing factors could be addressed to reduce the risks. Also, alleged impacts are not shown to be connected to, or created by, the Proposed Action. As a result, it is not clear which impacts would be addressed by measures recommended in Section 4.9 and whether the more likely incidents are sufficiently mitigated.

As an example, in Section 4.9.1, *Legislative Actions*, on page 4-116, the Draft EIS recommends implementing measures from the Washington State Marine and Rail Oil Transportation Study. While it is valuable to address existing safety concerns in the state, it is unclear as written which measures are being recommended and how these measures are anticipated to offset risks specific to the Proposed Action. Providing additional information about potential gaps in safety improvements is critical to ensuring safe operation of the Proposed Action. Similarly, on page 4-118, the Draft EIS states that in coordination with other parties, the Applicant should implement the measures of the pending vessel traffic safety study requirement by ESHB 1449; however, this study is not complete and is intended to address risk more broadly than would be affected by the Proposed Action alone. It is not clear how this measure would address risks related to the Proposed Action.

Section 4.10, Potential Significant Unavoidable Impacts

As noted above in comments throughout the Draft EIS, the discussion of impacts, particularly those related to the potential for increased risks associated with the handling and transport of crude oil, focuses on events that the Draft EIS admits are “extremely unlikely” to occur but that would have significant consequences should they occur. As noted previously, this SEPA requires analysis of likely or reasonably likely impacts, which are distinguished from impacts that are merely possible, but remote or speculative (WAC 197-11-782). Focusing on more unlikely events does not provide sufficient or relevant information for decision makers, does not aid in the development of appropriate mitigation, and does not meet the requirements of SEPA.

Chapter 5, Cumulative Impacts

For each of the cumulative impact sections 5.2 through 5.19 (*Earth Resources to Risk of Accidents*), the Port incorporates earlier comments on corresponding elements in Chapter 3. Each discussion of a particular element in the cumulative impacts analysis is weakened by reliance on missing, inaccurate, or unreasonable data or analysis as explained in comments to the particular sections in Chapter 3. The comments provided earlier in this letter are not repeated here, but the Port relies on them as the foundation for its comments on Chapter 5, *Cumulative Impacts*, of the Draft EIS.

Section 5.1, Analysis of Cumulative Impacts

Tables 5-1 and 5-2 in Chapter 5, *Cumulative Impacts*, list the projects that were considered in the cumulative impacts analysis. However, the status of some projects is incorrect, some projects are outside the study area, and some projects have incomplete or incorrect rail and vessel trip numbers. For the purposes of evaluating whether the Proposed Action would result in cumulatively significant impacts, the Draft EIS should more clearly (and in consistent terms) identify and evaluate correct projects and the appropriate level of rail and vessel trips relevant to the study area. The Draft EIS should also list the specific rail and vessel trip numbers presented in Table 5-2 and demonstrate how they are used in the analysis of cumulative impacts. Specific comments on the projects and associated rail and vessel traffic are presented in Table 2 of this comment letter.

Because the majority of the information related to vessel operations is presented in Chapter 5, specific comments on the general characterization of vessel traffic within the study area as presented in Section 5.1.3.3, *Vessel Traffic in the Columbia River*, are presented below.

The discussion of vessel traffic does not clearly state the types of vessels being considered or the sources of data used. This makes the analysis and conclusions in the Draft EIS difficult to follow and, therefore, not in compliance with SEPA.

The Port expects the Draft EIS to comply with basic requirements. For instance, the Draft EIS must be accurate and supported by substantial evidence. *See Weyerhaeuser v. Pierce County*, 124 Wn.2d 26, 33-34, 873 P.2d 498 (1994) (“[T]here is no question but that the accuracy and truthfulness of the information in the EIS is of paramount importance to the ultimate approval or disapproval of the . . . project. . .”); *see, also*, WAC 197-11-560(1)(d) (factual corrections identified specifically in the SEPA rules as a possible agency response to comments on a draft EIS). The NEPA regulations and federal cases construing them are in accord (40 CFR 1500.1; “Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.”); *WildEarth Guardians v. Mont. Snowmobile Ass'n*, 790 F.3d 920 (9th Cir. Mont. 2015) (“[T]he data the Forest Service provides to the public to substantiate its analysis and conclusions must also be accurate.”); *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) (“To take the required ‘hard look’ at a proposed project’s effects, an agency may not rely on incorrect assumptions or data in an EIS.”).

- On page 5-18, the Draft EIS refers to vessel data from both the Columbia River Pilots and the Washington State Department of Ecology; however, no clarification is made as to the type of vessels analyzed other than to state they are commercial vessels and articulated tug barges that use a pilot. As written, information related to vessel traffic is difficult to follow in terms of understanding specifically which type of vessels are being considered and how they relate to the total numbers presented in discussion and to the vessel trips being presented in Table 5-2.
- On page 5-19, first full paragraph, the Draft EIS says that information from Table 5-2 was used to calculate the total number of vessels that could be added to the river system; however, as noted previously, it is not clear what types of vessels were considered and how these total numbers were achieved.

The approach to characterizing vessel traffic makes incorrect assumptions about the nature of vessel operations in general or specific to the Proposed Action. This results in incorrect conclusions and misrepresents the potential contribution of the Proposed Action to cumulative vessel impacts.

- On page 5-19, bullet 6, the Draft EIS states that, in the future, more vessels could anchor in the Columbia River, causing crowding and potential swing-related groundings or collisions during low-water periods. However, it should be noted that project-related vessels would not be allowed to leave the terminal unless clear passage is allowed. This generalized statement in the analysis of cumulative impacts is not accurate because the Proposed Action would not contribute to this issue.
- On page 5-19, bullet 7, the Draft EIS states that the backlog of vessels awaiting transit following bar closures may increase due to weather and limited anchorages and periods of high traffic may occur at the bar after it is reopened. However, it should be noted that the proposed Facility would only accommodate one vessel per 24-hour period and, therefore, when the bar is closed, fewer transits would occur and there would not be a backlog of vessels. This generalized statement in the analysis of cumulative impacts is inaccurate because the Proposed Action would not contribute to this issue.
- On page 5-19, first full paragraph, the Draft EIS says that information from Table 5-2 was used to calculate the total number of vessels that could be added to the river system. However, adding future vessel trips to a single year (in this case, N = 2013) and comparing it to historic peaks oversimplifies the factors that influence vessel operations and implies that increases above the baseline year would result in exceeding some undefined capacity limitations of the navigational channel.

As noted previously, the Draft EIS does not provide sufficient information about the existing and future anticipated levels of rail and vessel traffic to evaluate and characterize the rail and vessel-related impacts of the Proposed Action. This is further complicated by the fact that throughout the Draft EIS, the discussion of rail and vessel traffic does not use consistent terminology, makes erroneous assumptions about certain

aspects of rail and vessel operations, and lacks analysis of the No Action Alternative. Without this foundation, the Draft EIS cannot reasonably assess the potential for cumulatively significant impacts under the Proposed Action, particularly with respect to impacts associated with rail and vessel transportation to and from the proposed Facility site.

The following comments identify where this approach has led to unsupported or inaccurate conclusions about the potential for the Proposed Action to result in cumulatively significant impacts.

Section 5.2, Earth Resources

In Section 5.2.3, *Vessel Transportation*, beginning on page 5-22, the Draft EIS states that the cumulative increase in vessel traffic could range from slightly higher than the historical high to well beyond that level. However, the analysis in this section does not refer to any sources of historical data or to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to vessel-related impacts, including the potential for wake-related damage. The analysis of cumulative impacts as presented in the Draft EIS should include actual data from which an appropriate evaluation can be made of the potential increases in vessel traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to earth resources (i.e., increased erosion) and statements to this effect are unsupported.

As noted in previous comments, the statement on page 5-23 that wake impacts would be limited to beaches located “close” to the navigation channel oversimplifies the factors that affect wake impacts. In fact, the Draft EIS refers to potentially affected sites along the Columbia River that are not close to the channel. As shown in Table 3, in the lower 35 miles of the Columbia River, the navigation channel ranges from 0.1 to 5.4 miles from the shoreline. By stating that vessel wake impacts would be greatest in areas where the navigation channel is close to the shoreline, the Draft EIS continues to oversimplify the factors that influence wake dynamics and fails to support the potential for impacts related to the Proposed Action.

Section 5.3, Air Quality

On page 5-24, in Section 5.3.2, *Rail Transportation*, the Draft EIS states that the cumulative increase in rail traffic could result in increases in vehicle idling emissions that could range from minor to moderate. However, as noted in comments on Section 3.14, *Transportation*, the analysis of increased rail gatedown time and vehicle delay is too generalized to make conclusive determinations as to the level of impact attributable to the Proposed Action. As noted previously, the Draft EIS does not analyze the potential impacts under the No Action Alternative and therefore, does not establish the environmental baseline needed to assess the potential for the Proposed Action to result in a cumulatively significant impact. Statements to this effect are unsupported.

Section 5.4, Water Resources

In Section 5.4.3, *Vessel Transportation*, beginning on page 5-25, the Draft EIS states that the cumulative increase in vessel traffic could range from slightly higher than the historical high to well beyond that level. However, the analysis in this section does not refer to any sources of historical data or to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to vessel-related impacts, including the potential for wake-related damage. The analysis of cumulative impacts should include actual data from which an appropriate evaluation can be made of the potential increases in vessel traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to water quality (i.e., increased erosion and resuspension of contaminants) and statements to this effect are unsupported.

With respect to vessel wake impacts, as noted above in comments on Section 3.4.3, *Impact Assessment*, the assertion that vessel wakes could affect turbidity and water quality is not supported by data or analysis, and two cited publications do not address this topic. Moreover, the analysis in Section 3.3, *Water Resources*, does not conclude that vessel wakes could affect turbidity or water quality significantly. Thus, the discussion in Section 5.4.3 is unsupported by reference to any information, including the water quality analysis in the Draft EIS, indicating that impacts would occur and could be substantial. As noted in the comments on Section 3.4, *Terrestrial Vegetation*, none of the published studies of vessel wake effects on the Lower Columbia River identify water quality concerns, but there are some theoretical papers and work from elsewhere in the world that could be used to improve the analysis (and perhaps to refute the conclusions) in the Draft EIS.

Section 5.5, Terrestrial Vegetation

In Section 5.5.2, *Rail Transportation*, beginning on page 5-27, the Draft EIS states that cumulative increase in rail traffic could result in moderate, long-term impacts to vegetation communities along rail lines; however, the analysis in this section does not refer to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to assessing rail-related impacts. The analysis of cumulative impacts should include an evaluation of the potential increases in rail traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to terrestrial vegetation (i.e., contamination from spills or leaks and the spread of invasive species).

In Section 5.5.3, *Vessel Transportation*, beginning on page 5-27, the Draft EIS states that the cumulative increase in vessel traffic could range from slightly higher than the historical high to well beyond that level. However, the analysis in this section does not refer to any sources of historical data or to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to vessel-related impacts, including the potential for wake-related damage. As mentioned in comments on Section 3.14, above,

the analysis of vessel traffic oversimplifies consideration of the appropriate information for characterizing the potential impacts related to the Proposed Action. More specifically, the Draft EIS does not consider the full range of likely vessel types, the broader historical traffic patterns and volumes, or the various factors that affect navigation (i.e., traffic and safety) in the study area, making conclusions presented in the Draft EIS unsupported and incorrect.

With respect to vessel wake impacts, as detailed above in comments on Section 3.4, *Terrestrial Vegetation*, the Draft EIS provides no supporting evidence or rationale for its conclusion that vessel wakes would result in vegetation impacts. Information is available to perform such an analysis but it was not used.

The analysis of cumulative impacts should include actual data from which an appropriate evaluation can be made of the potential increases in vessel traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to terrestrial vegetation (i.e., increased erosion and distribution of invasive species).

Section 5.7, Aquatic Resources

In Section 5.7.3, *Vessel Transportation*, beginning on page 5-30, the Draft EIS states that the cumulative increase in vessel traffic could result in cumulative impacts from vessel wake damage. However, for the reasons noted in the comments on Section 3.6, *Aquatic Species*, conclusions that the Proposed Action would result in cumulative vessel wake impacts are also not supported by facts or reasonable analysis.

More specifically, the foregoing comments on Section 3.6, *Aquatic Species*, demonstrate that the Draft EIS oversimplifies the factors that influence vessel wake patterns, and misrepresents the resulting potential for wake-related impacts to occur related to the Proposed Action, and, therefore, does not support conclusions that the Proposed Action would cause cumulatively significant impacts related to vessel wake impacts.

The analysis in Section 5.7, *Aquatic Resources*, of the Draft EIS does not consider the information that appears in sources cited in the EIS, which could be used to provide a more explicit statement of the likely locations and severity of vessel wake effects. In particular, past researchers on the Lower Columbia River have identified wake impacts in only a few locations and even at those sites have described impacts as localized and minor. Comments on Section 3.6, *Aquatic Species*, also show that the responsibility for managing vessel traffic on the Lower Columbia River to minimize adverse impacts to biological resources falls exclusively on the federal agencies. These agencies have regulatory authority over nearly all aspects of shipping traffic that could affect those resources; thus, it is not with the authority of the Applicant to implement mitigation to alter shipping traffic serving the proposed Facility.

The analysis in this section does not refer to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to vessel-related impacts, including the potential for wake-related damage. The analysis of cumulative impacts should include

actual data supporting an appropriate evaluation of the potential increases in vessel traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to terrestrial vegetation or aquatic resources (i.e., increased potential for wake stranding and entrainment, marine mammal strikes, increased erosion, and substantial changes in the shoreline environment). Statements to this effect are unsupported.

On page 5-31, the Draft EIS states that if a significant increase in vessel traffic were to occur, there would be a potential for minor to moderate noise impacts to aquatic species. This statement should be revised to qualify what level of traffic increase would result in significant impacts within the context of the cumulative impact analysis for the Proposed Action.

Section 5.9, Environmental Health

The analysis of potential cumulative impacts in Section 5.9, *Environmental Health*, does not refer to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to assessing increased risks. Without this information, it is not possible to assess the degree to which the Proposed Action would contribute to a cumulatively significant impact to environmental health. The analysis of risks presented in Section 5.9 and throughout the Draft EIS, alternates between evaluating the relative likelihood of various incidents (i.e., identifying the spectrum of possible risks) and focusing more heavily on only the worst-case (i.e., extremely unlikely) consequences. The Draft EIS should include a more complete discussion of the potential cumulative impacts related to the Proposed Action to provide decision makers with appropriately detailed information and to assist the development of effective mitigation.

Section 5.14, Historic and Cultural Resources

In Section 5.14.3, *Vessel Transportation*, on page 5-33, the Draft EIS states that there is a potential for moderate to major cumulative impacts to cultural resources from increased vessel-induced erosion and on usual and accustomed fishing and hunting areas from increased vessel-wake impacts, although the individual contribution of the Proposed Action to these impacts (as stated on pages 3.13-17 and 3.13-18) would be minor. This implies that the Proposed Action alone would result in a cumulatively significant impact to cultural resources and usual and accustomed fishing and hunting areas from increased vessel traffic, which is not a logical conclusion.

As mentioned in comments on Section 3.14, above, the Draft EIS does not consider the full range of available information to analyze or characterize potential vessel-related impacts, such as the variety of vessel types, the broader historical traffic patterns and volumes, or the various factors that affect navigation (i.e., traffic and safety) within the study area. Thus, conclusions about the nature and degree of vessel-related impacts presented in the Draft EIS are unsupported and incorrect.

More specifically, on page 5-39, the Draft EIS states that vessel traffic would likely cause tribal fishing vessels to lose fishing opportunities through direct conflicts or indirectly through increased wake stranding that has the potential reduce localized fish populations; however, no supporting evidence for either statement is provided.

The analysis of cumulative impacts should include a more thorough evaluation of the potential increases in vessel traffic related to the Proposed Action compared to the No Action Alternative. Without this information, it is not possible to assess the degree to which the incremental increases in impacts under the Proposed Action could contribute to a cumulatively significant impact to cultural resources and usual and accustomed fishing rights (i.e., increased wake-induced bank erosion or fish stranding).

Section 5.15, Transportation

Section 5.15.2, Rail Transportation

The analysis of potential cumulative impacts in Section 5.15.2, *Rail Transportation*, does not refer to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to assessing the potential cumulative impacts from increased congestion or gatedown time due to the Proposed Action. Without this information, it is not possible to assess the degree to which the Proposed Action would contribute to a cumulatively significant impact to rail capacity or vehicle delay.

Section 5.15.3, Vessel Transportation

Similar to comments on the analysis of vessel impacts presented in Chapter 3, the analysis of potential cumulative impacts in Section 5.15.3, *Vessel Transportation*, does not clearly establish the appropriate baseline for vessel traffic and oversimplifies the factors that influence vessel-related impacts, which leads to unsupported and incorrect conclusions, particularly in terms of vessel capacity.

As noted on page 5-42, the Draft EIS states that cumulative vessel traffic could range from slightly higher than the historical high to well beyond that level. However, as stated previously, the Draft EIS does not consider the full range of likely vessel types, the broader historical traffic patterns and volumes, or the various factors that affect navigation (i.e., traffic and safety) in the study area. The Draft EIS states that the vessels associated with the Proposed Action are larger than have historically transited the study area when Handymax and Panamax vessels have been used frequently on the river.

The Draft EIS also focuses on the increase in vessel traffic relative to one specific year and for one vessel type. As noted in the comments on Chapter 3, this approach does not consider the more complex factors that influence the analysis of vessel-related impacts. The use of a longer data time series would allow inference about long-term trends in vessel shipping on the river, which in turn would allow inference about changing conditions during the environmental baseline period and about foreseeable changes under the No Action Alternative. Neither of these topics is addressed in the Draft EIS. For instance, these longer-term data would provide quantification of the recognized long-term trend toward use of the river by increasingly larger vessels. The data would

also support the inference that deep-draft vessel traffic has been increasing each decade (with shorter-term fluctuations such as those associated with the recent global economic recession), an increase that is likely to continue under the No Action Alternative.

Section 5.16, Public Services and Utilities

The analysis of potential cumulative impacts in Section 5.16, *Public Services and Utilities*, does not refer to the cumulative projects listed in Table 5-2 to establish the baseline conditions relevant to assessing increased risks and the related potential for increased demand on emergency services providers. Without this information, it is not possible to assess the degree to which the Proposed Action would contribute to a cumulatively significant impact to public services. Additionally, the Draft EIS does not evaluate the increased potential for cumulative impacts to emergency service providers related to increased rail or vessel traffic.

Section 5.17, Socioeconomics

On page 5-43, in Section 5.17.2, *Rail Transportation*, the Draft EIS states that the total cumulative increase in rail traffic could result in disproportionate impacts to environmental justice populations from increased gatedown time. However, as noted in comments on Section 3.14, *Transportation*, the analysis of increased rail gatedown time and vehicle delay is too generalized to make conclusive determinations as to the level of impact attributable to the Proposed Action. As noted previously in the comments on Section 3.16, *Socioeconomics*, the Draft EIS does not contain sufficiently detailed information to assess whether increased gatedown time or vehicle delay would disproportionately affect environmental justice populations. Finally, the Draft EIS does not analyze the potential impacts under the No Action Alternative and therefore, does not establish the environmental baseline needed to assess the potential for the Proposed Action to result in a cumulatively significant impact.

Section 5.19, Risk of Accidents

Section 5.19, *Risk of Accidents*, provides little insight into cumulative risks. Section 5.19.1, *Proposed Facility* addresses only the proposed Facility, rather than all existing and proposed facilities. It concludes that the “possibility for a crude oil spill, fire, or explosion at the proposed Facility is very low” which is inconsistent with the proposed mitigation requirements. It is also based on consideration of large spills and no quantification of likelihood other than for the vessel transfers. Based on this conclusion, it then states that the “likelihood of an oil spill, fire, or explosion from another existing or future action within a similar timeframe and location as the Proposed Action is highly unlikely.” No substantiation for this conclusion is provided. Even if the risk at any one facility was properly determined and persuasively explained, the analysis says nothing about how the risk is changed, if at all, by adding additional facilities.

Section 5.19.2, *Rail Transportation*, addresses rail transportation more broadly than the discussion of facility risks but simply states that there could be more accidents (impacts) because there would be more trains carrying crude. The magnitude of the risk is not known, nor is the proportion that might be attributed to the Proposed Action.

Section 5.19.3, *Vessel Transportation*, states that more vessels mean more risk. It then goes on to discuss the inadequacy of the Maritime Fire and Safety Association Plan to address the Proposed Action, without mentioning the other planned projects listed in Table 5-2 that would also need to be covered by this plan. This section should focus on the cumulative risk and the overall preparedness, not just the Proposed Action. The second paragraph is much like the one for rail transportation, stating there would be more spills, fires, and explosions, and that the impacts would be similar. Again, no support nor the context for these statements is provided. The proportion of the risk attributable to the Proposed Action is not provided.

Conclusion

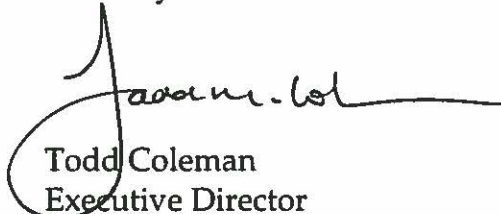
The Port was formed by the Washington State legislature and local voters more than a century ago to retain and manage critical waterfront property for public benefit. Throughout its history, the Port has managed the community's assets safely and effectively, bringing industry, jobs, and economic benefit to Clark County and the region.

The proposed Project is an important growth opportunity for the Port and the region. It is occurring at a time of unparalleled growth in the energy market and logistical challenges in bringing energy products to market. The Draft EIS is a critical step in the evaluation of the proposed Project. The outcome of this process will have a profound and lasting impact on the future of operations at the Port and other ports across the country as we work to fulfill our responsibility to create jobs and economic benefit and to manage market demand.

How Washington State handles the proposed Project and its Draft EIS sets a critical precedent that will affect every energy project in our burgeoning national energy market, as well as all projects that rely on ports and the established transportation systems that are vital to the movement of goods in the United States. The proposed Project deserves a thorough and accurate analysis of the probable and significant impacts to the environment.

Thank you for your consideration of the comments provided by the Port of Vancouver USA.

Sincerely,



Todd Coleman
Executive Director

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The Executive Summary is a required part of an EIS. To achieve its purposes, it needs to be accurate and reasonably complete. The Port provides this Table 1 to assist EFSEC in making the Executive Summary more accurate and reasonably complete. In some cases, the Port suggests including information from the body of the Draft EIS to ensure that the Executive Summary is a reasonably complete summary of the text. The Port does not necessarily endorse all of the material recommended for inclusion. The Port's criticisms or questions about the text of the Draft EIS stand, even if the Port suggests the subject language be summarized in the Executive Summary.

Table 1. Inconsistencies between the Executive Summary and the Draft EIS

Page #	Comment
ES-26	Table ES-2, Air Quality, Proposed Facility, Impacts, states that operation of the proposed Facility would have a minor impact to the Columbia River as a result of diesel PM deposition. This is inconsistent with the statement on page 3.2-22 that refers to the impact of PM on both the Columbia and Willamette River. Impact mechanism and receiving waters should be consistent across these two sections.
ES-26	Table ES-2, Air Quality, Rail Transport, Significant Unavoidable Impacts, states <i>a minor increase in rail traffic could be assumed to additionally represent a minor increase in air emissions in the vicinity of the rail corridor</i> . This is inconsistent with Section 3.2.7, which does not include this statement.
ES-26	Table ES-2, Air Quality, Rail Transport, Impacts, states <i>Vehicles idling while delayed at at-grade crossings could increase emissions to a level that would represent an additional minor impact to local air quality</i> . This is inconsistent with Section 3.3.2.2 which states <i>Vehicles idling while delayed at these crossing locations would temporarily increase emissions. However, the increase in emissions would be anticipated to be less than significant. In more rural areas, likely fewer vehicles would be idling, resulting in smaller, localized increases in emissions</i> .
ES-26	Table ES-2, Air Quality, Vessel Transport, Significant Unavoidable Impacts, states <i>Increased vessel traffic and associated air emissions would have a minor impact to air quality</i> . This is inconsistent with Section 3.2.7, which does not include this statement.
ES-27	Table ES-2, Water Quality, Proposed Facility, Impacts, states <i>Disturbance of the riverbed during temporary pile installation at the proposed marine terminal would cause minor to moderate temporary increases in turbidity of surface water</i> . This is inconsistent with page 3.3-40, Section 3.3.3.1, which states <i>Short-term disturbance of the Columbia River bed would occur during temporary pile installation and marine terminal improvements. These activities would cause temporary increases in turbidity</i> .
ES-28	Table ES-2, Water Quality, Proposed Facility, Mitigation, is missing the following mitigation measure from Section 3.3.5, page 3.3-54: <i>Install surface water monitoring wells downslope from the stone column and jet grout column installation areas to monitor water quality during the installation of these improvements. In the event of unacceptably high pH levels and/or sulfate levels in monitored water, install additional sheet pile barriers to prevent contaminated water from entering the Columbia River. Additional impacts associated with this mitigation would include more disturbance of existing site soils and some additional construction activity. These additional impacts would be negligible to minor and would reduce pH levels and/or sulfate to levels to be minor</i> .

Page #	Comment
ES-29	Table ES-2, Terrestrial Wildlife, Proposed Facility, Impacts, states that noise impacts to wildlife would be minor. This is inconsistent with page 3.5-27, third paragraph, which indicates that the impact to wildlife would be minor to moderate and then states that mitigation discussed in Section 3.5.5 would reduce noise impacts to minor levels.
ES-31	Table ES-2, Aquatic Species, Proposed Facility, Impacts, states the impacts to aquatic species from the small increase in turbidity would be localized and minor. This is inconsistent with page 3.6-38, Aquatic Habitat, fifth paragraph, which describes effects as negligible.
ES-32	<p>Table ES-2, Aquatic Species, Proposed Facility, Mitigation, is missing the following mitigation measures from Section 3.6.5, page 3.6-57:</p> <ul style="list-style-type: none"> • <i>Perform all construction activities below the OHWM during the EFSEC modified in-water work window of September 1 through January 15 to avoid peak migration and larval stages of salmonid and nonsalmonid species (especially eulachon and white sturgeon) in the proposed Facility study area.</i> • <i>Modify the walkways and trusses for the proposed dock modifications to use steel grating designed to let at least 60 percent of sunlight penetrate into areas over shallow-water habitat and use retractable shore-based walkways that would be in place only during periods when vessels are moored.</i>
ES-32	<p>Table ES-2, Aquatic Species, Vessel Transport, Significant Unavoidable Impacts, omits the following impacts from Section 3.6.6, pages 3.6-57 and 3.6-58:</p> <ul style="list-style-type: none"> • <i>The increase in deep-draft vessel traffic and associated increase in vessel wakes could reduce vegetation communities, resulting in a moderate to major long-term change to the resource, indirectly affecting fish species that rely on these habitats to complete their life cycle. The increase in deep-draft vessel traffic and associated increase in vessel wakes could result in a moderate to major long-term change to tidal wetland, shallow water, and tidal flat EFHs.</i> • <i>The approximately 223 percent increase in deep-draft vessel traffic associated with the proposed Facility could result in a moderate to major long-term effect on nearshore fish in the lower 33-mile portion of the Columbia River.</i>
ES-33	Table ES-2, Environmental Health, Rail Transport, Significant Unavoidable Impacts, states <i>Impacts from a rail accident (e.g., collision) would depend on the unique circumstance of the event and may include, but would not necessarily result in, injuries or fatalities, which are considered to be moderate to major impacts.</i> This statement is inconsistent with Section 3.8.3.2, page 3.8-15 to 18 that states <i>Therefore, impacts to environmental health from rail transportation are expected to be minor for most crossings but may be moderate for crossings with existing elevated safety risks.</i> If this statement is applicable to <u>rail</u> transportation it is missing from Section 3.8.6, page 3.8-17; however, this section does state the same for <u>vessel</u> accidents, suggesting the Executive Summary text for Rail Transport is in error.
ES-33	Table ES-2, Environmental Health, Vessel Transport, Impacts, states <i>Impacts from a collision could result in injuries or fatalities, which are considered to be moderate to major impacts.</i> This is consistent with Section 3.8.3.3; however, the third paragraph on page 3.8-16 (Section 3.8.3.3) goes on to say <i>However, as the projected volume of vessel traffic in the Columbia River is below the historical high and substantially below the capacity of the navigation system, public health and safety impacts associated with vessels transiting to and from the proposed Facility are expected to be minor, which is not included in Table ES-2.</i>

Page #	Comment
ES-34	Table ES-2, Noise, Proposed Facility, Impacts, states <i>Noise impacts at the JWC dormitories from pile driving and jet grouting would be moderate and temporary.</i> Section 3.9.3, page 3.6-15, adds that impacts would be negligible at the Fruit Valley Residential area. This may be implied by the next bullet (e.g., sensitive noise receptors from the proposed Facility) but should be clarified for consistency.
ES-34	Table ES-2, Noise, Proposed Facility, Mitigation, states <i>Effective barriers can break the line of sight between the noise source and the receiver and are most effective when they are closest to either the source or the receiver. If possible, acquire limited property rights for the construction of sound barriers at the receiver.</i> This is not listed as a mitigation measure for construction in Section 3.9.5 (page 3.9-23).
ES-38	Table ES-2, Historic and Cultural Resources, Proposed Facility, Mitigation, states <i>In the event of an unanticipated discovery during construction activities, the Cultural Resources Inadvertent Discovery Plan (Flint 2015) would be followed. The steps outlined in the plan serve to minimize damage to any inadvertently discovered archaeological resources during ground-disturbing activities, which may include small, deeply buried, and/or widely dispersed historic or precontact cultural materials. Steps included in the plan outline applicable state laws and regulations, previous data collected, stop-work and notification protocols for inadvertently discovered archaeological resources and human remains, discovery protection measures, documentation by professional archaeologists, monitoring of operations and emergency response activities, and notification contact list.</i> This does not appear as a mitigation measure in Section 3.13.5, page 3.13-19.
ES-40	Table ES-2, Public Services and Utilities, Proposed Facility, Impacts, states <i>Impacts to security services from operation of the proposed Facility would likely be minor, and no impacts to police services are anticipated.</i> This is inconsistent with Section 3.15.3.1, page 3.15-9, fifth paragraph, which states that impacts to police services would be negligible.
ES-41	Table ES-2, Socioeconomics, Proposed Facility, Impacts, states <i>Creation of approximately 320 jobs during construction and 91 jobs during operations.</i> This statement is not consistent with how other impacts are characterized in the Draft EIS by magnitude, duration, and degree.
ES-41	Table ES-2, Socioeconomics, Proposed Facility, Impacts, states <i>Tax revenue, sales and use tax, property tax, income tax, and other taxes would be generated in Washington and Oregon.</i> This statement is not consistent with how other impacts are characterized in the Draft EIS by magnitude, duration, and degree.
ES-41	Table ES-2, Socioeconomics, Rail Transport, Impacts, states <i>The addition of rail traffic associated with the proposed Facility would cause some segments of rail lines to approach or exceed capacity, with some shipments experiencing delays, costing rail carriers and shippers a combined \$409.07 for each hour of train delay time accrued.</i> This statement is not consistent with how other impacts are characterized in the Draft EIS by magnitude, duration, and degree.
ES-43	Table ES-3, Earth Resources, Rail Corridor, Impacts, states <i>A small to large crude oil spill would likely have a negligible to minor impact to bedrock geology.</i> This is inconsistent with page 4-57, Section 4.7.2.2, which describes this impact as <i>unlikely to have more than minor impacts to bedrock geology.</i>

Page #	Comment
ES-43	Table ES-3, Earth Resources, Rail Corridor, Impacts, states <i>Potential impacts to soils from a crude oil spill could range from minor to moderate; remediation requiring excavation could result in minor impacts to local topography.</i> This is inconsistent with page 4-57, Section 4.7.2.2 states this impact as <i>negligible to minor.</i>
ES-43	Table ES-3, Air Quality, Rail Corridor, Impacts, states <i>Impacts from spills, fires, and/or explosions along the rail route would likely be similar to those listed for the proposed Facility.</i> Per page 4-59, <i>Depending on the location of the event, the impacts could be major.</i>
ES-43	Table ES-3, Air Quality, Vessel Corridor, Impacts, states <i>Impacts from spills, fires, and/or explosions along the vessel route would likely be similar to those listed for the proposed Facility.</i> Per page 4-60, <i>Depending on the location of the event, the impacts could be major.</i>
ES-44	Table ES-3, Water Resources, Rail Corridor, Impacts, states <i>Impacts to water resources from fire and explosion events would likely be minor to major depending on the spread of the fire and the size of the explosion debris field.</i> This is inconsistent with page 4-65, fourth paragraph, which states <i>Impacts to water resources from a large explosion and fire event along the rail corridor would be moderate to major depending on the spread of the fire and the size of the explosion debris field.</i>
ES-45	Table ES-3, Terrestrial Wildlife, Proposed Facility, Impacts, is missing the following impact determination from page 4-72, third paragraph: <i>Impacts to terrestrial wildlife from a small fire event at the proposed Facility would likely be negligible to minor assuming the event were contained within the proposed Facility site.</i>
ES-46	Table ES-3, Aquatic Species, Proposed Facility, Impacts, is missing the following impact determination from page 4-79, fifth paragraph: <i>Impacts to aquatic species from a small fire event at the proposed Facility would likely be negligible as it would not likely reach aquatic habitats or species.</i>
ES-46	Table ES-3, Energy and Natural Resources: Statements for small and medium spills should be added to Table ES-3 from Sections 4.7.8.1, 4.7.8.2, and 4.7.8.3.
ES-46	Table ES-3, Energy and Natural Resources, Proposed Facility, Impacts, is missing the following impact determination from page 4-83, third paragraph: <i>A small crude oil fire at the proposed Facility would result in the loss of burned crude oil. This loss could produce a slight short-term reduction in the total amount of oil destined for refineries on the West Coast from the original crude oil source. Additionally, a small fire could damage some overhead powerlines, leading to a short-term disturbance in local energy supply. Both of these potential impacts would be negligible.</i>
ES-46	Table ES-3, Energy and Natural Resources, Rail Corridor, Impacts, is missing the following impact determination from page 4-83, fifth paragraph: <i>A small crude oil fire along the rail corridor would have similar impacts to energy and natural resources as a small crude oil fire at the proposed Facility.</i>
ES-47	Table ES-3, Environmental Health, Proposed Facility, Impacts, is missing the following impact determination from page 4-85: <i>Impacts to environmental health from a small to medium crude oil spill at the proposed Facility would likely be minor, since hazardous material spill response would be implemented by appropriately trained onsite personnel.</i>

Page #	Comment
ES-47	Table ES-3, Environmental Health, Proposed Facility, Impacts, is missing the following impact determination from page 4-86: <i>Impacts to human health from a small fire at the proposed Facility would be negligible if there were no resulting injuries or harmful levels of exposure. If the small fire did result in severe injury, fatality, or chronic illness from harmful levels of exposure, the impacts would be major.</i>
ES-47	Table ES-3, Noise, Proposed Facility, Impacts, is missing the following impact determination from page 4-92: <i>Noise resulting from a small crude oil fire would include the sounds of the fire and sounds associated with emergency response and firefighting efforts (e.g., fire alarms, sirens, response equipment). The noise impacts from a small fire at the proposed Facility would be short term and negligible.</i>
ES-47	Table ES-3, Noise, Rail Corridor, Impacts, is missing the following impact determination from page 4-93: <i>Noise impacts resulting from a small crude oil fire along the rail corridor would be similar to those describe above for a crude oil spill along the rail corridor, short term and negligible.</i>
ES-47	Table ES-3, Noise, Vessel Corridor, Impacts, is missing the following impact determination from page 4-93: <i>Impacts from a crude oil spill along the vessel corridor would be associated with spill response activities and would be similar to those described for a spill at the proposed Facility. However, a large to very large spill from a vessel could result in cleanup activities from the location of the incident to beyond the mouth of the Columbia River, resulting in potential noise impacts throughout the response area. Noise impacts from small to very large spills from a vessel would be short term and negligible.</i>
ES-48	Table ES-3, Land and Shoreline Use, Proposed Facility, Impacts is missing the following per page 4-93, <i>Impacts to land and shoreline use from a crude oil spill of any size at the proposed Facility would be negligible if the spill were contained within the site boundaries and did not reach the Columbia River.</i> Per page 4-94, consider inserting <i>Impacts to land and shoreline use from a small fire at the proposed Facility would be short term and negligible.</i>
ES-48	Table ES-3, Land and Shoreline Use, Vessel Corridor, Impacts is missing the following per page 4-95, <i>Impacts to land and shoreline use from a small fire along the vessel corridor would be negligible.</i>
ES-48	Table ES-3, Visual Resources, Proposed Facility, Impacts is missing the following per page 4-96, consider inserting <i>A small- to medium-sized spill at the proposed Facility site would likely have negligible impacts to visual resources as the level of contrast created by the spill and the response would be minimal.</i>
ES-48	Table ES-3, Visual Resources, Proposed Facility, Impacts is missing the following per page 4-96, <i>A small fire could produce minor impacts to visual resources in the vicinity of the proposed Facility.</i>
ES-48	Table ES-3, Visual Resources, Rail Corridor, Impacts is missing the following per page 4-96, <i>A small fire along the rail corridor could result in smoke and flames observable by nearby sensitive receptors, and depending on the location and extent, could impact sensitive visual resources (e.g., historical bridges), resulting in minor to major visual impacts.</i> Per page 4-96, consider inserting <i>Overall, impacts to visual resources from small to medium spills or fires along the rail corridor are anticipated to be minor because the change from the current conditions would only last for a short duration and be confined to the corridor.</i>

Page #	Comment
ES-48	Table ES-3, Visual Resources, Rail Corridor, Impacts is missing the following per page 4-97, <i>A small fire along the vessel corridor could result in smoke and flames observable by nearby sensitive receptors, which, depending on the location and extent, could impact sensitive visual resources (e.g., historical bridges), resulting in minor to major visual impacts.</i>
ES-49	For the remainder of the resources, the Executive Summary does not present information summarizing the impact determinations from Chapter 4 for small, medium, and large spills, fires and explosions consistently for the Facility, Rail, and Vessel Corridor. See above comments as examples.

Table 2. Errors, Omissions, and Clarifications

Chapter/Section	Page #	Comment
Executive Summary	ES-4	First paragraph, first sentence, states <i>the marine vessels expected to call at the proposed Facility would be in the 46 million deadweight tons (MDWT) size range</i> . This should be corrected to read <i>46,000 deadweight tons (DWT)</i> . Next sentence is inaccurate as well stating that larger vessels would be in the range of 105 MDWT and 165 MDWT; should be 105,000 DWT and 165,000 DWT.
Executive Summary	ES-5	Table ES-1, second row, Delivery of Crude Oil to the Proposed Facility by Barge, states that delivery by barge from Kennewick would require a second unit train unloading facility. This is inaccurate; the text should be revised to state that the alternative would require one train unloading facility (in Kennewick) and two vessel transfer facilities (one at the Kennewick site and one at the Port of Vancouver site). Also, this alternative would increase vessel transit/loading risks, which should be noted in the Draft EIS.
Executive Summary	ES-5	Table ES-1: The Draft EIS should be revised to clarify that the reduced capacity alternative would not meet the project objectives.
Executive Summary	ES-9	Section 6.2.2, Cumulative Impacts, Rail Transportation, identifies the number of future trains in the state, per the Washington State Rail Plan; however, it does not specify where in the state these trains are travelling and is not specific to the routes used by the proposed Project. Therefore, the impacts of cumulative projects appear to be overstated. The cumulative rail transportation analysis in the Draft EIS should be revised to reflect future trains on the routes that would be used by the project trains and reconciled with the information presented in Chapter 5 and Table 5-2.
Executive Summary	ES-16	Section 8.2.2, Mitigation Measures for the Applicant to Implement, first bullet, recommends secondary containment for aboveground crude oil transfer pipelines. This is inconsistent with pipeline code design in WAC 296-56-60221, which specifies single-walled pipelines. The Draft EIS should be revised to be consistent with this regulation.
Executive Summary	ES-39	Table ES-2, Transportation by Rail Column, Significant Unavoidable Impacts, refers to gate downtime at crossings <i>along the 445-mile Columbia River Alignment</i> . This should refer to 365 rail miles. Moreover, <i>Columbia River Alignment</i> is not standard terminology. The correct terminology is <i>subdivision</i> . This terminology issue – use of rail line, segment, and alignment in place of subdivision – applies throughout the rail discussion.
Executive Summary	ES-40	Table ES-2, Public Services and Utilities, Mitigation, encourages BNSF to make SecureTrak available to emergency response vehicles in areas with at-grade crossings along the proposed rail route in Washington. The Draft EIS should not recommend a specific trademarked system, when other systems are available. Additionally, elsewhere the Draft EIS states that the Applicant has

Chapter/Section	Page #	Comment
		agreed to use this system; however, use of the system would apply to BNSF, not the Applicant.
Chapter 2, Proposed Action and Alternatives	NA	The Draft EIS should include a complete list of Applicant voluntary measures and be clear about how those measures were factored into the analysis of potential impacts.
Chapter 2, Proposed Action and Alternatives	2-2	Section 2.1, fourth paragraph on page 2-2, first sentence, states that vessels calling at the proposed Facility would be in the 46 million deadweight tons (MDWT) size range. The size should be 46,000 deadweight tons (DWT). The next sentence is inaccurate, as well, stating that larger vessels would be in the range of 105 MDWT and 165 MDWT; this text should read 105,000 DWT and 165,000 DWT.
Chapter 2, Proposed Action and Alternatives	2-3	Section 2.2.1, third paragraph, states <i>In 2009, the Port purchased the land that now makes up Terminals 4 and 5</i> . This text should be corrected to state that the Port purchased Terminal 4 prior to 2009; only Terminal 5 was purchased in 2009.
Chapter 2, Proposed Action and Alternatives	2-6	Section 2.2.1, last paragraph of section, should include Tristar Transload as one of the tenants leasing property adjacent to the proposed Facility site.
Chapter 2, Proposed Action and Alternatives	2-7	Table 2-2 should identify track 4107 as being constructed as part of WVFA Project 11A. The heading of the second column should be edited to read <i>constructed or relocated as part of the Proposed Facility</i> , or a separate column should be added to identify these differences (i.e., one column for construction and one for relocation).
Chapter 2, Proposed Action and Alternatives	2-22	Section 2.2.2.5, Marine Terminal (Area 400), first sentence, incorrectly refers to two berthing locations. Although existing facilities consist of these two berthing locations, the combined Berths 13 and 14 will only be capable of berthing a single vessel under the proposed Project. The Draft EIS should be revised to clarify the proposed berthing capacity.
Chapter 2, Proposed Action and Alternatives	2-25	Section 2.2.2.6, last bullet: The area provided in the Draft EIS (50 feet by 100 feet) for the skid-mounted proving station is much larger than previously identified by the Applicant. The area should be verified with the Applicant, so that impacts are not overstated.
Chapter 2, Proposed Action and Alternatives	2-27	Section 2.3.1, second bullet, states that Track 4101 will be relocated in the first 12 months. The Port was not anticipating delivery of this track to the proposed Facility or project use of Track 4105 until throughput of the proposed Project reaches 120,000 barrels a day.
Chapter 2, Proposed Action and Alternatives	2-27	Section 2.2.2.7 boilers discussion states <i>three natural gas-fired boilers, each with a capacity of 62 million British thermal units per hour, would be used to provide steam for the heating of tank cars during unloading of crude oil</i> . But Table 2-1 says the Boiler Building houses two primary electrically powered boilers and one standby natural gas-fired boiler to provide steam for the heating of tank cars during

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		unloading of crude oil. Revise the Draft EIS to clarify which is correct.
Chapter 2, Proposed Action and Alternatives	2-39	Paragraph following the bulleted list cites the Applicant proposed an in-water work window for construction from November 1 to February 28. However, as noted in Chapter 3, Section 3.6, Aquatic Species, EFSEC coordinated with WDFW to determine a more appropriate window. The Draft EIS should clarify the appropriate in-water work window in Chapter 2.
Chapter 2, Proposed Action and Alternatives	2-45	Section 2.2.3.6, Rail clearances are actually determined by WAC 480-60, not AREMA. The Draft EIS should be corrected accordingly.
Chapter 2, Proposed Action and Alternatives	2-47	Third paragraph, first sentence: The Draft EIS refers to two General Motors switching engines rather than one, which was previously understood to be the proposal. The Draft EIS should clarify how two switching engines would be accommodated on the proposed site.
Chapter 2, Proposed Action and Alternatives	2-49	Section 2.1.4.5, Vessel Docking and Loading, states <i>the Applicant has indicated that the most common vessel expected to call at the marine terminal would be a medium-sized tanker with a crude oil cargo capacity of 319,925 bbl (Handymax)</i> . Elsewhere the reference to these vessels is in terms of dead weight. The Draft EIS should be consistent for the sake of clarity.
Chapter 2, Proposed Action and Alternatives	2-50	Third paragraph, last sentence says <i>46 MDWT</i> ; text should be corrected to say <i>46,000 DWT</i> .
Chapter 2, Proposed Action and Alternatives	2-62	Third bullet: Clarify how the rail loop access at the Gateway overpass would be gated and who would be responsible.
Chapter 2, Proposed Action and Alternatives	2-68	Second paragraph, first sentence, states <i>46,000 metric deadweight tons</i> . This is correct, but <i>metric</i> is not needed and is being confused elsewhere in the document with million deadweight tons. Suggest using <i>46,000 deadweight tons (DWT)</i> . The next sentence states <i>For the purposes of this Draft EIS, approximately 15 percent of the vessels used to transport crude oil are assumed to be 105,000 to 115,000 MDWT oil tankers and approximately 5 percent are assumed to be 160,000 to 165,000 MDTW oil tankers (BergerABAM 2015a)</i> . These numbers are inconsistent with the text on page 2-2 which states that the larger tankers would be in the range of 105,000 and 165,000 DWT [adjusted assuming 105 and 165 MDWT were errors]. These ranges should be consistently stated throughout the Draft EIS.
Chapter 2, Proposed Action and Alternatives	2-71	Third paragraph, first sentence: <i>Prior to arrival at the mouth of the Columbia River, vessels would be required to provide a 96-hour advanced notice to proposed Facility emergency contingency plan contractors and, additionally, would require a clearance for arrival from the USCG.</i> Currently, advance notice is provided to the U.S. Coast Guard; requiring notification to an

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		emergency response contractor is duplicative and unnecessary. Additionally, this appears to be a typo: the requirement is 24 hours notice unless the trip is 96 hours or greater in length.
Chapter 2, Proposed Action and Alternatives	2-71-72	Final sentence on p. 2-71, continuing onto p. 2-72: <i>Tug assistance would be contracted through the vessel's agent or company, and the agent would be responsible for providing the pilot with all necessary information.</i> The vessel agent does not provide the River or Bar pilot with navigation information.
Chapter 2, Proposed Action and Alternatives	2-82	Section 2.8.2.3: This section should note that the Port of Vancouver is the first deep-draft terminal encountered on the Columbia River rail route heading west from the Bakken region; therefore, the location of the proposed Facility minimizes the distance travelled by a loaded train to reach marine access to the Pacific.
Chapter 3, Section 3.1, Earth Resources	3.1-2	Section 3.1.2.1, Affected Environment, Proposed Facility, states that the Port has been an industrial site since 1912. While this is a true statement, its placement in the description of the proposed Facility is misleading, implying that the proposed site has been operated as an industrial site since 1912. Suggest identifying when industrially operations at the proposed site began (1940s). Also, there was a significant period of little industrial activity prior to Port purchase.
Chapter 3, Section 3.1, Earth Resources	3.1-30	The text in the fourth bullet related to the recommended design of the transfer pipelines should be consistent with the language on this subject described in Appendix C.
Chapter 3, Section 3.2, Air Quality	3.2-15	The second paragraph states that carbon monoxide (CO) would be emitted in the greatest quantity [presumably of all pollutants] at an estimated 35.75 tons per year. However, according to Table 3.2-5 on the previous page, CO emissions would be 23.02 tons per year; 35.75 tons per year is the value listed for annual volatile organic compound (VOC) emissions and was perhaps referenced accidentally. The text should be revised to correct this inaccuracy.
Chapter 3, Section 3.2, Air Quality	3.2-23	Top of the page, last sentence refers to Section 3.3 for further discussion of the effects of deposition on water resources. No such discussion was found in Section 3.3. A discussion of the effects of deposition on water resources should be added to Section 3.3 or the cross reference removed from this paragraph.
Chapter 3, Section 3.2, Air Quality	3.2-26	Section 3.2.4.3, Vessel Transportation, states emissions calculations <i>are based on an estimated 730 roundtrips by Panamax-size crude oil tankers</i> . This contains two inaccurate assumptions: number of vessel trips and type of vessels. One vessel could be loaded at the proposed Facility per 24 hours, for up to 365 vessels per year. Each vessel represents one roundtrip. This represents 730 one-way transits. Throughout the Draft EIS, the assumption is stated that 80% of vessels calling at the proposed Facility would be Handymax-size vessels, not Panamax-size; therefore, assuming all

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		Panamax-size vessels results in an overestimate of vessel emissions.
Chapter 3, Section 3.3, Water Resources	3.3-4	Second paragraph, second to last sentence, identifies the wrong river mile of the proposed Facility (106); the text should be revised to identify the facility location at river mile 103.5.
Chapter 3, Section 3.3, Water Resources	3.3-9	Figure 3.3-3 does not reflect the new P10 diversion, which now routes all stormwater to an outfall. Also Terminal 5 stormwater facilities are not accurately depicted. The figure should be revised to correct these errors.
Chapter 3, Section 3.3, Water Resources	3.3-11	Figure 3.3-5 uses benchmark from 2010, which makes it appear that the benchmark has been exceeded historically, and implies that the Port is not in compliance with the permit. The figures should be corrected to correlate years with appropriate permit benchmarks.
Chapter 3, Section 3.3, Water Resources	3.3-12	Groundwater, Hydrogeology, describes characteristics of the different zones of the aquifer based on a 2008 Anchor Environmental report. The Draft EIS should clarify what is being referred to as the study area in the bullets and its correlation to the proposed Facility site.
Chapter 3, Section 3.3, Water Resources	3.3-13	Last paragraph, first sentence, should be Vancouver Lake, not Lake Vancouver.
Chapter 3, Section 3.3, Water Resources	3.3-17	Table 3.3-4 should be revised to state that Port Well 1 and Port Well 3 are used for potable water and fire suppression and that the Terminal 5 well is not in use.
Chapter 3, Section 3.3, Water Resources	3.3-36	First paragraph inaccurately states that PCBs and PBDEs are breakdown products of DDT. Text should be revised to correct this inaccuracy.
Chapter 3, Section 3.3, Water Resources	3.3-42	Table 3.3-16 should be updated to identify the site-wide groundwater covenant.
Chapter 3, Section 3.4, Terrestrial Vegetation	3.4-16	Footnote 3 refers to a 223% increase over the 164 deep-draft transits recorded by Ecology in 2013. This vessel count corresponds to 2013 VEAT data (Ecology 2014) number of tank vessels and ATBs, which represents only a small percentage of the commercial (potentially deep-draft) vessel traffic in the river. Therefore, this overstates the increase in deep-draft vessel traffic resulting from the Proposed Action. This inaccuracy is repeated on pages 3.6-51 and 3.6-58. The term deep-draft vessel should also be clearly defined in the Draft EIS.
Chapter 3, Section 3.6, Aquatic Species	3.6-51	Footnote 10 states <i>Ecology (2014) counts only entering transits for vessels; thus, a "transit" can be considered to be one entry and one exit per vessel.</i> This definition further confuses terminology use in the Draft EIS. Text should be revised to states that Ecology data only counts entering transits for vessels; therefore, one VEAT "transit" is equivalent to one vessel call but two river transits (one

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		entry and one exit). Calls are a good representation of total number of vessels in the system; while transits represent traffic movements. These terms should be defined in the Draft EIS and used consistently throughout, regardless of the terms that were used in the original source data. It should be further clarified that some barges make additional in-river, port-to-port transits, so doubling VEAT numbers underestimates actual total traffic movement in the river.
Chapter 3, Section 3.6, Aquatic Species	3.6-57	Section 3.6.6 identifies potential impacts to water quality from increased turbidity and hazardous materials contamination during construction; however, these impacts are not identified in Section 3.3.6 of Section 3.3, Water Resources, as being significant unavoidable adverse impacts.
Chapter 3, Section 3.7, Energy and Natural Resources	3.7-2	The Draft EIS should be revised to clarify that the new Clark Public Utilities (CPU) electric substation is not dependent on proposed Project.
Chapter 3, Section 3.8, Environmental Health	3.8-4	Table 3.8-1: The description of Terminal 5 Alcoa restrictive covenants needs to acknowledge the shoreline and site-wide groundwater water covenant, which is important to dewatering. Figure 3.8-1 acknowledges the shoreline covenant, and so is inconsistent with the table. Appendix D.8, CMMP, contains the correct information. Environmental Restrictive Covenants for Terminal 5 are as follows: East landfill, N/N2 Landfill, and Shoreline Areas, as well as a site-wide groundwater use restriction are all under one covenant (#4545480, dated 3-26-2009), Vanexco Covenant (#9603120195, dated 4-8-1996), SPL covenant (#9212160226, dated 3-23-1992) is only found in the consent decree #92-2-00783-9 (Exhibit E, 1992), Ingot covenant does not have a number associated with it but is dated 12/31/08.
Chapter 3, Section 3.8, Environmental Health	3.8-13	Site Security: The Draft EIS should be revised to clarify that the rail facilities would not be gated.
Chapter 3, Section 3.14, Transportation – General	3.14-2	Figure 3.14-1 shows all rail loops as being constructed for the proposed Project. The text should be revised to clarify that only the outer loop (4102) is being constructed as part of the proposed Project. Also the first paragraph on page 3.14-1 refers to <i>rail loops</i> ; this should be singular (rail loop).
Chapter 3, Section 3.14, Transportation – Rail	3.14-12	Section 3.14.2.2: Given the range of tankcar volumes, the range value would be assigned to the 40,000 carload term. If the 40,000 carload figure has been determined to be a valid representation, then the actual trip estimate would be 333.
Chapter 3, Section 3.14, Transportation – Rail	3.14-14	Section 3.14.2.2, the sentence in footnote 8 should be negative; one should expect that delay at an uncontrolled crossing would be less than that at a controlled crossing, as there is no gate delay at the uncontrolled crossing.

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Chapter 3, Section 3.14, Transportation – Rail	3.14-16	Section 3.14.2.2, Rail Facilities at the Port of Vancouver, second sentence: <i>The Port provides rail access that extends from the main rail lines just west of I-5, continuing to and circulating through the Port, and extending eastward into the proposed Facility site.</i> This text should be revised to state that the Port rail extends westward into the facility.
Chapter 3, Section 3.14, Transportation – Vessel	3.14-19	First sentence at the top of the page states <i>Typical commercial vessels transiting the Columbia River have weights ranging from 11,000 to 53,100 tons and drafts ranging from 20 to 50 feet (WorleyParsons 2014).</i> This is inconsistent with vessel weights throughout the EIS, which uses deadweight tons (DWT). For clarity, the Draft EIS should use consistent terminology. Moreover, the statement that drafts of typical vessels transiting the river range to 50 feet is inaccurate, because the channel is only maintained to a design depth of 43 feet. Typical commercial vessels range from about 25,000-70,000 DWT
Chapter 3, Section 3.14, Transportation – Facility	3.14-20	Section 3.14.3.1 refers to an 18-month construction period related to the realignment of the gas line near Areas 200 and 600; this realignment would like take significantly less than 18 months to complete.
Chapter 3, Section 3.14, Transportation – Facility	3.14-22	Section 3.14.3.1 should note that Vancouver is the furthest upriver deep-water port on the Columbia River; therefore, because no deep-draft vessels transit past the proposed Facility, vessel maneuvering at the proposed berth would not affect deep-draft vessels.
Chapter 3, Section 3.14, Transportation – Rail	3.14-28	Table 3.14-15: The Total Delay All Vehicles calculation is not based on actual queuing theory, as it assumes that no individual 2:30 delay period overlaps an adjacent period. In reality, Driver X queues 5 seconds behind Driver Y: the total time Drivers X and Y occupy the crossing is less than 2:35, rather than the 5:00 that would result from the calculation method used in the table.
Chapter 3, Section 3.14, Transportation – Vehicle	3.14-32	Section 3.14.6, Significant Unavoidable Impacts, states that <i>the combined gate downtime delay at each at-grade crossing from all project trains would be between 21 and 41 minutes per vehicle each day if a single vehicle encountered all trains in the same day.</i> A single vehicle encountering all eight trains in a 24-hour period is a statistical impossibility and should not serve as the basis for determine a significant unavoidable impact.
Chapter 4, Sections 4.1-4.3, Introduction/Safety Considerations/ Accident Prevention and Response Plans	4-5	Section 4.2.2, Transportation of Crude Oil by Rail, last paragraph on page 4-5, incorrectly describes Washington State regulatory requirements with respect to notification of crude oil shipments by rail. The Draft EIS should be revised with the correct information.
Chapter 4, Sections 4.1-4.3,	4-10	Section 4.2.4.3, Transportation of Crude Oil by Vessel, states that no vessels would be allowed to

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Introduction/Safety Considerations/ Accident Prevention and Response Plans		anchor in the river. The Draft EIS should be revised to state that anchorage of loaded vessels is restricted in the river and is only allowed with stipulations (i.e., tug standby, secured to stern buoy).
Chapter 4, Section 4.4.2, Rail Transportation	4-28	Second bullet states that in up to 59% of all derailments, no railcars derail. This statement is contradictory. Is it intended to say in 59% of events? Text should be revised to correct and clarify statement.
Chapter 4, Section 4.4.3, Vessel Transportation	4-31	Table 4-7: Units should be added to the table title or header row. Also, the value for Handymax vessel calls (85%) should be corrected to say 80%.
Chapter 4, Section 4.6, Responding to an Oil Spill, Fire, or Explosion	4-40	Table 4-9, Triggers for Notifications, should include a reference to the federal notification requirement in 40 CFR Part 300 (300.125). Moreover, the language prior to the table should states that federal government reporting standards also apply to an oil spill of any size.
Chapter 4, Section 4.7, Resource-Specific Impacts	4-55	Table 4-14: Table notes 2 and 4 should refer to Appendix E, not Appendix P.
Chapter 4, Section 4.7, Resource-Specific Impacts	4-61	Section 4.7.4.1, Proposed Facility, Groundwater Quality: Groundwater quality impacts are addressed for Port wells but not Great Western Malting wells. The Draft EIS should be revised to acknowledge these additional wells.
Chapter 4, Section 4.9, Mitigation Measures	4-116	Mitigation Measures for the Applicant to Implement, second bullet, recommends secondary containment for aboveground crude oil transfer pipelines. This is inconsistent with pipeline code design in WAC 296-56-60221, which specifies single-walled pipelines. The text should be revised to be consistent with this regulation.
Chapter 4, Crude Oil Safety Considerations, Potential Release Scenarios, and Impact Analysis	Throughout	The Draft EIS should include a broader investigation of emergency response capabilities and preparedness related to the Proposed Action. While it is critical to have the perspective of the Vancouver Fire Department, a broader in-depth analysis, including an evaluation of the existing safety and response equipment and potential gaps is warranted.
Chapter 5, Cumulative Impacts	5-4	Table 5-1, although the agreement for the bulk potash handling facility has lapsed, the permits have been obtained and it is possible another similar project could move forward in the reasonably foreseeable future.
Chapter 5, Cumulative Impacts	5-5	Table 5-1, Nustar Project, states <i>The system would have the capacity to receive 2 trains per day with 16 railcars in each train (City of Vancouver 2014a) but would likely receive one unit</i>

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		<i>train of 110 railcars every 5 days (SWCAA 2014).</i> The first part of the sentence is a misinterpretation of the referenced information. The reference cited states <i>The system capacity will allow for two sets of 16 railcars (32 total) to be unloaded in a 24 hour period.</i> This is just switching and unloading of the cars delivered in the unit train mentioned, not additional trains. The text should be revised to correct this inaccuracy.
Chapter 5, Cumulative Impacts	5-5	Table 5-1 lists NGL Terminals project status as <i>permitted; not yet constructed;</i> however, only the butane storage tank component of the project has not been constructed, the remainder of the facility described here is constructed and currently operating. The Draft EIS should be revised as follows: <i>NGL's Vancouver Supply Terminal transfers liquefied petroleum gas from railcars to trucks for delivery. The facility comprises six railcar offloading stations, two 80,000-gallon propane storage tanks, one 74,000-gallon butane storage tank, and two truck loading lanes. NGL submitted an application to the SWCAA requesting approval to install a third <u>74,000-gallon</u> tank to handle butane.</i>
Chapter 5, Cumulative Impacts	5-8	To provide a more appropriate focus for the analysis of cumulative impacts related to rail and vessel transport to and from the project site, the following comments on Table 5-2 are noted. <ul style="list-style-type: none"> • Vessel traffic outside the Columbia River (i.e., within Grays Harbor and Puget Sound) is not relevant and need not be considered in Table 5-2 or Chapter 5. • Trip numbers mentioned in Table 5-2 should be presented more consistently. For example, trips should be referred to for a consistent time period (e.g., trips/year) and it should be clarified if the trips are round trips (i.e., loaded and empty). Specific comments follow.
Chapter 5, Cumulative Impacts	5-8	In addition to the preceding general comments on Table 5-2, the following projects have incorrect or inconsistent information presented related to rail and vessel trips. <ul style="list-style-type: none"> • Riverside Refinery (Port of Longview, WA): Project proposed at the Port of Longview that would include 10 trains per month and 54 vessels per year. • Woodland Marine Terminal (Woodland, WA): A marine off-loading facility proposed on the Columbia River near Woodland, WA, that would include 24 barges per year. • NuStar Terminals Conversion to Crude: Vessel activity should be identified. • Arc Logistics Portland Terminal: Rail and vessel activity should be identified. • Burnaby Refinery and Rail Facility: Per description, all rail and vessel activity would occur in Canada, so reason for including here is unclear. • Gateway Pacific Terminal: Rail activity should be identified. • Haven Energy Export Terminal: This proposal at the Port of Longview has be revised (Washington Energy Storage and Transfer) And includes approximately 29 trains per month and 54 vessels per year.

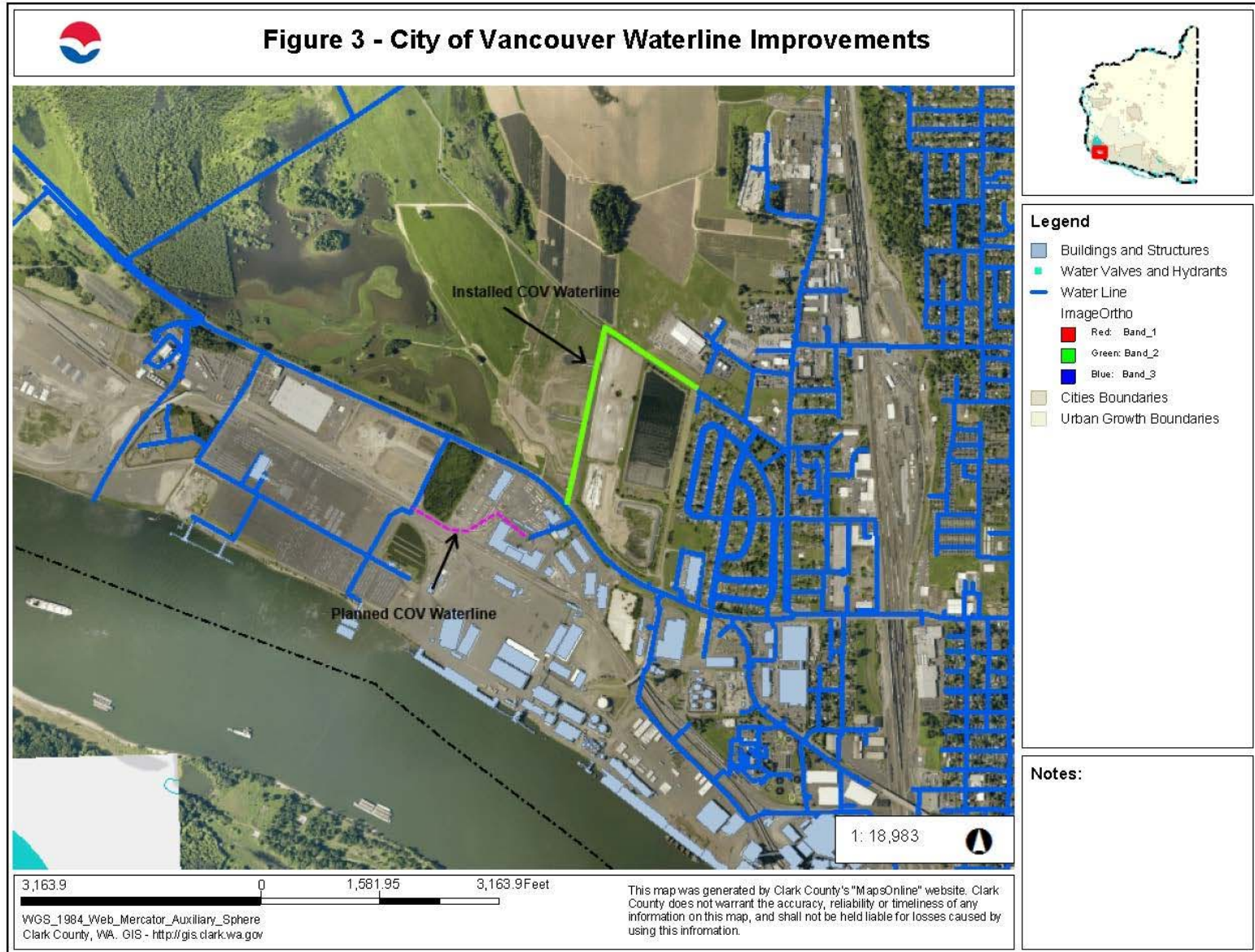
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		<ul style="list-style-type: none"> • Kalama Manufacturing & Export Marine Export Facility: Includes between 36 and 72 vessels per year. • March Point Crude Oil Unit Train Unloading Facility: The Marine and Rail Oil Transportation Study (Ecology, March 2015) cites 1 loaded train per day. • Millennium Bulk Terminals Longview Coal Export Terminal: Includes 840 vessels per year. • Phillips 66 Crude Unloading Rail Project: Description only refers to the Custer Spur. Trains would also use the BNSF main line, including in Clark County. • Port Westward Methanol Export Facility: Includes between 36 and 72 vessels per year. • US Oil Refinery and Rail Facility: The Marine and Rail Oil Transportation Study (Ecology, March 2015) cites 0.5 loaded trains per day. • Westway Terminal Expansion Project: Includes 0.6 loaded trains per day.
Chapter 5, Cumulative Impacts	5-9	Table 5-2, Global Partners Clatskanie Terminal: This project is already in operation but permitting additional capacity. The status column should be updated to reflect this.
Chapter 5, Cumulative Impacts	5-12	Table 5-2, Tacoma Manufacturing & Marine Export Facility, and Puget Sound Energy LNG Project should not be in this table. There is no conceivable impact on or connection with the Proposed Action. Neither will use Columbia River vessels. Also, pipeline, not trains, would deliver product to Tacoma Manufacturing project. Trains are not part of the Puget Sound Energy project.
Chapter 5, Cumulative Impacts	5-17	Section 5.1.3.3, Vessel Traffic on the Columbia River: <i>Handysize</i> should be corrected to say <i>Handymax-size vessels</i> .
Chapter 5, Cumulative Impacts	5-19	Section 5.1.3.3, Vessel Traffic on the Columbia River, first paragraph after bullets on page 5-19, states that the historical high number of vessels (2,086) occurred in 2000. This is inconsistent with Appendix J and the WorleyParsons and DNV GL Oil & Gas 2014 report, which state that historical peak vessel traffic in the Columbia River occurred in 1999 with 2,269 vessels, based on Ecology's VEAT data. Chapter 3 also refers to 2,269 vessels as peak historical number (pages 3.6-53, 3.14-31), but fails to reference the year; and page 3.16-10 uses yet another baseline for comparison: <i>Commercial vessel calls have declined by 31.0 percent on the Columbia River from 1993 to 2013.</i>
Chapter 5, Cumulative Impacts	5-26	<p>Section 5.5.1, first paragraph, tree information needs correcting.</p> <ul style="list-style-type: none"> • Check the reference to 273 trees on 0.07 acre; the trees are not that dense in this area. • Update to the information cited: The Port updated the tree plan for the Clark Public Utilities project; the plan was approved by the City of Vancouver in July 2014 and includes the removal of 318 trees on 3.40 acres.

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Chapter 5, Cumulative Impacts	5-30	Section 5.7.2, Aquatic Resources, Rail Transportation, first sentence, is inaccurate. The railroad ties have been upgraded on these segments with materials that do not contain creosote; therefore, creosote discharge from railroad ties is not likely. The Draft EIS should be updated to reflect this.
Chapter 5, Cumulative Impacts	5-42	Unlike Section 5.16.1, Proposed Facility, and Section 5.16.2, Rail Transportation, Section 5.16.3, Vessel Transportation, does not include a discussion of the potential impacts to emergency service responders.
Appendix B	2-3, 4-1	The report should consider both recent and planned upgrades to the City of Vancouver waterline network to increase reliability of the city's water supply to Terminal 5. The Port plans to construct a parallel 12 inch waterline in the area of the Port administrative offices west toward Area 300 for looped redundancy (Figure 3). The Port anticipates entering into an Intergovernmental Agreement with the city to govern the project specifics which includes a cost-sharing agreement for the work. The Port has included the anticipated costs for its share of the project into its budget forecast for 2017. Additionally, the Port installed a 12 inch waterline (which was dedicated to the city in October 2015) associated with its Centennial Industrial Park. This line connects the city water network between LaFrambois Road and SR-501/Lower River Road and further creates looped redundancy in the area. See Figure 3 – City of Vancouver Waterline Improvements.
Appendix D.2, Operation Spill Prevention, Control, and Countermeasure Plan	2-3	Section 2.1.3, Area 400, fourth paragraph, second to last sentence, contains a grammatical error: <i>are be expelled</i> .
Appendix D.2, Operation Spill Prevention, Control, and Countermeasure Plan	5-1	Section 5.1.1, Port needs to be notified of any visible discharges.
Appendix D.6, Operation Stormwater Pollution Prevention Plan	11	Section 3.2: Change title of Sections 3.2.1 through 3.2.6 to Industrial Activities, as they do not discuss material inventory or pollutants suggested by the title.
Appendix D.6, Operation Stormwater Pollution Prevention Plan	14	Table 2: Galvanized building materials should be listed as a source of zinc.
Appendix D.6, Operation Stormwater Pollution Prevention Plan	21	Section 4.1.17: Port needs to be notified of illicit connections and discharges to the Port's MS4.

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Appendix D.6, Operation Stormwater Pollution Prevention Plan	24	Section 4.2 contains numerous references to the industrial stormwater general permit and not an individual permit.
Appendix D.6, Operation Stormwater Pollution Prevention Plan	30	Table 12: Individual permits have limits not benchmarks, usually established after a mixing zone study of outfall area; this table references industrial stormwater general permit benchmark values.
Appendix D.6, Operation Stormwater Pollution Prevention Plan	33	Section 6.0 should reference an individual permit.
Appendix D.7, Construction Stormwater Pollution Prevention Plan	847	Figure should be revised to reflect current condition: all runoff from Parcel 1A and Farwest is diverted around the Terminal 4 pond, not into it.
Appendix D.7, Construction Stormwater Pollution Prevention Plan	851	Figure should be revised to reflect current conditions of stormwater conveyance: show connection to lift station.
Appendix D.7, Construction Stormwater Pollution Prevention Plan	902	Reference to Keyera should be changed to NGL.
Appendix D.8, Contaminated Media Management Plan	7	Section 3, Proposed Construction Activities, paragraph following bulleted list: PCS material and contamination are all gone, confirmations sampling has been conducted, and Ecology has been notified.
Appendix D.8, Contaminated Media Management Plan	8	Table 2, Area 300 (Storage), Former PCS Site (southwest corner), should be revised to reflect that PCS material and contamination are all gone, confirmations sampling has been conducted, and Ecology has been notified.
Appendix F, Air Quality Tech Report	17	Table 8: The mobile emission estimates reported here do not match those in Chapter 3, Section 3.2 (page 3.2-15) and Appendix G.
Appendix G, Air Emissions Calculations	G-35	Tab K, Table 6, first footnote incorrectly reports 1.0% marine sulfur; should be corrected to say 0.1%. Table 2 reports the correct value. Confirm that the correct value was used in the calculations.
Appendix J, Vessel Spill Risk	17	Table 15 fails to count all projected tanker movements in the cumulative tanker totals. Total should be 971.

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Appendix J, Vessel Spill Risk	19	Third paragraph: The California reduction is stated as 34%, but going from 0.013 to 0.0046 is more than a 34% reduction—it is closer to 1/3 of the original value, or a 66% reduction.
General Comment	Various	<p>As previously stated, the analysis of risks presented in the Draft EIS alternates between evaluating the relative likelihood of an incident and focusing on the worst-case consequences. The Draft EIS should use a consistent approach to evaluating and characterizing risks that should consider the balance of likelihood and consequence together both for the purposes of full disclosure and to inform the development of appropriate mitigation measures. Specific examples of inconsistencies follow.</p> <ul style="list-style-type: none"> • In Chapter 3, Section 3.8.3.1, Proposed Action, the Draft EIS states that if an unlikely incident were to occur, the impact to facility workers would be moderate to major; however, the overall cumulative risks to workers as evaluated in Chapter 5, Section 5.8, Environmental Health, from facility operations was determined to be negligible as presented on page 5-33. • In both Chapter 3, Section 3.14, Transportation, and Chapter 5, Section 5.9.3, Vessel Transportation, the Draft EIS concludes that the Proposed Action would result in minor vessel safety impacts, both individually and cumulatively. However, the Draft EIS goes on to conclude that if an incident occurred, the consequences could be minor to major. Further, in Chapter 4, Section 4.9, the Draft EIS recommends mitigation to address vessel safety impacts that are otherwise determined to be minor. • Additionally, in Chapter 5, Section 5.16, Public Services and Utilities, on page 5-42, the Draft EIS states that risks to workers and the public from Facility construction and operation are expected to result in negligible impacts. This appears to conflict with the characterization of risks in Chapters 3 and 4, which are determined to be major to moderate and in need of mitigation.
General Comment	Various	<p>In various sections of the Draft EIS, there are conflicting conclusions as to the magnitude of potential impacts related to increased spills and contamination from increased rail traffic. Based on the various information presented throughout the Draft EIS, it does not seem supported that the Proposed Action would result in moderate, long-term vegetation impacts from increased potential for spills along the rail line.</p> <ul style="list-style-type: none"> • Chapter 3, Section 3.1.3.1, Rail Transportation, states that the Proposed Action would result in minor impacts from spills to soil. • Chapter 3, Section 3.3.3.1, Rail Transportation, states that the Proposed Action would result in negligible impacts to water quality. • Chapter 3, Section 3.4.3.2, Rail Transportation, states that the Proposed Action would

Chapter/Section	Page #	Comment
		<p>result in moderate impacts on terrestrial vegetation.</p> <ul style="list-style-type: none"> • Section 5.2.2, Rail Transportation, on page 5-22 the Draft EIS states there would be cumulatively minor potential for the Proposed Action to result in soil contamination along the rail line from leaks of crude oil, diesel fuel, or lubricants. • Section 5.4.2, Rail Transportation, on page 5-25, the Draft EIS states there would be cumulatively minor potential for the Proposed Action to result in water quality impacts along the rail line. • Section 5.5.3, Rail Transportation, states that the Proposed Action would result in cumulative moderate impacts from leaks affecting terrestrial vegetation.
<p>AREMA = American Railway Engineering and Maintenance-of-Way Association ATB = articulated tug and barge unit BNSF = BNSF Railway Company DDT = dichlorodiphenyltrichloroethane DWT = deadweight tons EIS = environmental impact statement</p>	<p>NA = not applicable PBDE polybrominated diphenyl ether PCB = polychlorinated biphenyl USCG = U.S. Coast Guard VEAT = Vessel Entries And Transits WAC = Washington Administrative Code WVFA = West Vancouver Freight Rail</p>	



Attachment A
The Sawicki Group Comments



January 15, 2016

To:

Stephen Posner
State of Washington
Energy Facility Site Evaluation Council
P.O. Box 43172
Olympia, WA 98504

Subject: Draft Environmental Impact Statement Comments - Tesoro Savage Vancouver Energy Distribution Terminal Facility

The Sawicki Group, LLC (TSG) herewith submits comments for your consideration relative to the Draft Environmental Impact Statement (DEIS) for the Tesoro Savage Vancouver Energy (VE) Distribution Terminal Facility. The DEIS was released for Public Comment on November 24, 2015.

Background and Qualifications:

TSG reviewed the DEIS for the Port of Vancouver USA (POV) focusing on the specific site of the proposed Facility. The overall focus of our activities was to consider the general safety and suitability of the site for the proposed Facility. Specific areas of focus were site safety, security, and emergency response. TSG has also reviewed the numerous draft construction, operational and safety plans that were referenced in the DEIS.

I am pleased to offer several, high level, yet specific comments on the DEIS for consideration, starting on the next page.

I have worked in the energy business since 1978, holding positions from an entry-level employee, a first line Supervisor, Team Leader, Superintendent, Director of Crisis Management (BP) and Vice President / Resident Manager (Amoco New Zealand Co.). This work was conducted in 19 countries and 14 states over this time frame. In 2013 I founded The Sawicki Group LLC in Washington State.

My assignments have included exploration, production, refining, terminals and pipeline operations. I have also held corporate roles in Crisis & Continuity Management for domestic and international operations. I was fortunate to have been assigned to, and successfully served on three (3) of the Oil Spill Co-operatives on the west coast of the US, from San Diego to the Pacific Northwest.

A major part of my career has been spent developing operational / facility plans, training and leading response teams, conducting internal audits of facility Plans, and have been involved in emergency response operations both internationally and domestically. I have also held the position of the Facility Security Officer (FSO) and was responsible for implementing Maritime Transportation Security Act of 2002 (MTSA) and Transportation Worker Identification Credential (TWIC) programs. Facility Evacuation Plans and associated systems were also developed and implemented under my leadership.

For purposes of project work for POV relative to the review of the draft safety, emergency response and security plans for the VE project, TSG assembled a team of persons bringing over 200 years of experience in international and domestic projects, including a wide range of energy facility operations, rail / trucking transportation, pipeline, storage, and marine operations. Such operations can successfully operate over the long term only via effectively managed safety, health, industrial hygiene, compliance, and emergency response capabilities. The TSG Team has worked for, and / or in close collaboration with, military, regulatory agencies, industry, tribal and non-governmental organizations.

General Comments: Minor changes e.g., formatting and spelling are not discussed in this review. However general improvements are possible relative to issues where:

- recommended mitigation conflicts with port operations, safety, and/or applicant lease;
- safety of the operational staff and responders is a foundational element of oil spill response legislation, regulations and response plans, so additional measures recommended in the DEIS are building on this foundation;
- recommended mitigation is inappropriate, infeasible, or duplicative.

Based on the review of the DEIS and the construction, operational and safety plans that will be further developed and finalized, I believe that the site will be suitable for the proposed Facility from a site safety, emergency response and security perspective.

I am available to discuss any questions you may have.

Regards,

David A. Sawicki (President - The Sawicki Group LLC); dave@sawickigrp.com; cell: 360 739 3975

Detailed Comments

#	Chapter/Section	Page	DEIS Text / Comment
1	Executive Summary – 2.0 – Summary of the Vancouver Energy Distribution Project	ES-4	<p><i>“It should be noted that the Applicant (Tesoro Savage Petroleum Terminal LLC) would not source or own any crude oil, nor arrange for rail transportation of crude oil to the proposed Facility, or for marine vessel transportation of crude oil from the proposed Facility. Rather, the Applicant would receive its customers’ crude oil by rail, unload and stage that crude oil in onsite tanks, and load the crude oil onto vessels provided by those customers”.</i></p> <p>Consideration should be given to providing clarification in the DEIS as to the actual Responsible Party (RP) should there be a spill at the Facility, as well as the other transportation (rail and vessel) corridors. This will provide certainty about who is in charge of the response and would work with members of Unified Command to assure a rapid and aggressive response.</p>
2		ES-4	<p><i>“Depending on market conditions and the needs of the proposed Facility’s customers, crude oil may also come from other North American formations, such as the Niobrara in Wyoming and Colorado and the Uinta in northeast Utah (Corpron and Makarow, pers. comm., 2015).”</i></p> <p>Consideration should be given to clarifying what types of crude oils will be managed at the Facility. This will provide clarity about the training and equipment that could be needed on site.</p>
3		ES– 17: 1 st thru 6 th bullets	<p><i>“Coordinate with potentially affected first responder agencies and contribute support to implement a plan that would facilitate:</i></p> <ul style="list-style-type: none"> <i>- training for full-time and voluntary first responders with jurisdiction along the delivery rail route in Washington and in the vicinity of the Port in the appropriate methods for combating volatile crude oil fires and explosions....”</i> <p><i>“...provide comprehensive instruction and training for VFD”, including</i></p> <ul style="list-style-type: none"> <i>- facility’s fire protection system;</i> <i>- crude oil transshipment response at a marine terminal;</i> <i>- industrial rescue;</i> <i>- water response;</i> <i>- industrial fire suppression;</i> <i>- flammable liquids handling and fire suppression, and</i> <i>- foam application in a live fire event.</i> <p>Consideration should be given to developing specific understanding of the training needs identified, as the VFD may already have received similar training given the industrial nature of their area of operations.</p>
4	8.2.2 – Mitigation Measures for the Applicant to	ES – 17: 7 th bullet	<p><i>“Retain a licensed engineer to perform an independent</i></p>

#	Chapter/Section	Page	DEIS Text / Comment
	Implement		<p><i>engineering analysis and feasibility study to improve oil recovery in the case of a spill during vessel loading at the dock. The study would determine the number of days it is safe and effective to pre-boom oil transfers and would identify site-specific improvements to maximize successful prebooming”.</i></p> <p>Consideration should be given to understanding that there are already numerous studies by agencies and industry re: oil spill response recovery and associated safety elements.</p> <p>Consideration should be given to understanding that WAC 173-180 already requires the completion / approval of a Safe and Effective Threshold Study, and the outcome does not pre-determine an exact number of days of pre-booming; rather, pre-booming requirements are based on forecasted and actual environmental conditions at the specific site. The result of the study provides the on-site wind and river current conditions that define when pre-booming can be accomplished in a safe and effective manner.</p>
5	8.2.3 – Mitigation Measures Involving EFSEC, the Applicant....	ES-18: 2 nd bullet	<p><i>“The Applicant should coordinate with EFSEC and the City of Vancouver to ensure that an independent technical review of the proposed Facility’s fire protection systems is conducted at the 100 percent (final) design stage,”</i></p> <p>Consideration should be given to providing information that the Applicant has already commissioned a technical review of the fire protection system (by a licensed engineer – e.g. Oil Handling Manual - Appendix A – Facility and Dock Plans -prepared by Poole Fire Engineering – Professional Engineer); having duplicative technical reviews by similarly licensed engineers is neither effective nor efficient, and would not add to the overall safety or suitability of the proposed Facility at this site.</p>
6	Chapter 2 – Proposed Action and Alternatives – 2.4.3	2-61	<p><i>“The Applicant has proposed to conduct a Facility Security Assessment and prepare an operations Facility Security Plan pursuant to the Maritime Transportation Security Act of 2002, 33 CFR § 105, that would be approved by the Port and US Coast Guard (USCG). The proposed Facility Security Plan would be submitted to USCG’s Captain of the Port 60 days prior to beginning operations at the marine terminal”.</i></p> <p>Consideration should be given to clarifying the holder / responsible entity for the Facility Security Plan (FSP), to identify whether it will be the Port of Vancouver (POV) or Vancouver Energy (VE), in order to provide consistency in the final security plans.</p> <p>Note: this will likely occur as part of the Applicant’s ongoing activities to prepare final operating and response plans that will be needed prior to facility start up, should the Facility be approved by EFSEC.</p>

#	Chapter/Section	Page	DEIS Text / Comment
7	4.3.8.2 – Facility Response Plan	4-18	<p><i>“Before beginning construction and operation, the proposed Facility would have the following approved spill and fire prevention and response plans in place:</i></p> <ul style="list-style-type: none"> • <i>SPCC Plans</i> • <i>Facility Response Plan (FRP)</i> • <i>Oil Spill Contingency Plan (OSCP)</i> • <i>Fire Prevention and Response Plans (FPRPs)”</i>. <p>Consideration should be given to understanding the differences / similarities between the FRP, OSCP and the FPRP, and when implementation of a specific plan is appropriate, so as to avoid duplication and potential resultant confusion, if there was an incident where multiple response plans are in place.</p> <p>Consideration should be given to clarifying whether all the referenced plans are required so as to ensure an effective process for plan updating when required by facility changes or regulated mandated updates.</p>
8	4.3.8.2 – Facility Response Plan	4-19	<p><i>“An FRP must demonstrate the preparedness of the proposed Facility to respond to small discharges and a “worst-case” crude oil spill scenario”.</i></p> <p><i>“A draft FRP is not currently available for review”.</i></p> <p>Note: a draft OSCP is currently available for review by EFSEC and is referenced in the DEIS (Appendix D – D.4). The draft OSCP in the DEIS contains the information related to preparedness of the proposed Facility to respond to small discharges and a worst case discharge.</p>
9	4.7 – Resource Specific Impacts: / 4.7.4.1 / Wetlands, Floodplains and Other Aquatic Environments	4-61	<p><i>“However, a large spill, particularly a spill from the rail unloading transfer pipeline, could spread into these wetlands”.</i></p> <p>Consideration should be given to reviewing the final design plan for the Facility to determine the surface drainage pathways and potential impacts on adjacent wetland areas and potential mitigation measures, or response equipment additions that may be considered.</p>
10	4.7.4.1 – Crude Oil Fire or Explosion	4-62; paragraph 4	<p><i>“However, since water would not be used to control a crude oil fire, there would be negligible impacts to water supply from firefighting response efforts”.</i></p> <p>Consideration should be given to clarifying in the DEIS that water is used as the delivery agent for fire-fighting foam.</p>
END			

Schwabe Williamson & Wyatt Comments

ALICIA L. LOWE
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January 20, 2016

Stephen Posner
State of Washington
Energy Facility Site Evaluation Council
P.O. Box 43172
Olympia, WA 98504

Re: Comments of the Port of Vancouver USA on DEIS
Tesoro Savage Vancouver Energy Project, Application No. 2013-01
Our File No.: 067855-189993

Dear Mr. Posner:

On behalf of the Port of Vancouver USA (“Port”), we provide these comments on EFSEC’s November 24, 2015 Draft Environmental Impact Statement (“DEIS”) for the Tesoro Savage Vancouver Energy Project (“Project”) as part of the Port’s comment package.

Overview

SEPA sets forth a state policy of protection, restoration and enhancement of the environment. RCW 43.21C.020. Procedurally, this policy of environmental protection is implemented through the preparation and circulation of an environmental impact statement disclosing the environmental impacts of the proposed action. RCW 43.21C.030(2)(c); *Polygon Corp. v. Seattle*, 90 Wn.2d 59, 63, 578 P.2d 1309 (1978).

“[A]n EIS must provide sufficient information to allow officials to make a reasoned choice among alternatives.” *Kiewit Constr. Group v. Clark County*, 83 Wn. App. 133, 140, 920 P.2d 1207 (1996), citing *Solid Waste Alternative Proponents (SWAP) v. Okanogan County*, 66 Wn. App. 439, 442, 832 P.2d 503, review denied, 120 Wn.2d 1012, 844 P.2d 435 (1992).

The adequacy of an EIS is a question of law. *Klickitat Cy. Citizens Against Imported Waste v. Klickitat Cy.*, 122 Wn.2d 619, 632, 860 P.2d 390 (1993). EIS adequacy involves the legal sufficiency of the data in the EIS. *Klickitat Cy.*, at 633. EIS adequacy is assessed under the “rule of reason,” which requires a “‘reasonably thorough discussion of the significant aspects of the probable environmental consequences’ of the agency’s decision.” *Klickitat Cy.*, at 633 (quoting *Cheney v. Mountlake Terrace*, 87 Wn.2d 338, 344-45, 552 P.2d 184 (1976)).

In assessing the adequacy of the DEIS for the Project, the key aspect of the standard is *probable* environmental consequences. EFSEC's DEIS includes in its analysis and discussion environmental consequences that the DEIS concludes are not the probable consequences of the Project but, rather, are remote and speculative. In doing so, the DEIS fails to accomplish its primary purpose of providing EFSEC with a discussion of the probable environmental consequences of its decision. It also fails to provide to the interested public accurate information about probable environmental impacts, and instead devotes a significant portion of the DEIS to discussing impacts that are remote and speculative, and not reasonably likely to occur.

In analyzing impacts that are neither legally significant⁹ nor probable, the DEIS misdirects the attention of the decisionmaker from the probable environmental impacts associated with this Project, to impacts that are extremely unlikely ever to occur. In that way, the DEIS fails to further the informational purposes of SEPA. That failure is compounded by the imposition of mitigation measures for those remote and speculative impacts, as well as for impacts that are not attributable to the Project, that do not meet SEPA requirements. WAC 197-11-660(1)(b). Moreover, the DEIS impermissibly requires mitigation measures that are neither reasonable nor capable of being accomplished by the applicant, contrary to SEPA requirements. RCW 43.21C.060 and WAC 197-11-660(1)(c).

In addition, certain of the mitigation measures identified in the DEIS are objectionable because their enforcement would exceed the scope of EFSEC's statutory authority. Finally, the Port expects, and EFSEC should ensure, that the DEIS will comply with basic SEPA requirements. It is fundamental that the DEIS be accurate, and supported by substantial evidence. *See Weyerhaeuser v. Pierce County*, 124 Wn.2d 26, 873 P.2d 498 (1994).

Below is a discussion of each of the Port's six comments regarding compliance of the DEIS with SEPA. In the table that is appended to this letter, the specific sections of the DEIS to which each comment applies are identified. Some of the same issues raised by the Port in other parts of its comment package may well apply to one of the six comments detailed below. The Port's emphasis on these six issues does not eliminate the basic requirement that the DEIS needs to be reasonable, not arbitrary or capricious, and supported by substantial evidence. In many cases, an incomplete or unsupported analysis or the factual predicate for a conclusion in the DEIS renders it not just factually inaccurate, but legally insufficient.

Discussion

1. The Scope of the SEPA Impacts Analysis Violates the "Rule of Reason" by Evaluating Impacts that are Not Reasonably Likely to Occur.

⁹ "Significant" under SEPA means "a *reasonable likelihood* of more than a moderate adverse impact on environmental quality." WAC 197-11-794(1) (emphasis added).

The scope of environmental review required by SEPA is defined by causation, and in implementing SEPA the Department of Ecology has endorsed the proximate cause test: “Although Washington courts have not ruled on this issue as it relates to SEPA, [Ecology has] used the [proximate cause] standard in the state because it presents a reasonable approach to defining the scope of impacts that need to be considered.” Ecology, GUIDANCE FOR ECOLOGY INCLUDING GREENHOUSE GAS EMISSIONS IN SEPA REVIEWS, at 3 (June 3, 2011), *citing U.S. Dept. of Transportation v. Public Citizen*, 541 U.S. 752, 754 (2004).

SEPA requires meaningful consideration of significant impacts. “Significant” means “a reasonable likelihood of more than a moderate adverse impact on environmental quality.” WAC 197-11-794(1). “Impacts” are “the effects or consequences of actions.” WAC 197-11-752. Thus, in order to be significant, the effects or consequences of the Project must be **both** reasonably likely to occur, **and** cause a more than moderately adverse effect on environmental quality. “An environmental impact statement is required to analyze **only** those **probable** adverse environmental impacts which are **significant**.” RCW 43.21C.031 (emphasis added). EFSEC’s substantive SEPA authority is similarly qualified: in order to deny a project, EFSEC must find that it is **likely** that the Project will result in **significant** impacts that cannot be mitigated by reasonable mitigation measures. WAC 197-11-660(f); adopted by reference by WAC 463-47-020.

SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a), (c). If an impact “merely ha[s] a possibility of occurring,” SEPA treats it as “remote or speculative” and outside the scope of impacts to be analyzed. *See Cheney v. City of Mountlake Terrace*, 87 Wn.2d 338, 346, 552 P.2d 184 (1976) (“The mandate of SEPA does not require that every remote and speculative consequence of an impact be included in the EIS.”); *Cascade Bicycle Club v. Puget Sound Regional Council*, 175 Wn. App. 494, 509, 306 P.3d 1031 (2013) (“Impacts or alternatives which have insufficient causal relationship, likelihood, or reliability to influence decision-makers are ‘remote’ or ‘speculative’ and may be excluded from an EIS.”).

This is consistent with decisions construing the requirements of NEPA. *See City of Shoreacres v. Waterworth*, 332 F. Supp. 2d 992, 1007-1008 (S.D. Tex. 2004) (“While NEPA requires analysis of ‘reasonably foreseeable’ impacts, 40 C.F.R. § 1508.7, it does not mandate consideration of speculative risks or impacts.”). Washington courts frequently rely on federal court interpretations of NEPA when interpreting SEPA. *See, e.g., Kucera v. Dep’t. Transportation*, 140 Wn.2d 200, 220 fn 10, 995 P.2d 63 (2000); *ASARCO Inc. v. Air Quality Coalition*, 92 Wn.2d 685, 709, 601 P.2d 501 (1979) (noting that “NEPA and SEPA are substantially similar in intent and effect”).

Evaluating remote or speculative impacts does not present decision-makers with a reasonably thorough discussion of the significant aspects of the probable environmental consequences of the agency’s decision as required under SEPA, because remote or speculative impacts are not “probable.”

2. The Treatment of “Moderate” Impacts as “Significant Unavoidable Impacts” is Inconsistent With SEPA.

SEPA requires an EIS to include a summary of “significant adverse impacts that cannot or will not be mitigated.” WAC 197-11-440(6)(c)(v); *see also*, RCW 43.21C.030(2) (“Discussions of . . . significant environmental impacts which cannot be mitigated. . .”). In the DEIS, EFSEC uses the phrase “significant unavoidable impacts” to identify the impacts that cannot be mitigated. DEIS, Chapter 3, §3.0.3 at page 3.0-3, and Figure 3.0-1. Contrary to the SEPA rules, however, EFSEC defines “significant unavoidable impacts” to include both “moderate” and “major” impacts.

As we previously noted, “significant” means “a reasonable likelihood of *more than a moderate adverse impact* on environmental quality.” WAC 197-11-794(1) (emphasis added). A “significant impact” is established whenever *more than a moderate effect* on the quality of the environment is a reasonable probability. *Norway Hill Preservation & Protection Ass’n v. King County Council*, 87 Wn.2d 267, 278, 552 P.2d 674 (1976) (emphases added).

The drafters of SEPA and the SEPA rules included the modifier “more than” in describing a significant impact as “more than a moderate effect.” The inclusion of “moderate” impacts within the scope of “significant unavoidable impacts” identified in the DEIS ignores the qualifier “more than,” and violates the well-settled principle of statutory construction that each word of a statute is to be accorded meaning. *State v. Roggenkamp*, 153 Wn.2d 614, 624, 106 P.3d 196 (2005). “[W]e may not delete language from an unambiguous statute: Statutes must be interpreted and construed so that all the language used is given effect, with no portion rendered meaningless or superfluous.” *State v. J.P.*, 149 Wn.2d 444, 450, 69 P.3d 318 (2003). Nor may words be added to a statute that the legislature has chosen not to include. *State v. Delgado*, 148 Wn.2d 723, 727, 63 P.3d 792 (2003).

The DEIS’s treatment of “moderate” impacts as “significant unavoidable impacts” is inconsistent with SEPA. It overstates the impacts that are actually significant and unavoidable, and any conditioning or denial of the Project based on such overstated impacts would be clear error.

3. The DEIS Exceeds the Scope of Permissible Mitigation under SEPA.

Under the SEPA rules, mitigation measures “shall be related to specific, adverse environmental impacts clearly identified in an environmental document on the proposal”, “shall be reasonable and capable of being accomplished”, and “may be imposed upon an applicant only to the extent attributable to the identified adverse impacts of its proposal.” WAC 197-11-660. In addition, “before requiring mitigation measures, an agency must consider whether local, state, or federal requirements and enforcement would mitigate an identified significant impact.” *Id.*

Additionally, the DEIS requires mitigation where it has concluded there are no adverse environmental impacts, where the impacts to be mitigated that are not attributable to the adverse impacts of the project, and where the proposed mitigation is duplicative of other local, state, or

federal regulations. The DEIS concludes, in a number of places described in the appended table, that the project would result in negligible impacts, or negligible to minor impacts, on identified resources. For example, at page 3.1-31, §3.1.6, Significant and Unavoidable Impacts, the DEIS states:

The construction, normal operation and maintenance, and decommissioning of the proposed Facility would not result in any significant unavoidable adverse impacts on earth resources. As the Port has been an industrial site for over a century, additional use of the Port facilities would have negligible additional impacts. Additionally, impacts to the rail and vessel corridors would likely be negligible to minor for normal operations, and no significant unavoidable adverse impacts would occur along the rail or vessel corridors.

Despite those findings, the DEIS requires measures be implemented to mitigate these negligible or negligible to minor impacts. Such mitigation is impermissible under SEPA.

4. Federal Law Preempts State or Local Limitations on Rail and Vessel Traffic.

Preemption of state law has its basis in the Supremacy Clause of the United States Constitution, Article VI, clause 2: “[T]he Laws of the United States . . . shall be the supreme Law of the Land . . . anything in the Constitution or Laws of any State to the Contrary notwithstanding.” Where a state law or regulation “conflicts with or frustrates federal law, the former must give way.” *CSX Transportation, Inc. v. Easterwood*, 507 U.S. 658, 663, 1134 S.Ct. 1732, 123 L.Ed.2d 387 (1993). “Congress and the courts long have recognized a need to regulate railroad operations at the federal level.” *City of Auburn v. Surface Transportation Board*, 154 F.3d 1025, 1029 (9th Cir. 1998).

The Interstate Commerce Commission Termination Act (“ICCTA”) vests in the Surface Transportation Board (“STB”) “exclusive jurisdiction” over transportation by rail carriers and the construction and operation of rail facilities. 49 U.S.C. § 10501(b). This express preemption prevents state or local agencies from imposing conditions to mitigate impacts arising from the rail system. *City of Auburn*, 154 F.3d at 1031 (STB’s exclusive jurisdiction over railroad operations precludes Ecology’s use of SEPA process to modify railroad infrastructure or operations).

Similarly, federal courts consistently have upheld and reinforced the preemptive effect of federal regulations for maritime vessels. *See U.S. v. Locke*, 529 U.S. 89 (2000); *Ray v. Atlantic Richfield Co.*, 435 U.S. 151 (1978); *Kelly v. Washington ex rel Foss Co.*, 302 U.S. 1 (1937); *Moran v. New Orleans*, 112 U.S. 69 (1884); *Sinnot v. Daveport*, 63 U.S. (22 How.) 227 (1859); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824). As the United States Supreme Court explained in *Locke*, the “authority of Congress to regulate interstate navigation, without embarrassment from intervention of the separate States and resulting difficulties with foreign nations, was cited in the Federalist Papers as one of the reasons for adopting the Constitution.” 529 U.S. at 99.

The Commerce Clause prohibits state laws and regulations that interfere with or discriminate against interstate commerce, and thus efforts by EFSEC to impose conditions on Columbia River vessel traffic as mitigation for impacts identified in the DEIS are preempted.

In that same manner, federal law regulates railroads engaged in transportation-related activities, and state and local regulations that have the effect of managing or governing train operations are preempted. For that reason, mitigation measures in the DEIS that would regulate train speed, or would limit the duration that crossings are blocked, would impact operational requirements and are preempted.

5. The Non-Redelegation Doctrine Bars EFSEC’s Deferral to Other Agencies and Private Parties the Power to Develop Mitigation for Operational Conditions in the Site Certification Agreement.

In § 4.9 of the DEIS, EFSEC asserts that it has “identified . . . additional mitigation measures for consideration by the state legislature, and other federal, state, and local agencies and private organizations to address the risk of and impacts from a crude oil spill, fire, and/or explosion.” This assertion goes beyond the consideration whether other local, state, or federal requirements and enforcement would mitigate significant adverse environmental impacts identified in the DEIS provided for in WAC 463-47-110(2)(a)(ii). The “other local, state, or federal requirements” in the rule are existing requirements, and EFSEC is charged with determining whether or not their enforcement would mitigate the significant impacts EFSEC has identified.

EFSEC was delegated certain enumerated powers by the legislature, including (among other things) the power “[t]o develop and apply environmental and ecological guidelines in relation to the type, design, location, construction, and operational conditions of certification of energy facilities. . .” RCW 80.50.040(2). Administrative law principles prohibit an agency with powers delegated by the legislature from further delegating those powers to another. *State ex rel. W. v. Seattle*, 50 Wn.2d 94, 97; 309 P.2d 751 (1957) (“But the power of an administrative agency to promulgate rules is not unlimited. Under the guise of the rulemaking power, it may not legislate and the rules must be within the framework of the policy laid down in the statute or ordinance. The charter provision vesting the removal power in the head of the department invalidates any rule attempting to delegate that power to some other officer or employee and to that extent, the rule is *pro tanto* void.”).

In deferring to other agencies and private parties the power to develop mitigation for operational conditions in the Site Certification Agreement, EFSEC has impermissibly re-delegated the powers the legislature endowed it with upon its formation.

6. The Information Contained in the DEIS Must be Accurate.

It cannot be debated that the information provided to a decisionmaker in an EIS must be accurate. “[T]here is no question but that the accuracy and truthfulness of the information in the EIS is of paramount importance to the ultimate approval or disapproval of the . . . project. . .”

Weyerhaeuser v. Pierce County, 124 Wn.2d at 33-34; WAC 197-11-560(1)(d) (factual corrections identified specifically in the SEPA rules as a possible agency response to comments on a draft EIS).

In the State Environmental Policy Handbook (“Handbook”),¹⁰ the Department of Ecology states that “[a]ll agencies sharing lead agency status are responsible for the completeness and accuracy of the environmental document(s).” Handbook, at 25; *see also*, Handbook at 58 (“Lead agency review of . . . comments [of agencies, affected tribes, and the public] offers the opportunity to improve the completeness, accuracy, and objectivity of the environmental analysis of a proposal.”); Handbook, at 69 (“Comments can provide the lead agency with missing information on the proposal, identify inaccurate information, and/or provide input on possible mitigation or alternatives.”).

The NEPA regulations and federal cases construing them are in accord. *See* 40 CFR §1500.1 (“Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.”); *WildEarth Guardians v. Mont. Snowmobile Ass’n*, 790 F.3d 920 (9th Cir. Mont. 2015) (“[T]he data the Forest Service provides to the public to substantiate its analysis and conclusions must also be accurate.”); *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) (“To take the required ‘hard look’ at a proposed project’s effects, an agency may not rely on incorrect assumptions or data in an EIS.”).

There are a number of places in the DEIS, identified in detail in the appended table, where there are both factual and analytical inaccuracies that should be corrected, so as to give the decisionmaker the best information about impacts and mitigation. For example, the DEIS speculates that the Proposed Project would lead to increases in shoreline erosion that would primarily occur in the lower 33 miles of the Columbia River where beaches are “close” to the channel. Page 3.3-53, §3.3.3.3. Vessel Corridor; *see also* page 5-23, §5.2.3, Vessel Transportation. Much of the channel is not “close” to the beaches in the lower 33 miles, and potentially affected sites along the Columbia River are not located “close” to the channel. As noted in the comments of the Port’s Consultant, ICF, within the lower 35 miles of the Columbia River, the navigation channel ranges from 0.1 to 5.4 miles from the shoreline.

¹⁰ Washington State Department of Ecology Publication #98-114 (September, 1998; updated 2003).

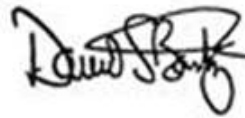
Conclusion

The Port appreciates this opportunity to provide comments on the DEIS. We are hopeful that EFSEC will carefully consider the Port's comments, and revise the DEIS accordingly so that the Final EIS, when issued, will be "concise, clear, and to the point, and . . . supported by evidence that the necessary environmental analyses have been made." WAC 197-11-030(c).

Very truly yours,



Alicia L. Lowe



David F. Bartz, Jr.



Connie Sue Martin

ALO:bjb

APPENDIX to SWW Comment Letter

No.	Section/Page	DEIS Text	Comment
1.	Page 3.1-31, §3.1.6, Significant Unavoidable Adverse Impacts	“The construction, normal operation and maintenance, and decommissioning of the proposed Facility would not result in any significant unavoidable adverse impacts on earth resources. As the Port has been an industrial site for over a century, additional use of the Port facilities would have negligible additional impacts. Additionally, impacts to the rail and vessel corridors would likely be negligible to minor for normal operations, and no significant unavoidable adverse impacts would occur along the rail or vessel corridors.”	The DEIS requires mitigation measures despite the fact that it has concluded there are no adverse environmental impacts, and where the impacts to be mitigated are not attributable to the adverse impacts of the project. This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
2.	Page 3.2-33, §3.2.7 Significant Unavoidable Adverse Impacts	“Emissions of criteria pollutants from stationary sources and onsite and near-site mobile sources during operation and maintenance, while below the levels allowed by ambient air quality standards, could result in moderate air quality impacts to and near the proposed Facility site, including at the JWC.”	Significant unavoidable adverse impact determination for only moderate impacts. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
3.	Page 3.2-33, §3.2.7 Significant Unavoidable Adverse Impacts	“Emissions of DPM from stationary sources and onsite and near-site mobile sources during operation and maintenance could result in moderate air quality impacts at nearby commercial and industrial receptors, including	Significant unavoidable adverse impact determination for only moderate impacts. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts”



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		staff at the JWC and other worksites in close proximity to the proposed Facility.”	under SEPA]
4.	Page 3.3-53, §3.3.3.3, Vessel Corridor	“Wakes and wave action generated by deep-draft vessels associated with the proposed Facility could impact water quality of the Lower Columbia River by direct turbulence, erosion, sedimentation, and sediment resuspension.”	There are no data, cited studies, or analyses in the DEIS supporting the conclusion that waves associated with vessel traffic have any water quality impacts different from the natural conditions in the river. Requiring mitigation measures where the impacts to be mitigated are not attributable to the adverse impacts of the project is impermissible under SEPA. WAC 197-11-660(1)(d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
5.	Page 3.3-53, §3.3.3.3. Vessel Corridor	“The potential for negative effects to wetlands would be limited to the lower approximately 33 miles of the river where shorelines with beaches close to the channel are not shielded from wave action and have beach slopes less than 10 percent.”	Much of the channel is not “close” to the beaches in the lower 33 miles, and potentially affected sites along the Columbia River are not located “close” to the channel. The information provided to a decision-maker in an EIS must be accurate. “[T]here is no question but that the accuracy and truthfulness of the information in the EIS is of paramount importance to the ultimate approval or disapproval of the . . . project. . .” <i>Weyerhaeuser v. Pierce County</i> , 124 Wn.2d at 33-34; WAC 197-11-560(1)(d) (factual corrections identified specifically in the SEPA rules as a possible agency response

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			to comments on a draft EIS). [Comment 6, Accuracy]
6.	Page 3.3-55, § 3.3.6 Significant Unavoidable Adverse Impacts	“The increase in deep-draft vessel traffic and associated increase in vessel wakes could have a minor to moderate impact to wetland vegetation, primarily in the Columbia River Estuary.”	Identified deep-draft vessel traffic and vessel wakes as significant unavoidable adverse impacts even though the impacts are minor to moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
7.	Page 3.3-55, § 3.3.6 Significant Unavoidable Adverse Impacts	“While the incremental impact from vessels associated with the proposed Facility would likely be minor, vessel induced resuspension of existing (legacy) contaminated bed sediments in the Lower Columbia River could cause moderate local effects that could violate water quality standards and beneficial uses; the location, timing, or duration of impact cannot be readily predicted.”	Identified vessel resuspension of existing (legacy) contaminated bed sediments as a significant unavoidable adverse impact even though the impacts are moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
8.	Page 3.4-17, §3.4.6 Significant Unavoidable Adverse Impacts	“The incremental increase in rail traffic from the proposed Facility could contribute to moderate, long-term impacts to vegetation from incremental increases in contamination from small spills and in abundance and distribution of noxious and invasive weeds.”	Identified impacts to vegetation from increase in train traffic as a significant unavoidable adverse impact even though the impact is moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
9.	Page 3.4-17, §3.4.6 Significant	“The incremental increase in deep-draft vessel traffic could contribute to moderate, long-term	Identified impacts to shoreline vegetation from incremental increase in deep-draft

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	Unavoidable Adverse Impacts	impacts to shoreline vegetation from wake-induced shoreline erosion and potential spread of invasive wetland and riparian plants.”	vessel traffic as significant unavoidable adverse impact even though the impact is moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
10.	Page 3.5-35, §3.5.6 Significant Unavoidable Adverse Impacts	“The incremental increase in Project-related rail traffic would likely contribute a minor to moderate increase in wildlife collision mortality, including to predators and scavengers that may be attracted to the rail corridor by the increased availability of carcasses from animals hit by trains.”	Identified wildlife collision mortality as a significant unavoidable adverse impact, even though the impacts are minor to moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
11.	Page 3.5-35, §3.5.6 Significant Unavoidable Adverse Impacts	“The incremental increases in Project-related rail traffic could contribute to minor to moderate long-term impacts to terrestrial wildlife from incremental increases in barrier effects and minor increases of small quantities of contaminants.”	Identified impacts to terrestrial wildlife from barrier effects and small quantities of contaminants as significant unavoidable adverse impacts, even though the impacts are minor to moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
12.	Page 3.6-57, §3.6.6 Significant Unavoidable Adverse Impacts	“Overall, noise impacts to aquatic species (fish and pinnipeds) from noise generated by pile driving would be temporary but moderate.”	Identified noise impacts to aquatic species as significant unavoidable adverse impacts even though impacts are moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts”]

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			under SEPA]
13.	Page 3.6-57, §3.6.6 Significant Unavoidable Adverse Impacts	“Impacts to water quality from increased turbidity and hazardous material contamination during construction are expected to be minor to moderate.”	Identified impacts to water quality as significant unavoidable adverse impacts even though impacts are minor to moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
14.	Page 3.9-24, §3.9.6 Significant Unavoidable Adverse Impacts	“Noise impacts at the JWC from construction and decommissioning of proposed Facility elements are considered moderate but would be typical of a heavily industrialized area (as the JWC is located within an industrialized area classification).”	Identified noise impacts at JWC as significant unavoidable adverse impacts even though the impacts are moderate. [Comment 2, “Moderate” Impacts not “Significant Unavoidable Adverse Impacts” under SEPA]
15.	Page 3.13-18, §3.13.3.3 Vessel Transportation	“The addition of one vessel (two trips) per day through the vessel corridor may result in minor impacts including a temporary halt to fishing by tribal members in the vicinity when vessels are moving through the area, which could lead to a minor reduction in a day’s catch volume.”	The DEIS requires mitigation measures despite the fact that the Project “may result in minor impacts.” This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
16.	Page 3.13-18, §3.13.3.3 Vessel Transportation	“Vessel traffic could also reduce access to nearshore marine fisheries because tribal fishers may not be able to cross the bar at the time of a vessel moving into or out of the navigation channel, resulting in minor impacts.”	The DEIS requires mitigation measures despite the fact that the Project may result in minor impacts. This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
17.	Page 3.13-18, §3.13.3.3 Vessel Transportation	“The increase in one vessel (two trips) trip per day could impact tribal resources if it were to	The DEIS requires mitigation measures despite the fact that the Project may result

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		degrade water quality through leaks from routine operations and maintenance; however, this impact would be minor (see Section 3.3).”	in minor impacts. This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
18.	Page 3.13-18, §3.13.3.3 Vessel Transportation	“Access impacts to tribal resources, including aquatic habitat, vegetation, and marine and terrestrial wildlife, are expected to be minor (see Sections 3.4 through 3.6).”	The DEIS requires mitigation measures despite the fact that the Project may result in minor impacts. This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
19.	Page 3.13-18, §3.13.3.3 Vessel Transportation	“The area outside of the 3-nmi limit beyond the Columbia River mouth and into the Pacific Ocean contains few U&A resources including fish and sea mammal species. These offshore areas are currently subjected to vessel traffic that is dispersed over a large area, and vessel traffic associated with the proposed Facility would likely be indistinguishable from existing vessel traffic in this area, resulting in minor impacts to reserved treaty rights.”	The DEIS requires mitigation measures despite the fact that the Project may result in minor impacts. This is impermissible under SEPA. WAC 197-11-660(1)(b) and (d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
20.	Page 3.14-32, §3.14.5 Mitigation Measures	<p>“EFSEC has not identified mitigation measures specifically for the Applicant, but has identified the following studies as additional mitigation measures to reduce impacts to transportation that would require coordination with others:</p> <ul style="list-style-type: none"> • BNSF, UTC, WSDOT, and affected local jurisdictions should coordinate to identify the need for, and feasibility of, constructing new grade-separated railroad crossings in areas 	(1) The Interstate Commerce Commission Termination Act (“ICCTA”) vests in the Surface Transportation Board (“STB”) “exclusive jurisdiction” over transportation by rail carriers and the construction and operation of rail facilities. 49 U.S.C. § 10501(b). This express preemption prevents state or local agencies from imposing conditions to mitigate impacts arising from

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		<p>along the proposed rail routes where excessive gate downtimes and vehicular delays are anticipated.</p> <ul style="list-style-type: none"> • UTC, WSDOT, and affected local jurisdictions should coordinate to evaluate railroad crossing locations that are considered by WSDOT to be operationally sensitive to increases in train traffic, to identify appropriate mitigation measures, possibly including upgrading passive crossings to active safety crossings, rerouting high-traffic routes to use existing grade-separated crossings, adding U-turns to allow drivers to easily access alternate routes, and/or installing grade-separated crossings (bridge or underpass). <p>Both of these studies should be modeled after and coordinated with the study to be undertaken by the Washington State Legislature’s Joint Transportation Committee (JTC) to investigate road-rail conflicts in Washington cities.”</p>	<p>the rail system. <i>City of Auburn v. Surface Transportation Board</i>, 154 F.3d 1025, 1031 (9th Cir. 1998). [Comment 4, Federal Preemption]</p> <p>(2) In deferring to other agencies the power to develop mitigation for operational conditions in the Site Certification Agreement, EFSEC has impermissibly re-delegated the powers the legislature endowed it with under RCW 80.50.040(2). <i>State ex rel. W. v. Seattle</i>, 50 Wn.2d 94, 97; 309 P.2d 751 (1957). [Comment 5, Non-Redelegation Doctrine]</p>
21.	Page 3.14-32, §3.14.6, Significant Unavoidable Adverse Impacts	“When accounting for all of the proposed trains, the combined gate downtime delay at each at-grade crossing would be between 21 and 41 minutes per vehicle each day if a single	The likelihood that a single vehicle would encounter all trains in the same day is extremely unlikely. SEPA does not require analysis of impacts that are “merely

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		vehicle encountered all trains in the same day.”	speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i> , 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i> , 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). [Comment 1, Exceeds Scope of SEPA Impacts Analysis]
22.	Page 3.15-15, §3.15.6, Significant Unavoidable Adverse Impacts	“Delays to emergency responders (including fire protection, emergency medical service, and police protection) could occur along the rail corridor from trains associated with the proposed Facility in areas with at-grade crossings when a train is passing. . . The additional four unit trains per day associated with the proposed Facility would increase gate downtime by between 15 and 26 percent along the Columbia River Alignment. While emergency service providers currently have the potential to be delayed by existing train traffic, an increase in delays could constitute a major impact to public services.”	(1) The likelihood that an emergency responder would encounter all trains during the same emergency call is extremely unlikely. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i> , 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i> , 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). [Comment 1, Exceeds Scope of SEPA Impacts Analysis] (2) Existing train traffic already impacts public services, but the DEIS fails to quantify

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			the existing impacts versus the adverse impacts of the Project. Requiring mitigation measures where the impacts to be mitigated are not attributable to the adverse impacts of the project is impermissible under SEPA. WAC 197-11-660(1)(d). [Comment 3, Scope of Permissible Mitigation Under SEPA]
23.	Page 3.16-15, §3.16.3 Environmental Justice Page 3.16-17, §3.16.5 Mitigation Measures and §3.16.6 Significant Unavoidable Adverse Impacts	“Additional rail traffic generated by the proposed Project is not expected to increase the rate of potential accidents and fatalities for pedestrian trespass or motorists (Section 3.8.3.2), would cause a less than significant increase in air emissions due to rail delays and minor air quality impacts from train operations (Section 3.2.3.2), would have minor noise impacts (Section 3.9.3.2), and would not represent a disproportionate effect upon environmental justice communities in the proposed Project vicinity. No disproportionate effects on environmental justice communities along the rail corridor would occur from these minor impacts.”	The DEIS concludes that there would be only minor impacts from increased rail traffic on environmental justice populations, but nonetheless identifies mitigation measures. Requiring mitigation measures where the impacts are not significant is impermissible under SEPA. WAC 197-11-440(6)(a) and WAC 197-11-660(1)(b). [Comment 3, Scope of Permissible Mitigation Under SEPA]
24.	Pages 4-26 and 4-27, §4.4.1 Proposed Facility	See Table 4-5. Estimated Frequency of Transfer-Related Spills Spill Volume	The discussion of transfer-related spills in excess of 10 barrels or more of spill volume includes events that the DEIS concludes

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			<p>are extremely unlikely to occur. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i>, 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i>, 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). [Comment 1, Exceeds Scope of SEPA Impacts Analysis]</p>
25.	Pages 4-28 and 4-29, §4.4.2 Rail Transportation	<p>“This analysis estimated the following conservatively high frequencies of derailments and potential spill sizes from trains transiting to the proposed Facility:</p> <p>...</p> <ul style="list-style-type: none"> • The estimated average number of years that would elapse between a derailment of three loaded cars that results in a crude oil spill volume of 2,200 bbl or less is 121 years; and • The estimated average number of years that would elapse between a derailment of 28 loaded cars that results in a crude oil spill volume of 20,000 bbl (WCD) or less is 21,959 	<p>The discussion of derailments and potential spill sizes from trains transiting to the Facility includes events that may have significant consequences should they occur, but which the DEIS concludes are extremely unlikely. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i>, 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i>, 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). [Comment 1, Exceeds Scope of SEPA</p>

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		years.”	Impacts Analysis]
26.	Pages 34-35, Appendix J, Probability Distributions of Oil Outflow in Vessel Impact Accidents	“No simulations were conducted for allision accidents, because these incidents would generally involve less energy or force since one of the objects is stationary. Allision incidents, such as a vessel striking a dock, would be expected to result in less oil outflow. The focus of this study is worst-case discharges and other potentially large spill scenarios. Allision-related spill incidents can effectively be assumed to be similar to the smaller volume collision spills.	The risk assessment in the DEIS disregards the probable impacts of the Project and instead focuses on the large-scale or catastrophic impacts which are remote or speculative and, therefore, not reasonably likely to occur. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i> , 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i> , 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). [Comment 1, Exceeds Scope of SEPA Impacts Analysis]
27.	Page 4-116, § 4.9 Additional Mitigation Measures to Address the Risks of and Impacts From a Crude Oil Spill, Fire, and/or Explosion	“Because EFSEC has made no final decisions regarding the adequacy of the current mitigation proposals from the Applicant, additional mitigation could be identified during the site certification process, permitting activities, or further environmental review. EFSEC has identified the following additional mitigation measures for consideration by the	In deferring to other agencies the power to develop mitigation for operational conditions in the Site Certification Agreement, EFSEC has impermissibly re-delegated the powers the legislature endowed it with under RCW 80.50.040(2). <i>State ex rel. W. v. Seattle</i> , 50 Wn.2d 94, 97; 309 P.2d 751 (1957). [Comment 5, Non-

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		state legislature, and other federal, state, and local agencies and private organizations to address the risk of and impacts from a crude oil spill, fire, and/or explosion.”	Redelegation Doctrine]
28.	Page 4-117, § 4.9.3 Mitigation Measures Involving EFSEC, the Applicant, and Other Agencies and/or Private Organizations	“Ecology should verify that the appropriate regulatory contingency spill planning volume used to develop appropriate spill containment at the proposed Facility is “the entire volume of the largest aboveground storage tank on the facility site complicated by adverse weather conditions...” (the largest aboveground storage tank capacity at the proposed Facility is 375,000 bbl) or if “...a larger or smaller volume is more appropriate given a particular facility’s site characteristics and storage, production, and transfer capacity” (WAC 173-182).”	In deferring to other agencies the power to develop mitigation for operational conditions in the Site Certification Agreement, EFSEC has impermissibly re-delegated the powers the legislature endowed it with under RCW 80.50.040(2). <i>State ex rel. W. v. Seattle</i> , 50 Wn.2d 94, 97; 309 P.2d 751 (1957). [Comment 5, Non-Redelegation Doctrine]
29.	Pages 4-118 and 4-119, §4.9.3 Mitigation Measures Involving EFSEC, the Applicant, and Other Agencies and/or Private Organizations	“• The MFSA, with assistance from the Applicant, should update the existing MFSA VRP to: – Address a Handymax regulatory WCD volume of 319,925 bbl (Appendix J, Table 3) – Expand the plan’s current focus on vessel shipments of refined petroleum products to include shipments of crude oil of various types on the Columbia River. – Mandate that all vessels loading at the proposed Facility adopt	(1) In deferring to other agencies the power to develop mitigation for operational conditions in the Site Certification Agreement, EFSEC has impermissibly re-delegated the powers the legislature endowed it with under RCW 80.50.040(2). <i>State ex rel. W. v. Seattle</i> , 50 Wn.2d 94, 97; 309 P.2d 751 (1957). [Comment 5, Non-Redelegation Doctrine]

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		<p>the MFSA VRP.</p> <ul style="list-style-type: none"> The Applicant and EFSEC should coordinate with the USCG, Lower Columbia River Harbor Safety Committee, Ecology, ODEQ, Columbia River Bar Pilots, and Columbia River Pilots to ensure that existing safety procedures and vessel traffic management systems are adequate to accommodate 365 additional crude oil vessels per year, primarily of the Handymax vessel size. These procedures should address at minimum: – Safe speeds for laden tank vessels carrying crude oil and other vessels while in the traffic lane. – Appropriate capacities with regard for the Columbia River channel for laden tank vessels carrying crude oil. – Minimizing of vessel traffic and anchorage maneuvers during outbound transits.” 	<p>(2) The Commerce Clause prohibits state laws and regulations that interfere with or discriminate against interstate commerce and, thus, efforts by EFSEC to impose conditions on Columbia River vessel traffic as mitigation, are preempted. Federal courts consistently have upheld and reinforced the preemptive effect of federal regulations for maritime vessels. <i>See U.S. v. Locke</i>, 529 U.S. 89 (2000); <i>Ray v. Atlantic Richfield Co.</i>, 435 U.S. 151 (1978); <i>Kelly v. Washington ex rel Foss Co.</i>, 302 U.S. 1 (1937); <i>Moran v. New Orleans</i>, 112 U.S. 69 (1884); <i>Sinnot v. Daveport</i>, 63 U.S. (22 How.) 227 (1859); <i>Gibbons v. Ogden</i>, 22 U.S. (9 Wheat.) 1 (1824). The “authority of Congress to regulate interstate navigation, without embarrassment from intervention of the separate States and resulting difficulties with foreign nations, was cited in the Federalist Papers as one of the reasons for adopting the Constitution.” 529 U.S. at 99. [Comment 4, Federal Preemption]</p>
30.	Pages 4-118 and 4-119, § 4.10 Potential Significant Unavoidable	“A large crude oil spill, fire, and/or explosion could result in significant adverse impacts, depending on the size, location, and extent of	The discussion of impacts, particularly those related to the potential for increased risks associated with the handling and transport

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	Adverse Impacts	<p>the incident. . . Some of the mitigation measures listed previously are intended to reduce the likelihood of a spill (and spill-related fire or explosion), which is the best form of mitigation—avoidance. Some or all of the other mitigation measures listed previously, if implemented, are intended to reduce the extent (e.g., duration, intensity, geography) of significant adverse impacts in the event of a crude oil spill, fire, and/or explosion. However, an uncontained large to very large spill and/or associated fire and/or explosion, even with mitigation, could result in significant adverse impacts to one or more environmental resources. The potential for major unanticipated events resulting from factors occurring alone or in combination as described in Section 4.1 cannot be totally eliminated. Although extremely unlikely, an unprecedented event could potentially cause one or more crude oil storage tanks and the secondary containment berm to be significantly damaged, which could result in a very large crude oil spill at the proposed Facility. Such a spill could spread inland to other Port facilities, nearby wetlands and neighborhoods and could reach the Columbia River. Impacts from such an event</p>	<p>of crude oil, focuses on events that would have significant consequences should they occur, but which the DEIS concludes are extremely unlikely to occur. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i>, 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i>, 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). In analyzing impacts that are neither significant nor probable, the DEIS violates the “rule of reason” and misdirects the attention of the decision-maker from the probable environmental impacts, to impacts that are extremely unlikely ever to occur. In that way, the DEIS fails to “further the informational purposes of” SEPA. [Comment 1, Exceeds Scope of SEPA Impacts Analysis]</p>

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		could result in significant adverse impacts to environmental resources and would require a major response effort”	
31.	Pages 5-33 and 5-34, §5.9 Environmental Health	“Overall, risks to workers and the public from construction and operation of the proposed Facility in combination with other existing and reasonably foreseeable future actions are expected to result in negligible cumulative impacts or increases in the rate of injury or fatality to workers or the public. . . [C]umulative impacts to environmental health from rail transportation are expected to be minor for many crossings but may be moderate for crossings with existing elevated safety risks. In the event of an accident, impacts to environmental health could be minor to major, depending on the unique circumstances of the event. Mitigation measures are identified in Section 3.8.5 to address this impact.”	Section 5.9, and throughout the DEIS, focuses on the worst-case scenarios, which the DEIS concludes are extremely unlikely consequences of the Project. SEPA does not require analysis of impacts that are “merely speculative.” WAC 197-11-060(4)(a) and (c). Remote or speculative impacts are outside the scope of impacts to be analyzed under SEPA. <i>Cheney v. City of Mountlake Terrace</i> , 87 Wn.2d 338, 346, 552 P.2d 184 (1976); <i>Cascade Bicycle Club v. Puget Sound Regional Council</i> , 175 Wn. App. 494, 509, 306 P.3d 1031 (2013). In analyzing impacts that are neither significant nor probable, the DEIS violates the “rule of reason” and misdirects the attention of the decision-maker from the probable environmental impacts, to impacts that are extremely unlikely ever to occur. In that way, the DEIS fails to “further the informational purposes of” SEPA. [Comment 1, Exceeds Scope of SEPA Impacts Analysis]
32.	Page 5-23, §5.2.3, Vessel	“The potential for soil erosion would be limited	Much of the channel is not “close” to the

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	Transportation	to the lower approximately 33 miles of the river where shorelines with beaches close to the channel are not shielded from wave action and have beach slopes less than 10 percent.”	beaches in the lower 33 miles, and potentially affected sites along the Columbia River are not located “close” to the channel. The information provided to a decision-maker in an EIS must be accurate. “[T]here is no question but that the accuracy and truthfulness of the information in the EIS is of paramount importance to the ultimate approval or disapproval of the . . . project. . .” <i>Weyerhaeuser v. Pierce County</i> , 124 Wn.2d at 33-34; WAC 197-11-560(1)(d) (factual corrections identified specifically in the SEPA rules as a possible agency response to comments on a draft EIS). [Comment 6, Accuracy]
33.	Page 5-39, §5.14.3 Vessel Transportation	“U&A fishing and hunting areas for treaty tribes lie within the vessel corridor, which is currently used for vessel traffic.”	The treaties, in general, reserved to the tribes the right to fish at all usual and accustomed places, and to hunt, gather, and pasture their stock on open and unclaimed lands. Hunting areas, therefore, are landward and would not lie within the vessel area. The information provided to a decision-maker in an EIS must be accurate. “[T]here is no question but that the accuracy and truthfulness of the information in the EIS is of paramount importance to the ultimate approval or disapproval of the . . . project. . .” <i>Weyerhaeuser v. Pierce County</i> , 124 Wn.2d at 33-34; WAC 197-11-560(1)(d) (factual corrections identified specifically in the SEPA rules as a possible agency response

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