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Chapter 1

Project Background and Purpose and Need

1.1 INTRODUCTION

Tesoro Savage Petroleum Terminal LLC, doing business as Vancouver Energy (the Applicant), is proposing to construct and operate the Vancouver Energy Distribution Terminal Facility (the Facility, or the Project) at the Port of Vancouver (Port) in Vancouver, Washington, located on the Columbia River. The proposed Facility would be a crude oil terminal capable of receiving an average of 360,000 barrels (bbl) of crude oil per day by train, storing it onsite, and loading it onto marine vessels. The Applicant anticipates that crude oil loaded onto marine vessels at the proposed Facility would be delivered to refineries primarily located on the US West Coast.[1] A map showing the Project area is presented on Figure 1-1.

1.2 PROJECT OVERVIEW

Crude oil would be delivered to the proposed Facility by railroad within "unit trains" composed of up to 120 sole-purpose crude oil tank cars. Existing railroad tracks belonging to the Burlington Northern Santa Fe (BNSF) railroad (a Class 1 Railroad) would be used to transport the crude oil from its source to the Port.[2] The proposed Facility could receive crude oil from any source with rail access to the Port; however, according to information provided by the Applicant, the most likely sources would be northern mid-continent crude oil produced in North Dakota, Montana, and the provinces of Alberta and Saskatchewan, Canada. An average of four unit trains per day would arrive at the proposed Facility.

Crude oil would be unloaded from the unit trains and pumped through transfer pipelines to a storage area containing six aboveground storage tanks. The crude oil would then be transferred via pipeline from the storage tank area to a marine terminal on the Columbia River where it would be loaded onto marine vessels. Occasionally, crude oil would be pumped directly from unit trains to marine vessels. The marine vessels would transit down the Columbia River to the Pacific Ocean and on to receiving refineries.

1.3 THE APPLICANT

Tesoro Refining & Marketing Company LLC, a subsidiary of Tesoro Corporation, and Savage Companies have entered into a joint venture as Tesoro Savage Petroleum Terminal LLC. Tesoro Savage Petroleum Terminal LLC, doing business as Vancouver Energy, is seeking a Site Certification Agreement (SCA) to construct and operate the proposed Facility at the Port. An Application for Site Certification (ASC) is required before an SCA can be considered.

The Applicant would own the crude oil unloading facilities, transfer pipelines, storage tanks, and marine terminal loading facilities at the proposed Facility consistent with the terms in the existing land lease agreement with the Port. Savage Companies would oversee and manage the proposed Facility design, construction, and operation on behalf of both parties.

1 Receiving refineries could include those located in Alaska, Hawaii, California, and Washington.

2 Union Pacific also has operating rights over portions of the BNSF track and could deliver crude oil to the proposed Facility.

1.4 ENERGY FACILITY SITE EVALUATION COUNCIL

The Washington State Energy Facility Site Evaluation Council (EFSEC) is the state agency responsible for evaluating and making recommendations to the governor on approval or denial of certain major energy facilities in Washington. The agency's responsibilities are listed in the Revised Code of Washington (RCW) 80.50. They include making recommendations about facilities with the capacity to receive more than an average of 50,000 bbl per day (bpd) of crude or refined petroleum that has been or will be transported over marine waters.

EFSEC is a council comprising the directors of five state agencies (or their designees) and a chairperson appointed by the governor. The state agencies with designees on EFSEC are:

- Department of Commerce
- Department of Ecology (Ecology)
- Department of Fish and Wildlife (WDFW)
- Department of Natural Resources (WDNR)
- Utilities and Transportation Commission (UTC)

The directors of other specified state agencies may at their discretion choose to participate as council members for a particular proposal before EFSEC. For this Project, the Washington State Department of Transportation has designated a member to EFSEC. Counties, cities, and port districts where a potential project is located also appoint members to EFSEC. For this proposed Project, Clark County, the City of Vancouver, and the Port of Vancouver have appointed members. By law (RCW 80.50.030[6]), the Port's designee is a nonvoting member.

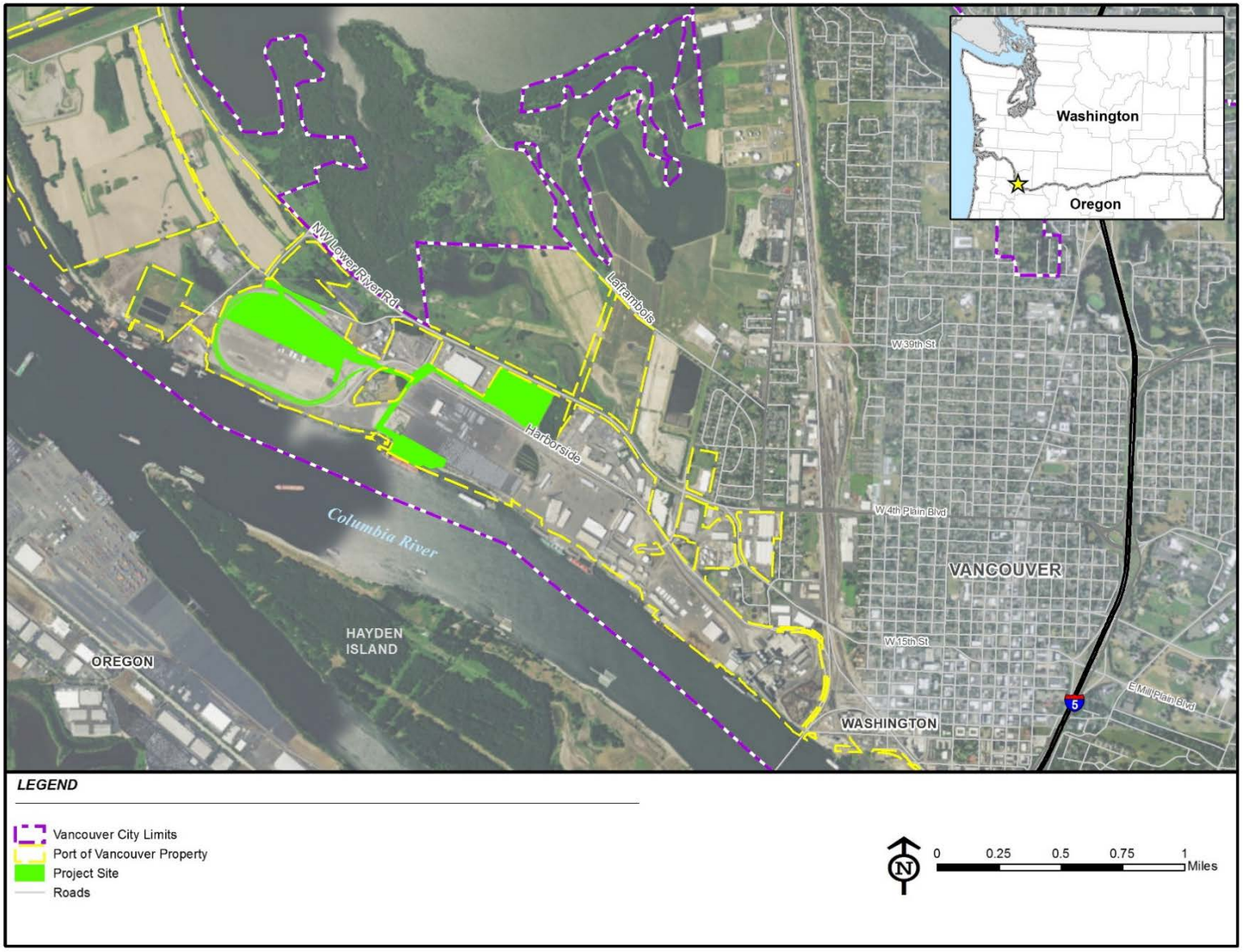


Figure 1-1 Vicinity Map of the Proposed Facility

1.5 PROJECT BACKGROUND

1.5.1 Port of Vancouver Request for Statements of Interest

The proposal to construct and operate the proposed Facility was initiated on November 30, 2012, when the Port issued a Request for Statements of Interest from firms to "design, permit, construct and operate a petroleum transloading facility that would accept petroleum products by rail from multiple sources and origination points, transfer the cargo to dedicated storage via pipelines, and load vessels for transport to customer facilities" (Port 2012). The request stated that the Port expected the transloading facility to be a "Common User" facility open to all potential customers and operated by a designated terminal operator. The terminal operator would function under a Rail Operating Agreement, a Ground Lease, and a Marine Terminal Operating Agreement that would contain the various commercial and operational terms and conditions that, as among the parties to the lease and agreements, would be expected to guide the relationship among the Port, the Port's exclusive rail operator, and the terminal operator.

The Port began construction of the West Vancouver Freight Access (WVFA) Project in 2007. The WVFA Project consists of several separate project elements, "aimed to increase efficiency of rail movement into and through the Port" (Port ND). The Port's request for Statements of Interest described a range of infrastructure improvements the Port would make available to the terminal operator (see Section 2.2.2.1), including exclusive use of existing rail loop tracks constructed as part of the WVFA Project, land for a railcar unloading facility and crude oil storage area, use of vessel loading berths on the Columbia River, and rights-of-way for transfer pipelines from the unloading facility to the storage area and from the storage area to the vessel loading berths.

The Port selected the Applicant's proposal and the elected Port Board of Commissioners unanimously approved a 10-year lease on October 22, 2013.

1.5.2 Application for Site Certification

The Applicant submitted an ASC for the Facility (ASC No. 2013-01) to EFSEC on August 29, 2013. The ASC contained information regarding the site including the natural and built environments, the ownership lease, the proposed construction methods, and information for other permits and authorizations per the requirements of Washington Administrative Code [WAC] 463-060-010. Also included in the ASC were tribal correspondence, preliminary spill contingency and accident prevention plans, a preliminary stormwater report, a biological resources report, a Joint Aquatic Resources Permit Application (JARPA) form, and information regarding shoreline management and potential impacts to transportation and socioeconomics.

The Applicant-prepared ASC, along with additional information prepared and submitted by the Applicant, was used as the basis for the analysis in the Draft Environmental Impact Statement (EIS). Following publication of the Draft EIS in November 2015, the Applicant submitted an updated ASC in May 2016. A final ASC including all commitments and stipulations made by the Applicant during the adjudicative hearing was submitted to EFSEC in October 2016 as required by WAC 463-60-116(3). Updated information in the May 2016 ASC has been incorporated into this Final EIS with additional analyses conducted accordingly. All versions of the ASC can be found at the EFSEC Project-specific website: http://www.efsec.wa.gov/Tesoro%20Savage/Application/TesoroApplicationPage.shtml.

1.5.3 EFSEC's Role and Responsibilities

EFSEC has jurisdiction over the evaluation of major energy facilities, including the proposed Facility, and is reviewing the Applicant's proposal under the requirements of RCW 80.50 and associated regulations. The proposed Project falls under EFSEC's jurisdiction because it meets the definition of an "energy plant" with the capacity "to receive more than an average of 50,000 bpd of crude or refined

petroleum or liquefied petroleum gas which has been or will be transported over marine waters…" (RCW 80.50.020(12) (d)).

During its review, EFSEC obtains information from a variety of sources including an administrative adjudication under the Administrative Procedure Act, public hearings, and information gathered pursuant to Washington's State Environmental Policy Act (SEPA). EFSEC's review is guided by RCW 80.50.010, which states the following about Washington State policies:

- The State recognizes "the pressing need for increased energy facilities."
- The State intends to ensure, through available and reasonable means, that the location and operation of such facilities would produce minimal adverse effects.
- The State intends to balance the increasing demands for energy facilities with the broad interests of the public. Such balancing is to include adequate operational safeguards, preserve and protect the environment, provide abundant energy at a reasonable cost, and avoid costly duplication and wasted time.

After its evaluation of the proposed Facility is complete, EFSEC will submit a recommendation to the governor. If EFSEC recommends approval of the proposed Facility, EFSEC will submit a draft SCA for the governor's signature. An approved SCA typically includes conditions that the Applicant must meet during project construction, operation, and eventual decommissioning. Within 60 days of receipt of EFSEC's recommendation, the governor may approve the Facility, reject the Facility, or direct EFSEC to reconsider the SCA. If an ASC is denied, a proposal cannot be constructed and operated.

EFSEC's governing statutes supersede all other state laws and regulations that would otherwise apply to energy facilities approved under RCW 80.50 (RCW 80.50.110 and RCW 80.50.120). As a result, otherwise applicable state and local regulatory permits, requirements, and standards may not apply to the proposed Facility.

1.5.4 State Environmental Policy Act Review Process

During the site certification process, EFSEC functions as the "lead agency" responsible for complying with SEPA's procedural requirements (WAC 463-47). As authorized under WAC 463-47-090, the Applicant prepared a Preliminary Draft EIS (BergerABAM 2014) for EFSEC review, together with supporting technical information. EFSEC subsequently prepared a Draft EIS with the assistance of an independent consultant, as provided for in WAC 463-47-090(2)(b). EFSEC's independent consultant reviewed all Applicant-prepared information and analyses before they were included in the Draft EIS. EFSEC staff and EFSEC's consultant also extensively supplemented the Applicant-prepared information and analyses during preparation of the Draft EIS.

Following the end of the public comment period on the Draft EIS on January 22, 2016, EFSEC's independent consultant reviewed over 200,000 submissions that included comments on the Draft EIS. Comments were received from federal, state, and local agencies; nonprofit environmental organizations; and members of the public. All comments have been reviewed, responses to the comments have been prepared, and additional analysis has been conducted to assist in preparing responses to those comments. Where appropriate, text and figures in this Final EIS have been revised to clarify information presented in the Draft EIS, to present the results of new or additional analysis, or to respond to comments on the Draft EIS.

1.6 OBJECTIVES INCLUDING PURPOSE AND NEED TO WHICH THE PROPOSAL IS RESPONDING

The proposed Facility is intended to serve the current and future growing demand of West Coast refineries for mid-continent crude oil. Defining a proposed project's objectives, including the purpose and need to which the proposal is responding, is important; these objectives play a key role in determining the range of alternatives that will be considered and analyzed in an EIS, and in selecting a preferred alternative or eliminating alternatives from further consideration.

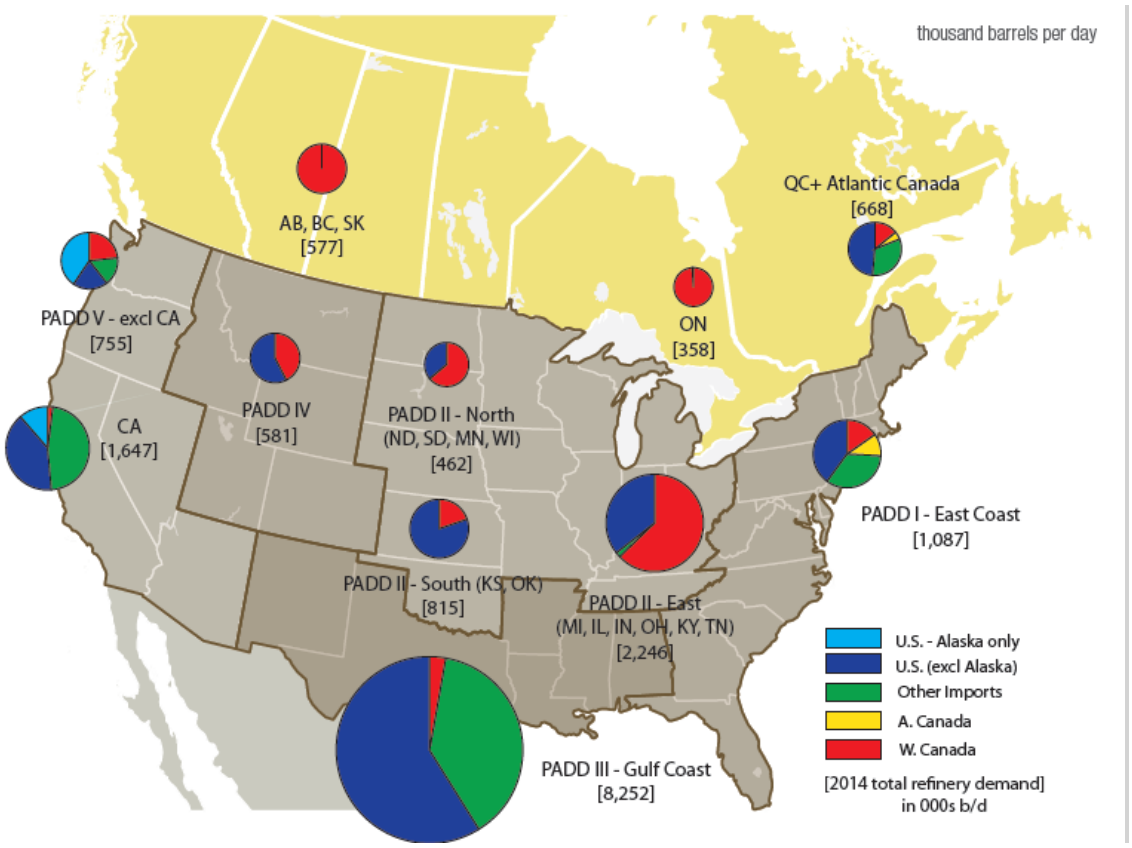
The purpose and need of the proposed Facility is to construct and operate a facility that would provide the service of trans-loading mid-continent North American crude oil to the West Coast to allow shipment of crude oil to refineries located primarily on the West Coast of North America.

1.7 OIL MARKET CONDITIONS

The US Department of Defense administers five regions, known as "Petroleum Administration for Defense Districts" (PADDs) to facilitate oil allocation across the United States. Refineries on the West Coast of North America are located within PADD 5, which encompasses the states of Alaska, Washington, Oregon, Nevada, Arizona, and Hawaii.

PADD 5 refineries have traditionally received crude oil feedstock, primarily by vessel, from Alaska, California, and foreign oil fields (Figure 1-2). However, crude oil production in California and Alaska is declining, and PADD 5 refineries are now relying on crude oil sourced from the growing supply in the US mid-continent (i.e., Bakken crude oil) and imports from foreign sources, particularly Canada (i.e., diluted bitumen). To accommodate the demand for mid-continent crude oil at PADD 5 refineries, crude oil transport by rail from the mid-continent to these refineries has been increasing (Ecology 2015).

PADD 5 has 30 operating refineries with a capacity to refine up to 3.1 million bpd of crude oil. As of 2015, PADD 5 accounts for 17 percent (1.5 million bpd) of total US gasoline consumption, 13 percent (494,000 bpd) of distillate (including diesel fuel) consumption, and about 30 percent (430,000 bpd) of jet fuel consumption (US Energy Information Administration [EIA] 2015a). Consumption varies across the PADD and is concentrated in California (EIA 2015a). In recent years, Washington has received a greater volume of crude oil transported by rail from mid-continent sources, to replace the declining supply of Alaskan North Slope crude oil (which has been the primary feedstock for West Coast refineries since the late 1970s). In 2013 approximately 8.4 percent of the crude oil imported to Washington was transported by rail compared to 0 percent in 2011 (Ecology 2015).

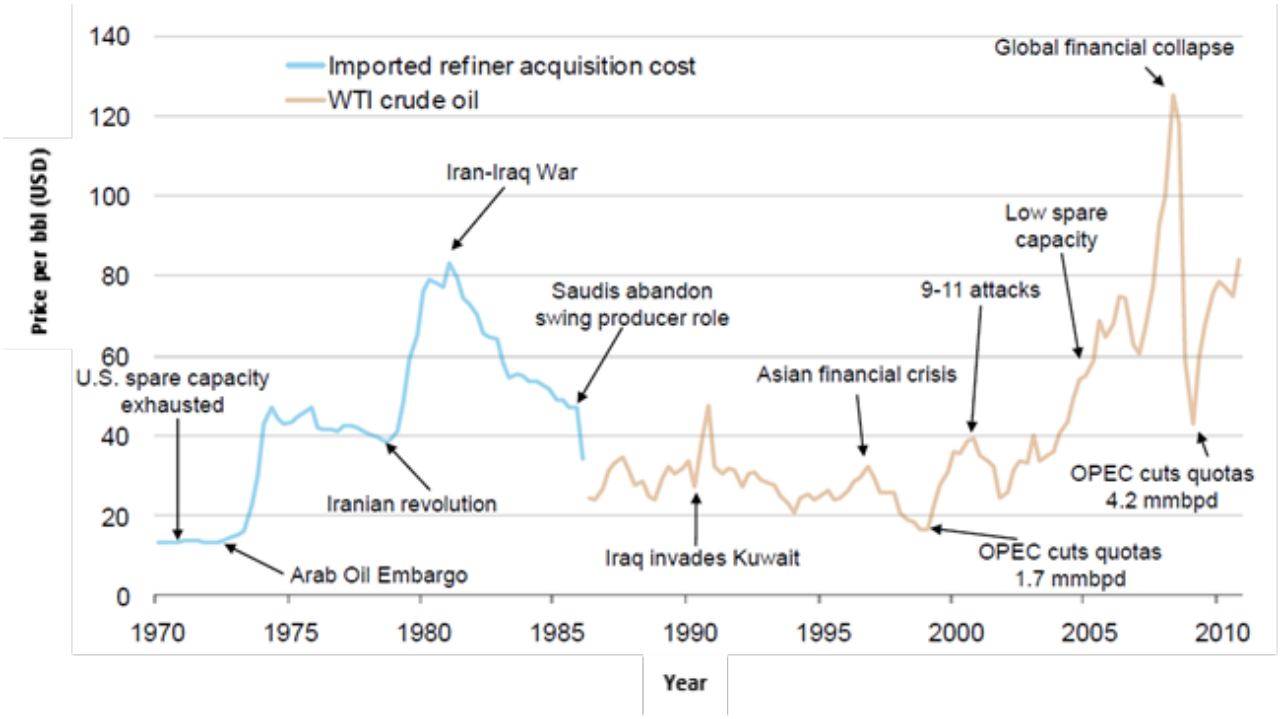


Source: Canadian Association of Petroleum Producers 2015

Figure 1-2 Crude Oil Market Demand in the United States and Canada by Source and Destination (2014)

The demand for gasoline and diesel to power vehicles is projected to continue to grow at least through 2020 as 98 percent of American cars have internal combustion engines (Vancouver Energy 2016). Petroleum provides 95 percent of the energy for transportation in Washington, Oregon, California, Nevada, Arizona, and Alaska. The EIA, which provides official energy statistics to the US government, projects significant growth in worldwide energy demand through the year 2040 (EIA 2016). Fossil fuels are expected to account for 78 percent of global energy use in 2040 (EIA 2016). During this time frame, advances in alternative energy sources and transportation technologies are anticipated, and alternative energy consumption is expected to grow faster than consumption of fossil fuels. However, these alternative energy sources will likely not be accessible enough to satisfy the growing demand for transportation services worldwide.

It should be noted that crude oil is a global commodity with a very complex market determined by global supply and demand, distribution infrastructures, geopolitical dynamics, governmental policies, and financial markets. Crude oil demand is primarily driven by price and the demand for refined petroleum products, particularly from the transportation sector. An example of how crude oil markets react to global conditions is presented in Figure 1-3, which displays the price per barrel of crude oil reacting to global financial and geopolitical events.



Source: EIA 2011

Notes: Cost in price per bbl, real 2009 US dollars, quarterly average; OPEC = Organization of the Petroleum Exporting Countries, WTI = West Texas Intermediate.

Figure 1-3 Price of Crude Oil per Barrel Reacting to Global Events

1.7.1 Crude Oil Exports to Foreign Markets

The federal crude oil export ban disallowed the export of most crude oil originating in the United States, but did allow the export of certain crude oils, including the following (EIA 2015b):

- Crude oil derived from fields under the state waters of Cook Inlet in Alaska
- Alaskan North Slope crude oil
- Certain domestically produced crude oil destined for Canada
- Shipments to US territories
- California crude oil shipments to Pacific Rim countries

On December 18, 2015, the crude oil export ban (which has barred shipments of crude oil originating in the United States to countries other than Canada since 1975) was rescinded (Volcovici and Ngai 2015). Prior to the lifting of the export ban, the United States shipped some crude oil from the sources above to overseas nations. For example, through the first five months of 2015 prior to December 2015, international crude oil exports from the United States averaged 491,000 bpd (EIA 2015b).

In late 2015, the EIA modeled the impacts of lifting the crude oil export ban using four different domestic production and oil price scenarios. The results for each scenario were as follows (EIA 2015b):

- **Reference scenario.** US crude oil net exports would remain unchanged if oil prices fell during 2015 and then increased by 2025 due to demand from non-Organization for Economic Cooperation and Development countries.

- **Low Oil Price scenario.** US crude oil net exports would remain unchanged if there was lower demand for petroleum products, higher Organization of Petroleum Exporting Countries (OPEC) upstream investment, and lower non-OPEC exploration and development costs.
- **High Oil and Gas Resource scenario.** US crude oil net exports would greatly increase if there was higher domestic production and thus lower crude oil prices in 2025 compared to the reference scenario.
- **High Oil and Gas Resource/Low Oil Price scenario:** US crude oil net exports would slightly increase if the combined assumptions of the High Oil and Gas Resource/Low Oil Price scenarios were met.

When the export ban was lifted, the United States began exporting crude oil from ports in the Gulf of Mexico (PADD 3) to Europe and elsewhere, including Israel, China, and Panama (Blas and Hurst 2016; see Section 5.19.1 for further discussion on PADDs). From the lifting of the export ban through July 2016, there was no apparent upward trend in crude oil exports from PADD 5 (i.e., US West Coast) ports (EIA 2016). Given the information available, EFSEC recognizes that some crude oil export could occur from the proposed Facility; however, the purpose and need stating that crude oil would be sent to refineries located primarily on the West Coast of North America is still applicable.

1.7.2 Oil Demand Growth

An oil market study of demand growth that may occur as a result of the Proposed Action was not conducted due to the speculative nature of such a study. As Figure 1-3 indicates, the price and resulting demand of oil are highly dependent upon geopolitical dynamics. Availability of oil is only one parameter affecting price and hence, demand. Additionally, there is evidence that the market has some elasticity. For instance, as natural gas prices decrease, homeowners and businesses switch from heating oil to natural gas for their energy needs. While the transportation sector is a significant consumer of petroleum-based fuels, the sector is providing new alternatives to petroleum-fueled vehicles. A market study could only speculate the extent to which the Proposed Action would stimulate an increase in the use of petroleum and the nature and extent of future geopolitical events, fuel switching due to market conditions, and alternatively fueled transportation mechanisms. EFSEC concluded that a market study would not be useful, given the multiple variables that affect oil demand.

1.8 PUBLIC, AGENCY, AND TRIBAL INVOLVEMENT

SEPA requires opportunities for public involvement and comment during EIS preparation. The initial phase of public involvement is the scoping phase, during which the SEPA lead agency requests public input on the scope of the Draft EIS to be prepared, including the range of alternatives, potential environmental impacts, and possible mitigation measures. EFSEC provided public notice of these meetings by mailing and emailing persons on its mailing list, along with agencies, tribes, organizations, and other interested individuals; advertising in local newspapers; and posting meeting notices on its website. Further information on the scoping process is provided in Section 1.8.2 below.

Project documents are available to the public on EFSEC's website (http://www.efsec.wa.gov/Tesoro-Savage.shtml) and in local libraries. EFSEC has also developed and is maintaining a mailing list of interested persons for the EIS. All public notices and announcements concerning the Project are posted to the EFSEC Project website and mailed to all persons on the Project-specific mailing list and EFSEC's regular mailing list.

1.8.1 Notice of Receipt of Application

On September 4, 2013, EFSEC mailed a notice to the public and interested agencies and organizations indicating receipt of an ASC for the proposed Project, and stating that it was beginning review of the proposal under RCW 80.50 and WAC Chapter 463 and that it was the lead agency under SEPA. This review commenced prior to the Port formally approving a lease agreement with the Applicant. EFSEC further identified that copies of the application were available upon request and that a public information meeting would be conducted in Vancouver, Washington, at a later date.

1.8.2 Public and Agency Scoping

1.8.2.1 EFSEC Public Notice and SEPA Scoping Notice

On October 3, 2013, EFSEC issued a notice to the public concerning the Applicant's August 29, 2013, ASC submittal (EFSEC 2013). The notice included a summary of the Proposed Action,[3] EFSEC's threshold determination of significance for initiating an EIS, and information on the scoping process for the EIS that would be prepared. The notice requested all scoping comments be received by EFSEC by November 18, 2013, and provided the date, time, and location for the initial public information and scoping meeting for the EIS. On November 8, 2013, EFSEC issued an extension of the SEPA scoping comment period from its original date of November 18, 2013, to December 18, 2013. The notice also announced the date, time, and location for an additional public scoping meeting.

1.8.2.2 State Environmental Policy Act Scoping Meetings

A scoping meeting was held on October 29, 2013, at Clark College Gaiser Student Center in Vancouver, Washington. A second scoping meeting was held on December 11, 2013, at CenterPlace Regional Event Center in Spokane Valley, Washington. Public notice of these meetings was provided by mailing and emailing persons on EFSEC's mailing list, along with agencies, organizations, and other interested persons; advertising in local newspapers; and posting meeting notices on EFSEC's website. The meetings included presentations by EFSEC to explain the SEPA process for preparing the EIS. Members of the public were given the opportunity to provide oral and written comments on the scope of the EIS. A total of 374 people attended the two scoping meetings, and 105 speakers provided verbal comments.

1.8.2.3 State Environmental Policy Act Scoping Report

Following closure of the extended public scoping comment period on December 18, 2013, EFSEC reviewed all of the comments received from the public, tribes, agencies, interest groups, and other persons, and developed the scope of issues to evaluate in the Draft EIS. EFSEC received a total of 31,074 comments from private citizens, environmental organizations, public agencies, and tribal representatives from the EIS scoping meetings and through written submittals.

EFSEC prepared a Scoping Report, which was released to the public on February 24, 2014 (EFSEC 2014). The EIS Scoping Report, which is incorporated by reference, provides additional information on the EIS scoping comments that were received. On April 2, 2014, at a public meeting held in Vancouver, Washington, EFSEC discussed the Scoping Report and approved the scope of analysis for the Draft EIS. A copy of the Scoping Report can be found at: http://www.efsec.wa.gov/Tesoro%20Savage/Scoping%20Report/Scoping%20report%202-24-14.shtml.

3 Proposed Action is synonymous with "proposal." A proposal includes both actions and regulatory decisions of agencies as well as any actions proposed by applicants (WAC 197-11-784).

1.9 EFSEC PUBLIC INFORMATION MEETING AND DRAFT EIS COMMENT PERIOD AND PUBLIC MEETINGS

In accordance with WAC 463-26-025, on October 28, 2013, EFSEC held a public information meeting at Clark College Gaiser Center in Vancouver, Washington, to explain the process that would be followed for review of the proposal. Members of the public were provided an opportunity to provide oral and written comments.

The Draft EIS for the Vancouver Energy Distribution Terminal Facility was issued for public comment on November 24, 2015. The public comment period also began on November 24, 2015, and was scheduled to end on January 8, 2016. The Applicant agreed to extend the comment period through January 22, 2016, to provide additional time for the public to submit comments on the Draft EIS. Public comment hearings for the Draft EIS were conducted as follows:

- January 5, 2016, Clark County Event Center at the Fairgrounds, Ridgefield, WA
- January 12, 2016, Clark County Event Center at the Fairgrounds, Ridgefield, WA
- January 14, 2016, CenterPlace Regional Event Center, Spokane Valley, WA

1.9.1 EFSEC Adjudicative Proceedings

As required by RCW 80.50.090(3), the Washington Administrative Procedure Act (RCW 34.05), and WAC Chapter 463-30, EFSEC began adjudicative proceedings for the proposed Project on January 28, 2015. These proceedings are a formal hearing process similar to a courtroom trial, in which EFSEC hears evidence presented by the parties to the adjudication. By law, all state agencies and local governments with members on EFSEC are parties to any EFSEC adjudication, although they may elect not to actively participate. The state attorney general's office appoints an assistant attorney general to be a party in the adjudication. The Counsel for the Environment represents the public and its interest in protecting the quality of the environment.

Other persons or entities with an interest in the adjudication, such as tribes, groups, and local, state, or federal agencies, may petition EFSEC to intervene in the proceedings. EFSEC considers the intervenor petitions and determines whether to grant intervenor party status to the petitioner based on a proposed project's potential impact to the interest(s) of the intervenors. If denied party status, petitioners for intervention may ask EFSEC to reconsider its decision on their intervention petition.

EFSEC's adjudication proceedings were held over 5 weeks in Vancouver and Olympia, Washington. Twelve hearings between July 5 and July 22 were held at Red Lion Hotel in Olympia. Eight hearings from June 27 to June 30 and July 25 to 29 were held at Clark College at Columbia Tech Center in Vancouver. Each event was concluded in 6 hours where interested parties were able to speak. Attendees included representatives of the Applicant, EFSEC council members and staff, the Counsel for the Environment, tribal representatives, representatives of environmental organizations and neighborhood groups, local officials, the media, and members of the public.

Petitioners for intervention included the Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, City of Spokane, Columbia Waterfront, Columbia River Intertribal Fish Commission, International Longshore and Warehouse Union Local 4, City of Washougal, Columbia Riverkeeper, Climate Solutions, ForestEthics, Friends of the Columbia Gorge, Fruit Valley Neighborhood Association, Sierra Club, Spokane Riverkeeper, and Washington Environmental Council. See the EFSEC website (http://www.efsec.wa.gov/Tesoro%20Savage/Adjudication/TSVEPadj.shtml) for transcripts and daily

video of the hearings, including motions, orders, filings, and exhibits related to the adjudicative proceedings.

1.9.2 Applicant Meetings

In addition to EFSEC's public outreach efforts, the Applicant has met and communicated with agencies, tribes, the public, and nongovernmental organizations during the review process being conducted by EFSEC.

1.10 DECISIONS TO BE MADE

EFSEC will use this Final EIS to inform its decision on whether to recommend approval or denial of the proposed Project to the governor, and the Final EIS will inform the governor's ultimate decision. If EFSEC determines the Project should be recommended for approval, it will develop a recommendation and a draft SCA to be signed by the governor. The SCA would contain all requirements and any other conditions the Applicant must meet for construction and operation throughout the Project's life, and for eventual decommissioning of the Facility. If EFSEC determines the Project should not be recommended to the governor for approval, the recommendation will explain EFSEC's decision.

The governor has 60 days to consider EFSEC's recommendation and can take one of the following actions:

1. Approve EFSEC's recommendation to approve the application and execute the draft SCA.
2. Approve EFSEC's recommendation to deny the application and reject the application.
3. Direct EFSEC to reconsider certain aspects of the Project and draft SCA.

1.11 ISSUES TO BE RESOLVED

This Final EIS analyzes a wide range of issues associated with the Proposed Action identified during scoping and during the Draft EIS comment period. Some of these issues require further consideration by the Applicant and decision makers, or require information that was not available prior to publication of the Final EIS (e.g., 100 percent design), but is not necessary for identifying significant adverse environmental impacts, mitigation for those impacts, and for comparing alternatives as required by SEPA.

- **Final Design and Plans including mitigation plans**. The proposal is currently at about 65% design. A number of required plans are either in draft form or not yet in draft form. If the proposal were approved, final plans would be developed along with the final design as each have an effect on the contents of the other. The proposal analyzed in the Final EIS, and any conditions included in the approval, would direct the development of final plans and final design prior to construction.
- **Volume of crude oil carried by vessels**. Although the proposal requests the ability to use ships large enough to transport an average of 360,000 barrels a day, there is a current planning standard which limits crude oil volumes on ships traveling in the Lower Columbia River. No ship is allowed to carry more than approximately 300,000 barrels of oil. This volume limitation may be changed by Ecology in the future. However, until a change occurs and the maximum allowed volume increases, vessels would still be limited to no more than 300,000 and the facility would not operate at the proposed capacity in the application; or the average number of vessels/day could be more than one unless specifically limited in an approval (e.g., eight vessels per week; see Chapter 2.7 for additional discussion).

- **Financial Assurance.** The Final EIS does not specify a monetary amount or the financial mechanism that EFSEC could implement to ensure financial reimbursement to 3rd parties in the event of an incident. If the proposal were approved, a study would be developed and conducted to determine the appropriate level and form of financial assurance necessary to ensure any 3rd parties harmed in the event of an incident, under any circumstances, would be made whole, notwithstanding the Applicant's financial assurance commitments made in the October 2016 ASC.

In the event that the ASC is denied, these issues would not require resolution.

1.12 FEDERAL, STATE, AND LOCAL PERMITS AND APPROVALS

1.12.1 State and Local Permits and Approvals

For facilities under its jurisdiction, EFSEC's governing statutes and rules preempt all aspects of the certification and regulation of energy facilities approved under RCW 80.50. As a result, state and local regulatory permits, requirements, and standards may not apply to the proposed Facility. Table 1-1 lists the generally applicable state and local permits and approvals that would apply if the Project were not under EFSEC's jurisdiction. See Appendix A for additional information.

Table 1-1 State (or Federally Delegated) and Local Permits and Approvals

Permit or Approval	Agency/Statute and/or Regulation
State or Federally Delegated Permits/Approvals	
SEPA Compliance	EFSEC (state lead agency for this Project); WAC 463-47, RCW 43.21C, and WAC 197-11
Hydraulic Project Approval	WDFW; Hydraulic Code (RCW 77.55 and WAC 220-660)
Ballast Water Management	WDFW; RCW 77.120 and WAC 220-150
Aquatic Resources Program	WDNR; RCW 79.105 and WAC 332-30-123
401 Water Quality Certification (federally delegated)	Ecology; Section 401 CWA
NPDES Industrial Stormwater Permit (federally delegated)	EFSEC; WAC 463-76; Ecology; CWA, 40 CFR 122.28, RCW 90.48, and WAC 173-220
Operation SWPPP	Ecology; CWA, 40 CFR 122.28, RCW 90.48, and WAC 173-220
NPDES Construction Stormwater General Permit (federally delegated)	Ecology; CWA, 40 CFR 122.28, RCW 90.48, and WAC 173-220
Construction SWPPP	Ecology; CWA, 40 CFR 122.28, RCW 90.48, and WAC 173-220
Air Discharge Permit(s) (federally delegated)	Ecology; Washington Clean Air Act RCW 70.94 Federal Clean Air Act (as delegated to Southwest Clean Air Agency [SWCAA]) New Source Performance Standards (NSPS) 40 CFR 60 Crude Oil Storage Tanks equipment and procedures defined in 40 CFR 60.112(b) Hazardous Air Pollutants (HAPs) 40 CFR 61 Maximum Achievable Control Technology (MACT) Standards 40 CFR 63 Notice of Construction (NOC) Preconstruction Permit WAC 173-400-110 Title V Air Operation Permit WAC 173-401 Toxic Air Pollutants (TAPs) WAC 173-460 Particulate Matter (PM) WAC 173-470 Sulfur Oxides WAC 173-474 Volatile Organic Compounds (VOCs) WAC 173-490

Permit or Approval	Agency/Statute and/or Regulation
	Reporting of Emissions of Greenhouse Gases WAC 173-441 BACT WAC 173-400-113 Mandatory Report of Greenhouse Gas Rule 40 CFR 98 General Conformity Rule 40 CFR 93, Subpart B
Facility Oil Handling Standards/Oil Transfer Requirements/Design Standards/Operations Manual Training/Certification/Oil Transfer Response Plans	EPA; 33 CFR 154 (Facilities Transferring Oil or Hazardous Material in Bulk), 40 CFR 112 (Oil Pollution Prevention), 40 CFR 300 (National Oil and Hazardous Substances Pollution Contingency Plan), and Ecology; WAC 173-180 (Facility Oil Handling Standards)
Vessel Oil Transfer Advance Notice and Containment	EPA; 40 CFR 112 (Oil Pollution Prevention) and Ecology; WAC 173-184
Spill Prevention and Contingency Plans	EPA; 40 CFR 112 (Oil Pollution Prevention), 40 CFR 300 (National Oil and Hazardous Substances Pollution Contingency Plan) and Ecology; RCW 90.56 (Oil and Hazardous Substance Spill Prevention and Response), WAC 173-180 (Facility Oil Handling Standards), WAC 173-182 (Oil Spill Contingency Plan), and WAC 173-183 (Oil Spill Natural Resource Damage Assessment)
MTCA Consent Decree/Restrictive Covenant Work	Ecology; RCW 70.105D, RCW 64.70, and WAC 173-340
Dangerous/Hazardous Waste Regulations	EPA; RCRA, 40 CFR 260, and Ecology; RCW 70.105 (Hazardous Waste Management), and WAC 173-303
Safety and Health Regulations	Washington State Labor & Industries; OSHA, RCW 49.17 (WISHA), and WAC 296
Hazardous Chemical Emergency Response Planning and Community Right-To-Know Reporting	Ecology; WAC 118-40
Boiler and Unfired Pressure Vessel Rules	Labor and Industries; RCW 70.79 and WAC 296-104
Washington State Waste Discharge Permit Program	Ecology; WAC 173-216
Local Permits/Approvals	
Site Plan Review	City; VMC 20.270
Industrial Wastewater Discharge Permit	City; VMC 14.10 and Wastewater Discharge Standards WAC 173-221A
Stormwater Management System	City; VMC 14.24-26
Hazardous Materials Regulatory Fee Certificate	City; VMC 16.40
Shoreline Substantial Development Permit	City; RCW 90.58 and City SMP
Critical Areas Ordinance	City; VMC 20.740.130
Tree Ordinance	City; VMC 20.770
Archaeological Predetermination Review	City; VMC 20.710
Fire Code (construction permit and a Fire Code Operational Permit)	City; VMC 16.04.010
Transportation Concurrency	City; VMC 11.70
Major Grading Permit	City; IBC, VMC Title 12, and Title 17
Civil Engineering Review	City; VMC Title 10, Title 11, and Title 14
Building, Fire, Mechanical and Electrical Permits	City; IBC, IMC, IFC, UPC, NEC, Washington State Energy Code, VMC Title 16, and Title 17

CFR = Code of Federal Regulations, CWA = Clean Water Act, Ecology = Washington State Department of Ecology, EFSEC = Washington State Energy Facility Site Evaluation Council, MTCA = Model Toxics Control Act, OSHA = Occupational Safety and Health Administration, NPDES = National Pollutant Discharge Elimination System, RCRA = Resource Conservation and Recovery Act, RCW = Revised Code of Washington, SEPA = Washington's State Environmental Policy Act, SMP = Shoreline Master Program, SWPPP = Stormwater Pollution Prevention Plan, VMC = Vancouver Municipal Code, WAC = Washington Administrative Code, WDFW = Washington Department of Fish and Wildlife, WDNR = Washington Department of Natural Resources, WISHA = Washington Industrial Safety and Health Act.

1.12.2 Federal Permits and Approvals

Generally applicable federal permits and regulations that would apply to the proposed Project are listed in Table 1-2. See Appendix A for additional information on federal permits and approvals. The Applicant would be responsible for complying with all applicable federal permits and approval processes.

Table 1-2 Federal Permits and Approvals

Permit or Approval	Agency and Regulations
Federal Permits/Approvals	
NEPA Compliance	USACE (federal lead agency[1] for this project); 42 USC 4321 and 40 CFR 1500-1508
ESA Section 7 Consultation	USACE in consultation with USFWS and NMFS; 16 USC 1531-1544 and 50 CFR 402
Magnuson Stevens Fisheries Conservation and Management Act	USACE in consultation with NMFS; 16 USC 1801-1883 and 50 CFR 600
Marine Mammal Protection Act (MMPA)	USACE in consultation with USFWS and NMFS; 16 USC 1361-1407, 50 CFR 18, and 50 CFR 216
Migratory Bird Treaty Act (MBTA)	USACE in consultation with USFWS; 16 USC 703, Executive Order 13186, and 50 CFR 21
Bald and Golden Eagle Protection Act	USACE in consultation with USFWS; 16 USC 668 and 50 CFR 22
National Historic Preservation Act (NHPA) Section 106 Review	USACE in consultation with DAHP and potentially affected Indian tribes; 54 USC 306108, 36 CFR PART 800, and 16 USC 470
Section 404 Permit (Section 404 of the CWA)	USACE; 33 USC 1251 et seq. and 33 CFR Parts 320-332
Section 10 Permit (Rivers and Harbors Act)	USACE; 33 USC 403 and 33 CFR 322
Private Aids to Navigation (PATON) Permit	USCG; 33 CFR 66 and 33 CFR 62
Hazardous Materials & Oil Transportation Regulations (Hazardous Material Transportation Act)	US Department of Transportation; 49 CFR 100-185
Maritime Procedures	USCG; 46 CFR 35 (Tank Vessels – Operations)
Maritime Transportation Security Act (MTSA) security plan	USCG; 33 CFR 101-107
Rail Security Regulations	TSA; 49 CFR 1520 and 49 CFR 1580
Facilities Transferring Oil or Other Hazardous Materials in Bulk	USCG; 33 CFR 154 Subpart E Vapor Control Systems and 33 CFR 154 Subpart F Response Plans for Oil Facilities
Oil and Hazardous Material Transfer Operations	USCG; 33 CFR 156
Discharge of Oil (“Sheen Rule”)	EPA; 40 CFR 110
Oil Pollution Prevention	40 CFR 112 Subpart A and Subsection 112.8 of Subpart B
EPCRA	EPA; 40 CFR 350-372
CERCLA	EPA; 42 USC 103
Pretreatment Section 307(b)	EPA; Section 307(b) of the Clean Water Act and 40 CFR 403

Notes:

[1] The Proposed Action requires both a federal CWA Section 10 Permit and a federal CWA Section 404 Permit, which are administrated by the USACE (Joint Public Notice NWS-2013-962). The potential issuance of these permits constitutes a federal action that requires the USACE, as the federal lead agency, to follow the requirements of NEPA. The federal NEPA process is separate from Washington’s SEPA process.

CFR = Code of Federal Regulations, CWA = Clean Water Act, DAHP = Washington State Department of Archaeology and Historic Preservation, EPA = US Environmental Protection Agency, ESA = federal Endangered Species Act, FR = Federal Register, NEPA = National Environmental Policy Act, NMFS = National Marine Fisheries Service, USACE = US Army Corps of Engineers, USC = United States Code, USCG = US Coast Guard, USFWS = US Fish and Wildlife Service

1.13 ORGANIZATION OF FINAL EIS

This Final EIS is organized into 10 separate chapters and has multiple technical appendices. Chapter 3 is further subdivided into 17 sections addressing specific resource topics. Additional details on the organization of the Final EIS chapters are presented below.

Chapter 1 Project Background and Purpose and Need	Chapter 1 provides background information on the proposed Project, and states the Project purpose and need. The chapter also outlines the steps undertaken to date in the SEPA review process, describes public, agency, and tribal involvement to date, and identifies federal, state, and local permits that would apply to the proposed Facility.
Chapter 2 Proposed Action and Alternatives	Chapter 2 provides detailed descriptions of the construction, operation, maintenance, and decommissioning activities proposed for the Facility. It explains the Proposed Action, provides an evaluation of alternatives to the Proposed Action, and describes the No Action Alternative. Applicant commitments and proposed best management practices are collated and presented here.
Chapter 3 Affected Environment, Impacts, and Mitigation Measures	Chapter 3 focuses on impacts that may occur to environmental resources from normal operations of the proposed Facility and associated rail and vessel transportation. For each specific resource, the chapter discusses the following: relevant regulations, the methods used to analyze impacts, the affected environment, potential impacts identified under the No Action Alternative and the Proposed Action, and suggested mitigation measures. Any significant unavoidable adverse impacts that remain after mitigation are identified.
Chapter 4 Crude Oil Safety Considerations, Potential Release Scenarios, and Impact Analysis	Chapter 4 focuses on the potential for and impacts from crude oil spills and associated fires and explosions. The chapter describes the types of accidents that could occur from various Facility elements or associated operations, and provides estimates of spill sizes and accident probabilities from onsite Facility elements and from associated rail and vessel transportation of crude oil. The chapter describes the regulatory framework for accident prevention, response, and liability, including spill prevention, contingency, and response plans that pertain to the proposed Facility and to rail and vessel operations locally, statewide, regionally, and nationally. Chapter 4 also describes the fate and behavior of spilled crude oil in the environment, including spill fate and trajectory modeling results, and describes impacts of crude oil spills, fires, and explosions to the human and natural environment.
Chapter 5 Cumulative Impacts	Chapter 5 describes potential cumulative impacts of the Proposed Action when combined with potential impacts from other past, present, and reasonably foreseeable future projects that could occur within similar geographic and temporal scopes. These projects include other projects in the vicinity of the Port, other projects in Washington state that could add trains to the rail system, or other projects on the Columbia River that could add vessels to the Columbia River navigation channel. Cumulative impacts are discussed for each resource analyzed in this Final EIS. Chapter 5 also includes a qualitative analysis of Project data related to crude oil extraction, refining, and end use, and the contribution of these activities to greenhouse gas emissions.
Chapter 6 References	Chapter 6 provides references to the literature cited throughout the Final EIS.
Chapter 7 List of Contributors	Chapter 7 identifies those who contributed to the preparation of the Final EIS.
Chapter 8 Glossary	The glossary defines many of the terms used in the Final EIS.
Chapter 9 Distribution List	The distribution list identifies organizations and individuals who were sent an electronic copy of the Final EIS.
Chapter 10 Comments and Responses on the Draft EIS	This chapter of the Final EIS describes the process by which comments to the Draft EIS were reviewed, categorized, evaluated, and responded to. The Draft EIS was revised in response to the comments received to create this Final EIS. This chapter includes a set of consolidated responses that address key issues raised during the comment period. Responses to individual comments received are included in Appendix R to this Final EIS.

1.14 CHANGES REFLECTED IN THE FINAL EIS

EFSEC issued the Draft EIS in November 2015, and relied upon some of the analysis in that document to develop this Final EIS. However, some information in the Draft EIS has been updated in this Final EIS. Revisions have been made to the Draft EIS to clarify details of the Proposed Action, respond to public and agency comments on the Draft EIS, provide additional information related to the analysis of impacts, and refine and present additional mitigation measures to address impacts.

In the Draft EIS, impacts were assigned "negligible", "minor", "moderate" or "major" ratings based on factors of magnitude, duration, and degree; impacts anticipated to be "moderate" or "major" were considered significant unavoidable impacts, and the other two categories as nonsignificant. The Final EIS expanded the factors considered in the impact assessment, and eliminated the subdivisions of nonsignificant impacts. This approach to impact assessment was modified based in part on agency, Applicant, and public comments received on the Draft EIS.

Additional technical analyses were conducted for several environmental resources/concerns in this Final EIS. The studies related to aquatic species (specifically, pertaining to impacts from vessel wakes) and earth resources (specifically, seismic hazards) and the resulting environmental impact assessment are described further in ES-6. The studies/reports related to cultural resources and air quality (diesel particulate matter and nitrogen dioxide) and the resulting environmental impact assessments are described in the respective environmental resource sections of Chapter 3.

Chapter 4 in particular has been supplemented with new information, commitments, and studies received from the Applicant in its updated ASC and disclosed during the EFSEC adjudication process. In addition, the following revisions have been made in that Chapter:

- More details on emergency response methods, resources, trainings, and planning gaps have been included.
- Both the rail and vessel spill risk analyses have been updated with more recent information.
- Crude oil spill fate and trajectory modeling was also performed (see Appendix F) and the results have been incorporated into the analyses of impacts in each of these sections.

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