



October 2023
SeaPort Sound Plant Modernization Project



Final Environmental Impact Statement

Prepared for SeaPort Sound Terminal, LLC



October 2023
SeaPort Sound Plant Modernization Project

Final Environmental Impact Statement

Prepared for
SeaPort Sound Terminal, LLC
4130 East 11th Street
Tacoma, Washington 98421

Prepared by
Anchor QEA, LLC
949 Market Street
Tacoma, Washington 98402

FACT SHEET

File Number

LU20-0107

Project Name

SeaPort Sound Plant Modernization Project

Project Proponent

SeaPort Sound Terminal, LLC

4130 East 11th Street

Tacoma, Washington 98421

Project Location

2628 Marine View Drive, Tacoma, Washington 98422

Summary of Proposed Action

The Proposed Action would provide flexibility to SeaPort Sound to respond to anticipated market demand by increasing tank capacity at the terminal to accommodate the distribution of low-carbon fuels. This increase in market demand is influenced by changes in legislation, such as the recently passed Washington House Bill 1091 for reducing the carbon intensity of road fuel. The Proposed Action would increase storage capacity by approximately 11% but is not seeking to increase any existing permit limits associated with permitted facility throughput and emissions as part of the Project. The Proposed Action includes demolishing the existing refinery equipment, boiler, and building; storage tanks; containment berm; and piping and replacing them with a new containment wall and renewable fuel-compatible storage tanks. Existing wastewater treatment equipment located south of the refinery demolition area would be replaced, including replacing the oil-water separator used for wastewater treatment. The Proposed Action also includes installing a new stormwater line parallel to and around an existing blocked storm line on the east side of the property.

Summary of Proposed Alternatives

The proposed alternatives evaluated in this Environmental Impact Statement (EIS) include a No Action Alternative (Alternative 1) and the Proposed Action (Alternative 2).

Requesting State Environmental Policy Act Lead Agency

City of Tacoma

Planning and Development Services

747 Market Street

Tacoma, Washington 98402

State Environmental Policy Act Responsible Official

Peter Huffman, Director

City of Tacoma Department of Planning and Development Services

Environmental Impact Statement Contact Person

Shirley Schultz, Principal Planner

City of Tacoma Department of Planning and Development Services

Further Actions

Not applicable

Phasing, If Any

Not applicable

Required Permits and Approvals

- Shoreline Substantial Development Permit (City of Tacoma)
- Building Permit (City of Tacoma)

Authors and Principal Contributors

The list of preparers can be found in Chapter 6.

Location of Background Data and Source Material

Background data and materials used for this Final EIS are listed in Chapter 5. Key documents used in this analysis include the following:

- *Study Report: Inventory of Greenhouse Gas Emissions SeaPort Sound Plant Modernization Project* (Appendix A)

Draft Environmental Impact Statement Dates

Issuance: November 10, 2022

Comments due: December 27, 2022

Date of Issuance for the Final Environmental Impact Statement

Issuance: October 26, 2023

Availability Statement

The Final EIS is available online at: www.cityoftacoma.org/SeaportPlantModernizationDEIS.

Printed copies of the Final EIS and supporting materials are available for review at no cost at the following locations:

City of Tacoma
Planning and Development Services
747 Market Street
Tacoma, Washington 98402

Email SeaportPlantModernizationDEIS@cityoftacoma.org or call (253) 591-5030 for office hours and to arrange the receipt of a copy of the Final EIS. Additional copies may be purchased for the cost of reproduction.

Tacoma Public Library Main Branch
1102 Tacoma Avenue South
Tacoma, Washington 98402

TABLE OF CONTENTS

Executive Summary.....	E- 1
1 Introduction	1
1.1 Background	3
1.2 Environmental Review Process.....	5
1.3 EIS Scope and Organization.....	6
2 Project Description and Alternatives	8
2.1 Purpose and Need	8
2.2 Existing Facility and Capacity.....	8
2.2.1 Terminal Throughput.....	12
2.2.2 Previous Permitting and SEPA Review	14
2.3 Market Fuel Mix Scenarios.....	16
2.3.1 Static Scenario	17
2.3.2 Central Scenario	18
2.3.3 State Goal Scenario.....	19
2.4 Alternative 1: No Action Alternative	20
2.5 Alternative 2: Proposed Action	20
2.5.1 Mitigation Measures and Best Management Practices	28
2.5.2 Direct Effects of Proposed Action	32
2.5.3 Secondary Effects of Proposed Action	32
2.5.4 Elements of the Environment Determined to Have No Probable Adverse Impact.	33
2.6 Other Alternatives Considered.....	33
3 Affected Environment, Impacts, and Mitigation Measures	34
3.1 Earth	34
3.1.1 Affected Environment.....	34
3.1.2 Potential Impacts from the No Action Alternative	38
3.1.3 Construction Impacts and Mitigation Measures from the Proposed Action	38
3.1.4 Long-Term Impacts and Mitigation Measures from the Proposed Action.....	39
3.2 Air.....	41
3.2.1 Affected Environment.....	41
3.2.2 Greenhouse Gas Emissions.....	44
3.2.3 Potential Impacts from the No Action Alternative	44
3.2.4 Construction Impacts and Mitigation Measures from the Proposed Action	46

3.2.5	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	47
3.3	Water.....	54
3.3.1	Affected Environment.....	54
3.3.2	Potential Impacts from the No Action Alternative	63
3.3.3	Construction Impacts and Mitigation Measures from the Proposed Action	64
3.3.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	66
3.4	Plants and Wildlife	71
3.4.1	Affected Environment.....	71
3.4.2	Potential Impacts from the No Action Alternative	82
3.4.3	Construction Impacts and Mitigation Measures from the Proposed Action	82
3.4.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	83
3.5	Energy and Natural Resources.....	89
3.5.1	Affected Environment.....	89
3.5.2	Potential Impacts from the No Action Alternative	91
3.5.3	Construction Impacts and Mitigation Measures from the Proposed Action	91
3.5.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	93
3.6	Archaeological, Historic, and Cultural Resources	95
3.6.1	Affected Environment.....	96
3.6.2	Potential Impacts from the No Action Alternative	98
3.6.3	Construction Impacts and Mitigation Measures from the Proposed Action.....	98
3.6.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	98
3.7	Environmental Health and Safety	98
3.7.1	Affected Environment.....	99
3.7.2	Potential Impacts from the No Action Alternative	103
3.7.3	Construction Impacts and Mitigation Measures from the Proposed Action	103
3.7.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	106
3.8	Land and Shoreline Use.....	110
3.8.1	Affected Environment.....	110
3.8.2	Potential Impacts from the No Action Alternative	117
3.8.3	Construction Impacts and Mitigation Measures from the Proposed Action	117
3.8.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	119
3.9	Transportation.....	121
3.9.1	Affected Environment.....	121
3.9.2	Potential Impacts from the No Action Alternative	124
3.9.3	Construction Impacts and Mitigation Measures from the Proposed Action	124

3.9.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	125
3.10	Public Services and Utilities.....	128
3.10.1	Affected Environment.....	128
3.10.2	Potential Impacts from the No Action Alternative	133
3.10.3	Construction Impacts and Mitigation Measures from the Proposed Action	134
3.10.4	Long-Term Impacts and Mitigation Measures from the Proposed Action.....	137
4	Cumulative Effects	141
4.1	Methodology	141
4.2	Past, Present, and Reasonably Foreseeable Future Projects	141
4.3	Potential Cumulative Effects	143
4.3.1	Earth.....	143
4.3.2	Air	144
4.3.3	Water.....	145
4.3.4	Plants and Wildlife	147
4.3.5	Energy and Natural Resources.....	148
4.3.6	Archaeological, Historic, and Cultural Resources.....	148
4.3.7	Environmental Health and Safety.....	149
4.3.8	Land and Shoreline Use	149
4.3.9	Transportation	150
4.3.10	Public Services and Utilities.....	151
5	References	152
6	List of Preparers	165

TABLES

Table ES-1	Summary of Construction, Long-Term, Secondary, and Cumulative Impacts for Alternatives.....	ES-11
Table 2-1	SeaPort Sound Terminal Actual Facility Throughput by Year.....	14
Table 2-2	SeaPort Sound Terminal Actual Product Throughput by Type (Barrels)	14
Table 2-3	Road Fuels	16
Table 2-4	PADD 5 2016–2020 Market Fuel Mix.....	17
Table 2-5	Grading Activities Summary	27
Table 2-6	Impervious Surfaces Summary.....	27
Table 3-1	Predicted Road Fuels Off-Site Emissions Shares.....	52

Table 3-2	State-Listed and Regulated Bird Species Known or Likely to Occur in the Study Area.....	76
Table 3-3	Total Killer Whale Sightings and SRKW Sightings in Elliott Bay, Commencement Bay, Nisqually Estuary, and San Juan Islands, 2018–2022 (Orca Network 2023).....	81
Table 3-4	Products Stored On Site and National Fire Protection Association Rating.....	99
Table 3-5	Cleanup Sites on Parcels Adjacent to the Project Site.....	102
Table 3-6	Population by Race.....	116
Table 3-7	Household Income	117
Table 4-1	Present and Reasonably Foreseeable Future Projects.....	142

FIGURES

Figure 1-1	Site Vicinity Map	2
Figure 2-1	Site Map.....	10
Figure 2-2	Existing Conditions Site Plan.....	11
Figure 2-3	Static Market Fuel Mix Scenario.....	18
Figure 2-4	Central Market Fuel Mix Scenario	19
Figure 2-5	State Goal Market Fuel Mix Scenario	20
Figure 2-6	Proposed Conditions Site Plan.....	23
Figure 2-7	Available Shoreline Restoration Areas.....	24
Figure 3-1	Geologic Hazards	37
Figure 3-2	Cumulative Emissions Associated with Project Construction and SeaPort Sound Terminal Operation	49
Figure 3-3	Range of Secondary Off-Site Emissions Under the Action and No Action Alternatives.....	51
Figure 3-4	Water Study Area	55
Figure 3-5	Site Drainage	60
Figure 3-6	Plants and Wildlife Study Area	73
Figure 3-7	Zoning Map.....	112
Figure 3-8	Land Use Designations	114
Figure 3-9	Shoreline Designations.....	115
Figure 3-10	Public Services and Utilities Study Area	130

APPENDICES

Appendix A	Study Report: Inventory of Greenhouse Gases – SeaPort Sound Plant Modernization Project
Appendix B	Distribution List
Appendix C	Cost of GHG Mitigation for the SeaPort Sound Plant Modernization Project Memorandum
Appendix D	Notices of Construction Summary
Appendix E	Project Laws and Regulations
Appendix F	Species Included on the Priority Habitats and Species List for Pierce County
Appendix G	Transportation Assessment – SeaPort Sound Terminal Modernization Project
Appendix H	Response to Comments

ABBREVIATIONS

µg/m ³	microgram per cubic meter
ANT	Advanced Notice of Oil Transfer
AQCR	Air Quality Control Region
ASCE	American Society of Civil Engineers
AST	aboveground storage tank
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BMP	best management practice
BPC	Washington State Board of Pilotage Commissioners
BTU	British thermal unit
CAP	cleanup action plan
CB N/T	Commencement Bay Nearshore/Tideflats
CFR	<i>Code of Federal Regulations</i>
City	City of Tacoma
Commerce	Washington State Department of Commerce
CSWGP	Construction Stormwater General Permit
cy	cubic yard
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EMS	emergency medical services
EPA	U.S. Environmental Protection Agency
ERTV	emergency response towing vehicle
ESA	Endangered Species Act
FSID	Facility Site Identification
GHG	greenhouse gas
GRP	geographic response plan
HB	Washington House Bill
ISIP	Industrial Stormwater Individual Permit
IWDP	Industrial Wastewater Discharge Permit
kWh	kilowatt hour
LNG	liquified natural gas
MHW	mean high water
MLLW	mean lower low water
MTCA	Model Toxics Control Act
NAAQS	National Ambient Air Quality Standards
NAVD88	North American Vertical Datum of 1988

NFA	No Further Action
NFPA	National Fire Protection Association
NOAA Fisheries	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NOC	Notice of Construction
NPDES	National Pollutant Discharge Elimination System
NWACP	Northwest Area Contingency Plan
PADD	Petroleum Administration for Defense District
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PHS	Priority Habitats and Species
PM _{2.5}	fine particulate matter
PRC	Primary Response Contractor
Project	SeaPort Sound Plant Modernization Project
PSCAA	Puget Sound Clean Air Agency
PSE	Puget Sound Energy
RCW	Revised Code of Washington
RD	refined diesel
RFS	Renewable Fuel Standard
RG	refined gasoline
RI/FS	remedial investigation/feasibility study
SeaPort Sound	SeaPort Sound Terminal, LLC
SEPA	Washington State Environmental Policy Act
SIP	State Implementation Plan
SMP	Shoreline Master Program
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SRKW	southern resident killer whale
SWPPP	stormwater pollution prevention plan
tCO ₂ e	metric tons carbon dioxide equivalent
TFD	Tacoma Fire Department
Tideflats Runner	Pierce Transit Tideflats Runner
TMC	Tacoma Municipal Code
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
EIA	U.S. Energy Information Administration
USFWS	U.S. Fish and Wildlife Service

VTC	Vessel Traffic Center
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WSP	Washington State Patrol

Executive Summary

Introduction

SeaPort Sound Terminal, LLC (SeaPort Sound), is proposing the SeaPort Sound Terminal Plant Modernization Project (Project) at the SeaPort Sound Terminal on the Hylebos Waterway in Tacoma, Washington. The Project will remove existing refinery infrastructure and replace it with new storage tanks, piping, and associated equipment, including wastewater treatment infrastructure upgrades, that will meet the functional, operational, and environmental needs at the terminal. The Project will increase the storage capacity at the terminal for low-carbon fuels to improve SeaPort Sound's flexibility in response to the increasing market demand for fossil fuel alternatives.

The City of Tacoma (City) is the Washington State Environmental Policy Act (SEPA) lead agency. On February 4, 2021, the City issued a Determination of Significance for the Project based upon the unknown and probable significant adverse impacts from the increased storage of fossil fuels in a location that is proximate to human habitation, that is adjacent to sensitive critical habitat, and that is subject to liquefaction and other seismic risks. On November 10, 2022, the City issued a Draft SEPA Environmental Impact Statement (EIS) to identify and evaluate environmental impacts associated with a set of alternatives for the Project. This EIS has been prepared to meet the SEPA procedural requirements outlined in Revised Code of Washington Chapter 43.21C and Tacoma Municipal Code (TMC)¹ Chapter 13.12 and has been updated to respond to public comments received during the public comment period, which ended on December 27, 2022.

Background

SeaPort Sound is a storage and distribution company for bulk liquids, including fossil and renewable fuels, providing bulk liquids to the maritime and land-based consumer markets in the Pacific Northwest. The property has been used for various industrial purposes since the 1940s, including petroleum refining and storage. Refining activities were discontinued at the property around 2002 due to market factors. The first tank of biodiesel at the SeaPort Sound Terminal was installed in 2007, and by the end of the year, a permit application had been submitted to the Puget Sound Clean Air Agency (PSCAA) to allow SeaPort Sound to expand into the storage and throughput of starch-based biofuels (i.e., ethanol). In 2017, SeaPort Sound became a provider of renewable diesel, which would provide end users with access to advanced biofuels.

SeaPort Sound provides bulk liquid products to land-based consumer markets in the Pacific Northwest and to the overland freight transportation, road paving, and manufacturing industries. A portion of SeaPort Sound's business currently involves providing fueling support to the maritime industry in Puget Sound. Although trucks are more frequently used to transport products to and from the site,

¹ The TMC is reliant on national and state authority and laws (e.g., seismic codes and flood regulations).

marine transfers represent the largest single-volume transfers at the terminal. Storage and product flexibility is required at the terminal to support maritime fueling because the vessels that SeaPort Sound serves vary in size and fuel types. Additionally, because the maritime customers determine when vessel fueling is needed, use of SeaPort Sound's facilities routinely changes depending on several factors, including vessel type and number.

SeaPort Sound is well positioned as a distributor in the region's renewable fuels market due to its location, infrastructure, and client base. It is expected that renewable fuels will continue to displace traditional fuels as market demand for renewables increases; notably, in response to the recent passage of Washington House Bill (HB) 1091, "Washington Clean Fuels Program," in 2021 ("Reducing greenhouse gas emissions by reducing the carbon intensity of transportation fuel"), which builds upon the California Low-Carbon Fuel Standard and Oregon Clean Fuels programs.

The Project proposes an approximately 11% increase of existing storage capacity to improve flexibility for providing customers with a variety of products, including renewable and biofuels. This increase in storage capacity will allow SeaPort Sound to store a greater variety of products (namely renewable fuels and biofuels) to better serve its customers by being more responsive to fluctuations in market demand. SeaPort Sound's throughput is regulated by facility permits that limit product throughput volumes and emissions. SeaPort Sound is not seeking permit modifications to increase its current authorizations and will continue to operate within the permitted throughput volume and emissions limits after the Project is completed.

SeaPort Sound is focused on maintaining its progress toward enhancing the regional availability of biofuels. While market demands may shift and impact fuel and fuel blends, SeaPort Sound sees the Washington Clean Fuels Program as an opportunity to further serve the community and help meet the growing needs of advanced biofuels in the marketplace. Ultimately, the use of the assets proposed by SeaPort Sound will be driven by market demand and equipment design. Compliance with stringent regulatory and operating requirements makes SeaPort Sound's operations safe, reliable, efficient, and responsible. With the state acceptance of the Washington Clean Fuels Program, SeaPort Sound believes there is a fast-approaching logistical need for increasing regional capacity to meet the demand for biofuels and low-carbon-intensity products.

Purpose and Need

The SeaPort Sound Terminal is operated for the distribution of bulk liquids, including fossil and renewable fuels, in response to market demand. The purpose of the Project is to provide SeaPort Sound operational flexibility and modernized facilities to better meet increasing market demand for renewable/low-carbon fuels. This increase in market demand is influenced by changes in legislation, such as the recently passed HB 1091 for reducing the carbon intensity of road fuel. The Project would increase storage capacity for low-vapor-pressure bulk liquids including diesel, biodiesel, renewable

diesel and feedstocks, and fuel oil. Storage capacity at the site would increase by approximately 11%, but SeaPort Sound is not seeking to increase any permit limits associated with permitted facility throughput and emissions as part of the Project.

To accomplish the Project purpose, the Project will modernize the terminal by removing aging refinery infrastructure and replacing it with upgraded facilities. Removing the aging refinery infrastructure will remove on-site equipment capable of producing approximately 2 million barrels (84,000,000 gallons) of product per year, or approximately 89,000 metric tons carbon dioxide equivalent (tCO_{2e}) per year of direct emissions from refinery operations. In 2002, SeaPort Sound decommissioned the refinery equipment, and in 2012, PSCAA issued a prohibition on operating the refining equipment as an enforceable permit condition per Notice of Construction (NOC) Order of Approval No. 10325. The refinery infrastructure will be replaced with new storage tanks, piping, and associated equipment and safety and environmental protection measures, including upgraded wastewater treatment systems to meet the functional, environmental, and operational needs at the terminal.

The Project also includes replacing existing stormwater infrastructure that receives and conveys off-site stormwater that is outside of the purview of this facility's National Pollutant Discharge Elimination System permit.

Alternatives Evaluated

The proposed alternatives evaluated in this EIS include a No Action Alternative (Alternative 1) and the Proposed Action (Alternative 2).

Alternative 1: No Action Alternative

Under Alternative 1, the No Action Alternative, the Project would not be constructed, and SeaPort Sound would continue to operate the facility using its existing infrastructure without necessary upgrades. The existing unused refinery equipment would remain in place. Maintaining the existing infrastructure may require SeaPort Sound to adjust the mix of bulk liquids stored at the terminal or modify existing tanks to hold different bulk liquids in response to market demand. This EIS considers three potential fuel market scenarios (described in the Market Fuel Mix Scenarios section). Under the No Action Alternative, throughput and mix of bulk products would continue to fluctuate within the terminal's permitted limits based on market and customer demand. Similarly, the demand for specific products would continue to fluctuate, and terminal infrastructure may require future modifications to accommodate changes in the bulk liquids marketplace.

Alternative 2: Proposed Action

Under Alternative 2, Proposed Action, a portion of the SeaPort Sound Terminal would be upgraded to provide operational flexibility and modernized facilities to better meet increasing market demand

for renewable/low-carbon fuels. This includes demolishing the existing refinery at the terminal and replacing it with fixed cone roof storage tanks and upgraded wastewater and stormwater infrastructure. The Proposed Action would increase existing bulk liquids storage capacity at the SeaPort Sound Terminal by up to 11% to accommodate low-vapor-pressure bulk liquids including diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. However, SeaPort Sound is not seeking to increase any permit limits associated with permitted facility throughput and emissions as part of the Project.

The Proposed Action would require demolition and construction activities within the 200-foot S-10 Port Industrial Area shoreline district. A portion of the work would occur within the 50-foot marine buffer but would be limited to replacing equipment and stormwater utilities within the footprint of existing development. All activities would be completed within existing developed areas that are actively used to support the existing industrial property use. No in-water work would occur as part of the Proposed Action. Construction would be expected to begin in 2025, with operations beginning in 2026.

The Proposed Action would include the following elements:

- Demolishing existing refinery equipment including stacks, towers, pumps and electrical systems, a boiler and building, seven storage tanks, piping, and a containment berm
- Installing eight new storage tanks, two new process water tanks, and piping within a 4-foot-high concrete containment wall around the impervious new storage tank area
- Demolishing and removing the existing wastewater treatment equipment, including replacing the oil-water separator (specifically, a coalescing plate separator with containment) and removing a rotating biological disk, a water clarifying unit, and an induced aeration basin
- Upgrading wastewater treatment system equipment as practicable using best available technologies (i.e., surge pond, aeration pump)
- Filling and abandoning in place the existing blocked community stormwater line on the east side of the property and diverting stormwater through a realigned pipe to be constructed parallel to the existing pipe that would discharge through the existing outfall; the existing outfall would be retained, and no outfall modifications are proposed. This realigned stormwater line would handle stormwater that originates from off-site right-of-way areas along Marine View Drive.
- Installing new manholes along the new stormwater line

Market Fuel Mix Scenarios

The No Action and Proposed Action alternatives are each evaluated under three market fuel mix scenarios: Static, Central, and State Goal. A range of scenarios was selected for the purposes of this EIS to assess the potential impacts of future variable market conditions. Each market fuel mix

scenario includes a future potential market mix of six road fuels that SeaPort Sound might store and distribute through the terminal. Road fuels are used in this analysis because they represent 80% of total product volume distributed through the terminal and are subject to recent regulations.

The three scenarios are intended to cover a range of future, additional renewable fuels market penetration from very high (State Goal scenario) to moderate (Central scenario) to none (Static scenario). The market fuel mix scenarios have been developed consistently with fuel production volumes reported by the U.S. Energy Information Administration (EIA) to the regional scale.

Static Scenario

The **Static** scenario presumes continuation of the status quo fuel mix. This is equivalent to a scenario in which the new Washington Clean Fuels Program is struck down in the courts. In this scenario, the market fuel mix would remain unchanged throughout the analysis period. This is the least likely of the three market fuel mix scenarios because it would require a lawsuit to be filed to reverse existing legislation. No lawsuit has been filed, and the outcome of a potential lawsuit is uncertain. However, this scenario is being included to present a range of market fuel mix scenarios for consideration in this EIS.

Central Scenario

The **Central** scenario assumes that Petroleum Administration for Defense District 5 fuel mix ratios change over time according to legislation that has been enacted. This is the same approach used by EIA for its annual energy forecasts. In Washington State, the mix of road fuels will change in response to HB 1091, the recently passed Washington Clean Fuels Program. The Washington Clean Fuels Program requires that the average carbon intensity of road fuels delivered in Washington State lower by up to 10% as of 2033 and by 20% as of 2038. Use of renewable fuels is expected to increase as a result of HB 1091. Using these values, year-by-year changes in the fuel mix can be forecasted through 2038. After 2038, this scenario assumes that the fuel mix does not change further because no other changes are currently legislated.

State Goal Scenario

The **State Goal** scenario is derived from the "Transport Fuels" scenario constructed for the Washington State Department of Commerce's (Commerce's) *2021 State Energy Strategy* (Commerce 2021). This scenario posits less electrification of transportation than other state energy strategy scenarios, instead achieving greenhouse gas (GHG) reduction targets by substituting biofuels and synthetic fuels for petroleum products. Commerce's analysis provides absolute forecast quantities of both biofuels and synthetic fuels in 5-year increments from 2025 to 2050. To produce the gasoline substitute and diesel substitute quantities needed for analysis, Commerce's synthetic

fuels and biofuels forecasts were summed and then reallocated to match the ratio of gasoline- and diesel-like fuels in SeaPort Sound's bulk liquid mix.

Mitigation Measures and Best Management Practices

The following are mitigation measures and best management practices (BMPs; using the numbering MM-#) that will be used to address potential impacts from the Proposed Action:

Permit Compliance

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.

Project Design Features

- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City of Tacoma (City) development and seismic code requirements and state aboveground storage tank secondary containment and fire protection requirements per Washington Administrative Code (WAC) 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 *Code of Federal Regulations* 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-6:** The Project will be designed so that any contact water generated during facility operation will be treated and managed in compliance with existing regulations.
- **MM-7:** The current on-site wastewater treatment system will be replaced with modern equipment to reduce electricity consumption at the facility.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.
- **MM-9:** All work will occur in the footprint of existing development and will not disturb any existing shoreline vegetation or habitat.

Construction Best Management Practices

- **MM-10:** SeaPort Sound will obtain a Construction Stormwater General Permit (CSWGP) from the Washington State Department of Ecology (Ecology) for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and other construction water discharges. SeaPort Sound will prepare and implement a stormwater pollution prevention plan (SWPPP), with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.
- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.
- **MM-13:** Additional security patrols will be provided, and all work areas will be fenced to prevent public access during construction. The Project site will continue to comply with its Facility Security Plan requirements.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-15:** Water that is used to clean decommissioned refinery equipment prior to removal from the site will be treated and disposed of properly.
- **MM-16:** All electrical and natural gas connections to the decommissioned refinery equipment will be properly disconnected and secured.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-19:** Unused equipment on the Project site that is demolished (e.g., refinery and wastewater treatment equipment) will be properly disposed of or recycled at an approved off-site facility.
- **MM-20:** Construction will occur during times allowed by the City's noise ordinance in TMC Title 8 or an approved extension.
- **MM-21:** Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable.
- **MM-22:** Erosion control measures will be implemented during construction per the Temporary Erosion Control Plan to be prepared for the Project.

- **MM-23:** The contractor will be responsible for the preparation of a spill plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-25:** The construction contractor will be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils or groundwater potentially encountered during excavation.
- **MM-26:** SeaPort Sound will provide asbestos and lead abatement requirements and procedures to the contractor prior to construction. Asbestos and other hazardous wastes used or encountered during construction will be properly disposed of in accordance with appropriate regulations.
- **MM-27:** An Inadvertent Discovery Plan will be prepared and would be followed in the event of a discovery of cultural resources during construction.

Operational Safety Plans and Procedures

- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's Industrial Stormwater Individual Permit; Industrial Wastewater Discharge Permit; Spill Prevention, Control, and Countermeasure (SPCC) Plan; *SeaPort Sound Terminal LLC Facility Contingency Plan*; Facility Security Plan; Emergency Response Plans; and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.

- **MM-33:** SeaPort Sound’s vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.

Additional Mitigation

- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City’s Urban Forestry Program. This mitigation measure is consistent with the City’s *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.
 - Purchase third-party-verified GHG offsets.
- **MM-35:** SeaPort Sound will install tanks within the proposed expansion area with fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require a separate SEPA review and an NOC issued through PSCAA. The NOC applicability for the Proposed Action will be completed after the EIS is complete as part of project permitting.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-37:** There will be annual reporting of established baseline capacity, throughput, and facility emissions per regulations in TMC 13.06.080.F.
- **MM-38:** To support and promote methods for reducing marine vessel risks to southern resident killer whales (SRKWs), SeaPort Sound will include language in its *Terminal Information Manual*, which is distributed to marine operators calling at the terminal. The language will encourage vessel operators to hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional Whale Report Alert System and emerging resources, such as the upcoming Cetacean Desk of the Vessel Traffic Service in U.S. Coast Guard’s Puget Sound sector, to slow down near SRKWs in near real time. It will also

encourage vessel operators to minimize the distances that secondary and service vessels (e.g., escorts and fueling) travel and/or to choose routes and timing that reduce overlap with SRKW foraging areas.

- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

Summary of Impacts and Mitigation

Table ES-1 provides a summary of benefits and impacts for the alternatives, including construction, long-term, secondary (not a direct result of the Proposed Action), and cumulative (those that could result in the combination of effects from individual project actions occurring over time) benefits and impacts. These impacts are described in more detail following the table and in Chapter 3. The EIS did not identify any significant adverse impacts that cannot be mitigated.

Table ES-1

Summary of Construction, Long-Term, Secondary, and Cumulative Impacts for Alternatives

Element of the Environment	Type of Impact	Alternative 1: No Action	Alternative 2: Proposed Action	Mitigation Measures and Best Management Practices (MM-#)
Earth	Construction	No Adverse Impact	Minor Impact	1, 10, 18, 22
	Long-Term	Minor Impact	Minor Impact	1, 2, 3, 4, 5, 28, 29, 30, 31, 32, 33
	Secondary	No Adverse Impact	No Adverse Impact	
	Cumulative	Minor Impact	Minor Impact	1, 2, 3, 4, 5, 10, 18, 28, 29, 30, 31, 32, 33
Air	Construction	No Adverse Impact	Minor Impact	1, 14, 17, 18, 26, 34, 36, 39
	Long-Term	Minor Impact	Minor Impact	1, 2, 8, 29, 34, 35, 37
	Secondary	Minor Impact	Minor Impact	
	Cumulative	No Adverse Impact	Minor Impact/ Minor Benefit	1, 2, 8, 14, 17, 18, 26, 29, 34, 35, 36, 37, 39
Water	Construction	No Adverse Impact	No Adverse Impact	1, 10, 11, 12, 14, 15, 23
	Long-Term	No Adverse Impact	No Adverse Impact/ Minor Benefit	1, 2, 3, 4, 5, 6, 7, 8, 28, 29, 30, 31, 32, 33
	Secondary	Minor Impact	Minor Impact	
	Cumulative	Minor Impact	No Adverse Impact/ Minor Benefit	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15, 23, 28, 29, 30, 31, 32, 33
Plants and Wildlife	Construction	No Adverse Impact	No Adverse Impact	1, 10, 11, 12, 22, 23
	Long-Term	No Adverse Impact	No Adverse Impact	1, 2, 3, 4, 5, 6, 9, 28, 29, 30, 31, 32, 38
	Secondary	Minor Impact	Minor Impact	
	Cumulative	No Adverse Impact	Minor Impact	1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 22, 23, 28, 29, 30, 31, 32, 38

Element of the Environment	Type of Impact	Alternative 1: No Action	Alternative 2: Proposed Action	Mitigation Measures and Best Management Practices (MM-#)
Energy and Natural Resources	Construction	No Adverse Impact	Minor Impact	1, 16, 17, 19, 24, 36
	Long-Term	Minor Impact	Minor Impact/ Minor Benefit	1, 7, 8
	Secondary	Minor Impact	Minor Impact	
	Cumulative	No Adverse Impact	No Adverse Impact	1, 7, 8, 16, 17, 19, 24, 36
Archaeological, Historic, and Cultural Resources	Construction	No Adverse Impact	No Adverse Impact	1, 27
	Long-Term	No Adverse Impact	No Adverse Impact	Not applicable
	Secondary	No Adverse Impact	No Adverse Impact	
	Cumulative	No Adverse Impact	No Adverse Impact	1, 27
Environmental Health and Safety	Construction	No Adverse Impact	Minor Impact	1, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 36, 39
	Long-Term	No Adverse Impact	No Adverse Impact	1, 2, 3, 4, 5, 6, 7, 8, 9, 28, 29, 30, 31, 32, 33, 34, 35
	Secondary	No Adverse Impact	Minor Impact	
	Cumulative	Minor Impact	Minor Impact	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 39

Element of the Environment	Type of Impact	Alternative 1: No Action	Alternative 2: Proposed Action	Mitigation Measures and Best Management Practices (MM-#)
Land and Shoreline Use	Construction	No Adverse Impact	No Adverse Impact	1, 13, 17, 18, 20, 21, 24, 39
	Long-Term	No Adverse Impact	No Adverse Impact	1, 28, 32, 33, 34
	Secondary	No Adverse Impact	No Adverse Impact	
	Cumulative	No Adverse Impact	No Adverse Impact	1, 13, 17, 18, 20, 21, 24, 28, 32, 33, 34, 39
Transportation	Construction	No Adverse Impact	No Adverse Impact	1, 21, 24, 36, 39
	Long-Term	No Adverse Impact	No Adverse Impact	1, 28, 33, 35, 38
	Secondary	No Adverse Impact	No Adverse Impact	
	Cumulative	Minor Impact	Minor Impact	1, 21, 24, 28, 33, 36, 38, 39
Public Services and Utilities	Construction	No Adverse Impact	No Adverse Impact	1, 11, 12, 13, 24, 39
	Long-Term	No Adverse Impact	No Adverse Impact	1, 2, 3, 4, 5, 28, 29, 30, 31, 32, 33
	Secondary	Minor Impact	Minor Impact/Minor Benefit	
	Cumulative	Minor Impact	Minor Impact	1, 2, 3, 4, 5, 11, 12, 13, 24, 28, 29, 30, 31, 32, 33, 39

Earth

Construction Impacts

- **No Action Alternative:** The No Action Alternative would have no impacts on earth resources from construction because no construction would occur.
- **Proposed Action:** Construction of the Proposed Action would result in temporary and localized impacts on earth resources, primarily consisting of the use of imported fill material during construction. During construction, because of the potential for soils with petroleum or other contaminants to be encountered, the contractor will have soils tested and disposed of at an approved off-site disposal facility. A contaminated media management plan will be developed to address the characterization, segregation, and disposal of any contaminated soils encountered during excavation. Due to the implementation of BMPs during construction, including erosion control BMPs, it is expected that impacts on earth resources would be minor.

Long-Term Impacts

- **No Action Alternative:** In the long term, the No Action Alternative would result in minor impacts on earth resources, with potential impacts being nominally greater than the Proposed Action because infrastructure would not be replaced or upgraded to current building code standards.
- **Proposed Action:** Long-term impacts as a result of the Proposed Action from potential geologic hazards are expected to be minor due to safety upgrades and adherence to permit and regulatory requirements, such as compliance with International Building Code Standards, use of modern City seismic and development codes, federal secondary containment requirements, and use of modern infrastructure and equipment. Unforeseen emergencies such as a spill could also impact earth resources, but these impacts are also expected to be minor due to the implementation of emergency shutdown protocols in place to quickly respond in the event of an emergency per the *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020).

Secondary Impacts

- No secondary impacts on local earth resources are anticipated from the No Action Alternative or Proposed Action.

Cumulative Effects

- **No Action Alternative:** Some short-term increases in risk of erosion could occur from other past, present, and reasonably foreseeable future projects, mainly from construction activities.

In addition, the construction and operation of new infrastructure from nearby projects could cause increases in risk of exposure to geological hazards.

- **Proposed Action:** There may be some minor impacts on earth resources, mainly during construction of the Proposed Action and other construction projects in the area, and negligible increases in risk of exposure to geologic hazards that would be addressed through construction BMPs. This is not expected to result in a cumulatively significant impact.

Air

Construction Impacts

- **No Action Alternative:** The No Action Alternative would have no impacts on air from construction because no localized construction emissions would occur.
- **Proposed Action:** The construction of the Proposed Action would include large machinery and equipment such as excavators, front-end loaders, welders, and forklifts. Construction impacts and emissions associated with construction equipment are expected to be minor because they would be short-term and limited in duration. On-site GHG emissions from construction equipment are anticipated to total approximately 221 tCO₂e. BMPs would be implemented during construction to avoid or minimize potential impacts on air, such as limiting idling of construction equipment when not in use, using biofuels when practicable, using dust suppression equipment during grading to reduce potential dust emissions, and periodically checking equipment to ensure that it is in good operational condition.

Long-Term Impacts

- **No Action Alternative:** Long-term impacts on air from the No Action Alternative are expected to be minor because the terminal would continue to operate in compliance with current permits and regulations. Emissions control measures implemented during operation to address potential impacts on air would also continue to occur. On-site GHG operating emissions are anticipated to be approximately 291,900 tCO₂e under the No Action Alternative for the analysis period from 2024 through 2063.
- **Proposed Action:** Operational emissions from the Proposed Action would only slightly increase compared to the No Action Alternative when modeling facility operations to expand proportionately to the new tank capacity by 2033 (see Appendix A). This is because the permitted throughput would not increase, and on-site operations would remain largely similar to the No Action Alternative. Operational emissions under the Proposed Action are different than the No Action Alternative because facility equipment will be replaced, and storage capacity will be expanded. Emissions at the facility are largely unaffected by the quantity of

renewable versus fossil fuels in the throughput product mix because emissions associated with storage make up a relatively small part of overall facility emissions. Emissions from the fuel streams passing through the plant are considered secondary effects from the terminal. The new tanks will be used to store fuel streams for transfer and will not be used to produce or refine any products. Therefore, operations emissions would be largely the same under all market fuel mix scenarios. On-site GHG emissions from operation of the Proposed Action are anticipated to result in an approximately 16,800 tCO_{2e} increase in GHG emissions compared to the emissions anticipated under the operation of the No Action Alternative over the analysis period from 2024 through 2063 (operating emissions would be approximately 291,900 tCO_{2e} under the No Action Alternative and approximately 308,700 tCO_{2e} under the Proposed Action).

Technologies that would continue to be in place at the facility during operation of the Proposed Action to control emissions and odors include a bottom-load truck rack that vacuums emissions and returns them to the storage tanks, floating roofs in some existing tanks (floating roof tanks are not proposed as part of the Proposed Action), a vapor detection system for propane loading, vapor demisters, a blower that pulls vapors from asphalt oil trucks and processes them through a vapor control device and carbon filter, and a marine vapor combustion unit that is used during product transfers. PSCAA would also conduct regular inspections to ensure compliance and that no unacceptable emissions or odors have been identified that would require further control. Additionally, the facility meets the California Bay Area Air Quality Management District (BAAQMD) definition for Best Available Control Technology (BACT).² Therefore, long-term air impacts from operation of the Proposed Action are anticipated to be minor.

Secondary Impacts

- Secondary impacts on air from the Proposed Action result from off-site transportation of the throughput products from their point of origin to their destination and the combustion or consumption of the products, similar to the No Action Alternative. As a third-party storage and distribution terminal, SeaPort Sound does not extract or refine feedstock materials for the products that it holds in inventory. Changes at the SeaPort Sound Terminal are unlikely to impact the regional demand for these products or the manner in which those products are manufactured. Ultimately, combustion of fuels or consumption of materials sold to customers is based on market demand and is expected to occur within the greater fuels marketplace

² The facility's infrastructure currently meets and will continue to meet the California Air Resources Board, BAAQMD's definition for BACT. BACT is a pollution control standard mandated by the Clean Air Act and administered by the U.S. Environmental Protection Agency (EPA), though more stringent standards may be adopted by the local Air Quality Control Region (AQCR). The BACT standard determines what air pollution control technology must be used to control the emission levels of a specific pollutant to its specified legal limit. The BAAQMD's BACT standards are among the most restrictive air pollution controls and apply to similar terminals in California's Bay Area.

regardless of SeaPort Sound's actions due to the relative inelasticity of demand for fuel products. The Proposed Action may reduce secondary off-site emissions associated with the transport of fuel products if it is providing more efficient pathways between manufacturers and consumers.

Under both alternatives, regional population growth will likely continue, potentially leading to an increase in market demand for fuel products and the need to transport them via SeaPort Sound and its competitors (OFM 2021). Using modeling, the predicted quantities of off-site, secondary GHGs generated by those external users who combust products handled by SeaPort Sound would increase by approximately 9% under each market fuel mix scenario. This value is not an increase in total global GHG emissions. It is only an increase in the share of fuels underlying global GHG emissions that would pass through SeaPort Sound under the Proposed Action.

Increased use of renewable and biofuel alternatives is expected to reduce GHG emissions over time, particularly in this region where the use of renewable and biofuel alternatives is more encouraged through policymaking. Under the Central and State Goal scenarios, as compared to the Static scenario, there may be a minor benefit to air as more carbon-intensive road fuels continue to be offset by renewable and biofuels. It is expected that under the Proposed Action, SeaPort Sound will be better equipped to provide the flexibility to offer an expanded inventory of renewable and biofuel products as the demand for these increases. Overall, the Proposed Action is anticipated to have minor secondary impacts on air compared to the No Action Alternative. As described in the previous paragraphs, secondary impacts are market-driven and associated with off-site actions that would occur independently of any changes to the SeaPort Sound Terminal's capacity.

Cumulative Effects

- **No Action Alternative:** There could be short- and long-term increases in emissions as a result of construction and operation of nearby projects. However, no construction would occur under the No Action Alternative, and the aging refinery infrastructure and wastewater treatment system would remain in place. Under the No Action Alternative, the terminal will continue to operate similar to existing conditions with fluctuations of on-site emissions.
- **Proposed Action:** Construction of the Proposed Action may contribute to local short-term increases in emissions if multiple projects are undergoing construction simultaneously. However, the Proposed Action would occur within an active industrial facility, with impacts that are typical of the surrounding industrial setting, and BMPs would avoid or minimize potential impacts during construction of the Proposed Action.

The Proposed Action will result in a minor increase in on-site emissions to support operations. Minor cumulative adverse impacts on long-term air quality could also occur with the implementation of present and reasonably foreseeable future projects. The Proposed Action, under the Central and State Goal scenarios, is anticipated to carry a greater quantity of renewable and biofuels through the site to the local and regional market, which is consistent with the Washington Clean Fuels Program goals toward reducing statewide GHG emissions through low-carbon alternatives. Mitigation measures consistent with the City's *2030 Climate Action Plan goals* (City of Tacoma 2021a) are also proposed to offset potential air quality impacts from construction and operation. Therefore, the Proposed Action could contribute to minor cumulative effects on air quality.

The Proposed Action would result in minor benefits to air quality under the Central and State Goal scenarios, each of which would result in a decrease in emissions over time relative to the 2016 to 2020 baseline period (resulting from higher fractions of renewable and biofuels displacing fossil fuels).

Water

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, construction would not occur; therefore, no impacts on water would occur.
- **Proposed Action:** Construction of the Proposed Action would require excavation several feet below the existing grade that could lead to encountering contaminated soils or groundwater. These activities have the potential to result in contaminated water being discharged from the construction site and impacting water quality in the Hylebos Waterway or Commencement Bay. However, permit requirements, including Ecology's CSWGP and plans such as a SWPPP and a contaminated media management plan, would be in place to avoid and minimize these potential impacts. Therefore, no impacts on water are anticipated from the Proposed Action.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, the on-site stormwater system and industrial wastewater pretreatment system would be operated, maintained, and repaired consistent with permit requirements. The No Action Alternative would provide neither improved wastewater treatment nor spill prevention measures, and the blocked stormwater line would continue to be blocked with restricted flow and would not be replaced. Furthermore, the existing wastewater treatment system is an older and aging system, and repair materials are becoming harder to obtain. The No Action Alternative could lead to a scenario where the wastewater treatment system equipment is no longer sufficient to meet

on-site wastewater permit requirements, which would require an update or modification if not completed as part of this Project. Excavation to construct the Project would not occur, and there would not be a need to manage groundwater that might be present in excavation areas. SeaPort Sound would continue to operate the existing facility in compliance with local, state, and federal regulations. Compliance with regulations and required plans (SWPPP, emergency action response plan, and *SeaPort Sound Terminal LLC Facility Contingency Plan* [Seaport Sound 2020]) would continue to avoid or minimize the risk of impacts on water quality near the Project site during operation. Rising sea levels are anticipated to occur gradually over the coming decades, requiring updates or modifications to parts of the facility if not completed as part of this Project. No impacts on water quality, water supply, or flood hazard areas are anticipated from the No Action Alternative.

- **Proposed Action:** No long-term impacts on water quality from the Proposed Action are anticipated due to adherence to permit requirements. There would also be no long-term impacts on water supply or flood hazard areas. The Proposed Action could result in potential changes in the amount of stormwater discharged to Hylebos Waterway compared to the City municipal sewer system; however, stormwater discharges would be compliant with permit requirements. SeaPort Sound will design its facilities to accommodate and adapt to anticipated changes in sea levels and the potential for increased flooding, including measures to prevent release of hazardous substances from the site. There could be minor benefits to water quality from improved treatment via repair and replacement of the wastewater treatment system, as well as a reduction in water usage from replacement of the steam boiler with a more efficient hot oil heater (reducing on-site water consumption by approximately 5 million gallons annually).

Secondary Impacts

- Secondary impacts from the Proposed Action could include a nominal increase in risk of spills during transport of fuel products off site, proportional to the amount of fuel transferred. A major spill anywhere along the supply chain that reaches freshwaters or marine waters could have significant impacts if not properly responded to and quickly contained. A transportation assessment was completed for the Project and determined that the increase in storage capacity could allow for a minor increase in marine, rail, and truck traffic. The assessment concludes that the Proposed Action is expected to result in an additional three marine vessel calls on average per month, an additional 78 railcars unloaded per month, and an additional 12 truck loading trips per day at the SeaPort Sound facility. This represents an increase of 6%, 14%, and 7% for vessels, rail, and trucks over the facility's existing trips, respectively. The risk of these impacts occurring would be similar to the No Action Alternative

because similar products are being transferred, and transportation throughput is driven by market demand, not an increase in storage capacity.

SeaPort Sound does not operate off-site transport vessels, trains, or trucks; however, third-party transportation companies are required to adhere to federal and Washington State safety regulations. Vessels that access the facility are required to adhere to regulations regarding vessel safety, spill prevention, and discharges of ballast water. As of the publication of this EIS, regulations for oil spills are being strengthened by Ecology to reduce the potential future risks of spills in Washington State waters. Similarly, state and federal regulations require safety measures for trains and trucks transporting fuel products to provide for human safety, as well as for the protection of natural resources and the environment. Adherence to these regulations would minimize but not eliminate the risk of a large spill and associated impacts on water quality under the No Action Alternative and the Proposed Action.

Cumulative Effects

- **No Action Alternative:** Demolition and construction would not occur at the site under the No Action Alternative, including replacement of the damaged City stormwater line. The wastewater treatment system would not be upgraded, possibly resulting in minor cumulative impacts on the sanitary sewer system where water is discharged from other operations in the Tideflats area. New development in the Tideflats area may include the installation of new pollution-generating impervious surfaces; however, the new surfaces would meet the current standards for flow control and water quality treatment for stormwater runoff, which could have a cumulative benefit to water quality.
- **Proposed Action:** The Proposed Action would result in a net decrease of 400 square feet of impervious surface on the Project site compared to existing conditions, and BMPs would be implemented during construction and operation to minimize risks to water quality, including installation of secondary containment measures to contain and direct any potential on-site spills to the wastewater treatment system. Nearby cleanup projects include sites with contaminated surface water and groundwater, resulting in a cumulative benefit to water quality. For these reasons, the Proposed Action is not expected to contribute to cumulative adverse impacts on water quality.

Present and reasonably foreseeable future projects could result in a need for additional water; however, the Proposed Action would not require substantial amounts of additional water during construction and would reduce facility water use during operations through replacement of the existing steam boiler with a more efficient hot oil heater (reducing on-site water consumption by approximately 5 million gallons annually). Therefore, the Project is not expected to contribute to cumulative adverse effects on water supply. It is anticipated that

SeaPort Sound and other users of the waterway would continue to conduct activities consistent with state and federal regulations that enforce the protection of water quality and aquatic species. The Proposed Action is anticipated to have no cumulative impacts on nearby surface waters from construction. Operation of the Proposed Action may lead to minor cumulative impacts on water; however, these impacts are not expected to be significant.

Plants and Wildlife

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, the proposed facilities would not be constructed; therefore, there would be no construction impacts on plants and wildlife.
- **Proposed Action:** The Proposed Action could result in negligible construction impacts on terrestrial wildlife due to construction disturbance; however, species that would be present are already somewhat tolerant of disturbance due to the industrial setting. No in-water construction is proposed as part of the Proposed Action, and noise from construction is not anticipated to result in impacts on marine mammals or fish. Therefore, no impacts on plants and wildlife would occur under the Proposed Action.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, impacts on plants and wildlife resulting from operation and maintenance of the existing facilities would not occur because habitat conditions would remain the same.
- **Proposed Action:** Under the Proposed Action, no direct impacts on plants or wildlife are anticipated because the Proposed Action would not substantially change the level of human activity or noise occurring at the Project site, and the Project site would remain an industrial facility where little wildlife habitat and vegetation exist. SeaPort Sound is regulated as a Class 1 industrial facility and has multiple spill response measures in place, including response plans and equipment and ongoing training and certification for employees. The Proposed Action would not affect SeaPort Sound's response capabilities because the completed Project would remain within the facility's spill response measures for a worst-case scenario. Therefore, no direct impacts on plants or wildlife are anticipated under any of the market fuel mix scenarios for the Proposed Action.

Secondary Impacts

- SeaPort Sound does not operate off-site transport vessels, trains, or trucks; therefore, transportation impacts are considered secondary impacts. A transportation assessment was completed for the Project and determined that the increase in storage capacity could allow

for a minor increase in marine, rail, and truck traffic. The assessment concludes that the Proposed Action is expected to result in an additional three marine vessel calls on average per month, an additional 78 railcars unloaded per month, and an additional 12 truck loading trips per day at the SeaPort Sound facility. This represents an increase of 6%, 14%, and 7% for vessels, rail, and trucks over the facility's existing trips, respectively.

Secondary impacts from the Proposed Action would be similar to the No Action Alternative because similar products are being transferred and throughput is driven by market demand, not an increase in storage capacity. However, there could be a nominal increase in risk of spills during transport of fuel products off site if demand for bulk liquid products in the region increases. A major spill anywhere along the supply chain could degrade wetlands, streams, marine waters, and other plant and wildlife habitats where they are present along the transportation route.

Third-party vessels that access the facility are required to adhere to Washington State regulations that comprehensively regulate shipping lanes, vessel speeds, and setback zones for the protection of killer whales. As of the publication of this EIS, regulations for oil spills are being strengthened by Ecology to reduce the potential future risks of spills in Washington State waters and reduce the risk of injury to SRKWs and other marine mammals. These regulations are intended to reduce noise levels that are harmful to killer whales and to maintain safe distances between vessels and wildlife. Similarly, state and federal regulations require safety measures for trains and trucks transporting fuel products to provide for human safety, as well as for the protection of natural resources and the environment. Adherence to these regulations would minimize but not eliminate the risk of a large spill and associated impacts on plants and wildlife under the No Action Alternative and the Proposed Action. Impacts would be minor under any of the three market fuel mix scenarios.

Cumulative Effects

- **No Action Alternative:** No construction would occur under the No Action Alternative, and the aging refinery infrastructure and wastewater treatment system would remain in place. No adverse impacts are anticipated from the No Action Alternative.
- **Proposed Action:** Construction of the Proposed Action would occur within an industrial area with little habitat, and it includes no in-water work. Therefore, it would not contribute to cumulative adverse impacts on plants or wildlife. During operations, the Proposed Action would continue existing uses of the site and waterway. It is anticipated that SeaPort Sound and other users of the waterway would continue to conduct activities consistent with state and federal regulations that enforce the protection of water quality and aquatic species. The implementation of other reasonably foreseeable future actions, such as the Puget Sound

Energy (PSE) Liquefied Natural Gas (LNG) Facility, may increase the amounts of fuel products being transported through the Tideflats area and could lead to an increase in the potential for spills. It is anticipated that SeaPort Sound and these other, similar facilities in the area would continue to operate in compliance with local, state, and federal regulatory guidelines for spill prevention and other environmental health and safety measures. Additionally, implementation of planned measures to continue to reduce potential vessel traffic impacts on SRKWs, including House Bill 1578, will facilitate safer and less impactful transit between terminals and reduce cumulative impacts to SRKWs from transportation of bulk liquids. Overall, the Proposed Action could contribute to minor cumulative effects on plants and animals.

Energy and Natural Resources

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, demolition and construction would not occur; therefore, no construction impacts on energy and natural resources would occur.
- **Proposed Action:** During construction of the Proposed Action, electricity would be used to provide temporary construction site lighting, heat buildings, and power tools and equipment. A temporary increase in fuel usage would result from transporting construction personnel and materials to the Project site and operating construction equipment. The demand for electricity, diesel, and gasoline, or renewable and biofuel alternatives, needed during construction is anticipated to be met by existing supplies, resulting in negligible energy supply impacts. Nonrenewable natural resources that would be used to construct the Proposed Action would include concrete, aggregate, and steel. The demand for natural resources needed during construction is anticipated to be met by existing supplies, resulting in a negligible level of impact.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, infrastructure would not be replaced with more modern, energy-efficient equipment. Maintaining the existing infrastructure may require SeaPort Sound to modify existing tanks to hold different bulk liquids in response to market demand. These modifications, as well as ongoing operation and maintenance of existing facilities, would require a minor commitment of energy and natural resources, resulting in a negligible level of impact.
- **Proposed Action:** Under the Proposed Action, energy-efficient equipment would be installed, resulting in a net reduction in overall energy usage. Replacement of the on-site boiler, in particular, would result in a substantial energy savings at the facility (up to 30% energy

savings). Once the new facilities are constructed, no significant use of natural resources would be needed, resulting in a negligible level of impact.

Secondary Impacts

- Secondary impacts from the Proposed Action could include a potential for minor increase in use of fuels to transport products off site, depending on market demand, similar to the No Action Alternative. Additionally, the City's *2030 Climate Action Plan* (City of Tacoma 2021a) and initiatives stemming from the City's Climate Emergency Resolution (City of Tacoma 2019a) and the Washington Clean Fuels Program, in addition to other future GHG reduction initiatives, may lead to a higher demand for renewable and biofuels and use of electric vehicles that reduce the use and transport of fossil fuels in the region.

Cumulative Effects

- **No Action Alternative:** No construction would occur under the No Action Alternative and the aging refinery infrastructure and wastewater treatment system would remain in place. Energy use at the site would continue to fluctuate based on operational needs, which are largely driven by market demand. No adverse impacts are anticipated from the No Action Alternative.
- **Proposed Action:** When combined with past, present, and reasonably foreseeable future actions, the demand for resources required for construction and operation of the Proposed Action is still expected to be met by existing supplies. Therefore, no cumulative adverse impacts on energy and natural resources are expected from the Proposed Action.

Archaeological, Historic, and Cultural Resources

Construction Impacts

- **No Action Alternative:** No impacts on archaeological, historic, and cultural resources are expected from the No Action Alternative because no construction would occur.
- **Proposed Action:** No impacts on archaeological, historic, and cultural resources are expected from construction of the Proposed Action, and no mitigation is recommended. For the Proposed Action, ground disturbance is not expected to extend beyond 10 feet below the surface and would likely occur in imported fill. An Inadvertent Discovery Plan will be prepared and would be followed in the event of a discovery of cultural resources during construction.

Long-Term Impacts

- **No Action Alternative:** No long-term impacts on archaeological, historic, and cultural resources are expected from the No Action Alternative.

- **Proposed Action:** No impacts on archaeological, historic, and cultural resources are expected from the Proposed Action, and no mitigation is recommended.

Secondary Impacts

- No secondary impacts on archaeological, historic, and cultural resources are expected as a result of the No Action Alternative or the Proposed Action.

Cumulative Effects

- **No Action Alternative:** No cumulative effects to archaeological, historic, and cultural resources are expected from the No Action Alternative.
- **Proposed Action:** No cumulative effects to archaeological, historic, and cultural resources are expected from the Proposed Action, and no mitigation is recommended.

Environmental Health and Safety

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, the proposed facilities would not be constructed, and construction impacts on environmental health and safety would not occur.
- **Proposed Action:** It is anticipated that construction of the Proposed Action would have negligible impacts on environmental health and safety. During construction of the Proposed Action, it is possible that contaminated soils could be encountered that may be present from historical activities at the facility; however, a contaminated media management plan will be developed to address the characterization, segregation, and disposal of any contaminated soils encountered during excavation. Demolition of existing structures could disturb asbestos-containing materials where present. Most asbestos was already removed, but appropriate demolition and disposal practices would be implemented during asbestos removal. Short-term and localized increases in noise may occur from construction activities; however, potential increases in construction noise are anticipated to quickly attenuate to background levels due to the industrial setting.

Long-Term Impacts

- **No Action Alternative:** No long-term impacts on environmental health and safety would occur under the No Action Alternative because potential impacts from ongoing activities at the terminal would continue to be mitigated via response plans and ongoing training.
- **Proposed Action:** The Proposed Action would include an increase in the storage of bulk liquids at the terminal, with throughput levels continuing to fluctuate (within the permitted limit similar to the No Action Alternative). The Proposed Action includes both design and

operational safety measures to avoid and minimize potential environmental impacts from operation and storage of materials, such as designing and spacing the new tanks to meet design safety standards. Continued safe operation of the facility would be ensured through compliance with local, state, and federal regulations for the handling, storage, and transport of materials. Long-term noise levels at the Project site would remain similar to existing levels after completion of the Proposed Action, and no new noise impacts would occur as part of the Proposed Action. Long-term benefits to environmental health and safety could result from the removal of asbestos from existing structures or contaminated soil from the site.

Long-term impacts from the operation of the Proposed Action are expected to be comparable to the No Action Alternative because similar bulk liquids and materials will be handled on site under both alternatives. Any impacts from the Proposed Action are expected to be mitigated through response plans, ongoing training, and upgrading fire response infrastructure at the terminal. The Proposed Action would include similar operations as the No Action Alternative under all three market fuel mix scenarios and would continue to operate within the permitted throughput limits.

Secondary Impacts

- Secondary impacts from the Proposed Action would be similar to the No Action Alternative because similar bulk liquids would be handled, and transportation throughput is driven by market demand, not an increase in storage capacity. However, there could be a nominal increase in risk of spills during transport of bulk liquid products off site, proportional to the amount of bulk liquids transferred if demand for bulk liquid products in the region increases. Spill response measures, including those described in the Plants and Wildlife Long-Term Impacts section, would be implemented to address potential spills; therefore, impacts are expected to be minor.

Cumulative Effects

- **No Action Alternative:** Under the No Action Alternative, there could be short-term cumulative impacts on environmental health and safety if multiple projects are undergoing construction simultaneously, temporarily increasing traffic, dust, and noise in the area.
- **Proposed Action:** The Proposed Action could also lead to short-term increases in noise and dust; however, the Proposed Action would occur within an active industrial facility, with impacts that are typical of an industrial setting, and BMPs would be implemented to avoid or minimize potential construction impacts.

Implementation of cleanup actions near the Project site could lead to beneficial cumulative impacts on environmental health and safety due to the removal of contaminants from soils,

sediments, groundwater, and surface water. Implementation of other reasonably foreseeable future actions, such as the PSE LNG Facility, may increase the amounts of fuel products being transported through the Tideflats area and could lead to an increase in the potential for spills. It is anticipated that SeaPort Sound and these other, similar facilities in the area would continue to operate in compliance with local, state, and federal regulatory guidelines for spill prevention and other environmental health and safety measures. Overall, the Proposed Action could contribute to minor cumulative effects on environmental health and safety.

Land and Shoreline Use

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, no construction would occur; therefore, no land and shoreline use impacts would occur.
- **Proposed Action:** Under the Proposed Action, minor, short-term increases in noise and dust from construction could impact adjacent properties; however, the Project site and immediately surrounding land uses are zoned Heavy Industrial, and construction activities are compatible with existing land use and shoreline use designations. BMPs would be in place to minimize these impacts, including using low-noise-emitting equipment, limiting high-noise activities to daytime hours, and using dust suppression BMPs. Construction would take place entirely within SeaPort Sound's existing development footprint; the site is within an existing industrial area. Because minorities and low-income populations are not present within the study area, construction impacts would not have disproportionate effects on these populations.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, SeaPort Sound would continue to operate its existing facility, which is a permitted use. Although the Proposed Action would not occur, it is assumed that growth in the region would continue under the No Action Alternative, which could lead to development of another industrial use at or near the Project site. Such development could result in impacts similar to those for the Proposed Action.
- **Proposed Action:** The Proposed Action would result in continued use of the Project site as a bulk liquids storage facility, which is compatible with current and projected land uses and plans. The Proposed Action would not change these existing land uses or affect nearby or adjacent properties. Implementation of the Proposed Action under local permits requires the Applicant to demonstrate consistency with the applicable policies, zoning, and conditions. Therefore, operation of the Proposed Action at the Project site would be consistent with the applicable policies, including consistency with the City's Comprehensive Plan, zoning

ordinance, critical areas ordinance, and Shoreline Master Program. With implementation of permit conditions, long-term impacts resulting from the Proposed Action would be considered negligible and would not require mitigation.

No residential properties are present on the Project site, and the nearest residential neighborhood is more than 0.5 mile from the Project site. After construction, long-term operations at the site would be similar to industrial activities now taking place on the site and are not expected to adversely affect population groups in the area.

Secondary Impacts

- No secondary impacts on land and shoreline use are expected as a result of the No Action Alternative or the Proposed Action.

Cumulative Effects

- **No Action Alternative:** Under the No Action Alternative, none of the reasonably foreseeable future projects or actions have been identified as having significant adverse impacts on land use due to extensive planning efforts that have happened and are currently underway to enforce compatible uses within the Tideflats area.
- **Proposed Action:** Similar to the No Action Alternative, the Proposed Action is consistent with land use goals and policies and planned future development, including the City's Comprehensive Plan and Shoreline Master Program (City of Tacoma 2015a, 2019b). Therefore, the Proposed Action is not expected to contribute to significant adverse impacts on land and shoreline use.

Although cumulative impacts are not anticipated from the Proposed Action, the Tideflats Subarea Plan, currently under development by the City, could help mitigate potential land use impacts from the numerous projects that are being planned in the Tideflats area. The Tideflats Subarea Plan is intended to create a shared long-term vision and more coordinated approach to development, environmental review, and strategic capital investments in the Tideflats area and would be consistent with the City's planning policies and goals.

Transportation

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, no construction would occur; therefore, no transportation impacts would occur.
- **Proposed Action:** The Proposed Action would likely create a limited increase in traffic to the Project vicinity due to construction. However, the Project is located in an industrial zone with

existing truck traffic and infrastructure, which can accommodate the short-term increase of traffic associated with construction. Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable. Construction, staging, and materials can all be accommodated on site. Therefore, no adverse impacts on transportation are anticipated from construction of the Proposed Action.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, increases in rail, truck, or vessel traffic may occur within the terminal's permitted throughput limits in response to increases in market demand. Any potential change in transportation due to an increase in renewable and biofuels at the site under the Central and State Goal scenarios would likely be nominal because the different fuel mixes would not equate to an increase in demand. Overall, the No Action Alternative would have no adverse impacts on transportation at the site under any of the three market fuel mix scenarios.
- **Proposed Action:** Overall, it is anticipated that there would be no adverse impact on transportation as a result of the Proposed Action. Although the storage capacity would increase by 11% under the Proposed Action, SeaPort Sound would continue to operate within its permitted throughput limits in response to changes in market demand. The transportation assessment (Appendix G) concluded that vessel calls could increase by up to three vessels on average per month (6% increase), up to 78 railcars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. As demonstrated in the transportation assessment, a minor increase from existing transportation trends could occur as a result of the increase in storage capacity; however, that is dependent on market conditions, which are subject to fluctuations from year to year. Continued implementation of response plans and compliance with local, state, and federal regulations for transport of fuels would continue under all three market fuel mix scenarios.

Secondary Impacts

- Overall, the Proposed Action may result in a small increase in rail, truck, and vessel traffic within the Tideflats area. This is because an increase in demand for renewable and biofuels would represent a greater percentage of the overall permitted throughput volume and a decrease in the overall percentage of conventional fuel throughput volume, not necessarily an increase in the overall throughput volume as a whole. As stated in Sections 3.9.2 and 3.9.4, an increase in storage alone is not expected to increase transportation; changes in market conditions and demand for a specific fuel type are likely to be the primary drivers of increased transportation. Other transportation-related secondary impacts could include impacts on water (see Section 3.3.4.5), plants and wildlife (see Section 3.4.4.2), air (see Section 3.2.5.1), or

environmental health and safety (see Section 3.7.4.1). It is expected that there would be no adverse secondary impacts on transportation from the Proposed Action under any of the three market fuel mix scenarios because conditions would be similar to the No Action Alternative.

Cumulative Effects

- **No Action Alternative:** Simultaneous construction of reasonably foreseeable future projects may cause cumulative impacts on road traffic and roadway surface damage due to a temporary increase in construction vehicles.
- **Proposed Action:** The Proposed Action could have minor cumulative effects on transportation during construction; however, most of the reasonably foreseeable future projects occur on other areas of the Tideflats, such as the Blair-Hylebos Peninsula, so construction vehicles would likely use different roadways. In addition, improvements being made to Marine View Drive would provide improved roadway surfaces to accommodate existing and proposed traffic.

Changes in throughput may occur due to market conditions and customer demand under both the No Action Alternative and the Proposed Action, but throughput and associated transportation would not exceed permitted levels that were determined through past projects requiring review of current and projected uses in the area. Another terminal project, the PSE LNG Facility, includes similar transportation activities. However, significant transportation mitigation measures are proposed to offset the anticipated impact from a new terminal located in the Tideflats area. It is expected that other future activities would also implement mitigation activities to offset potential transportation impacts in the area, consistent with local regulations, permits, and approvals. Overall, operation of the Proposed Action may lead to minor cumulative impacts on roadway, rail, and vessel traffic; however, these impacts are not expected to be significant and would be consistent with projected uses accounted for in the permitted throughput limits.

Public Services and Utilities

Construction Impacts

- **No Action Alternative:** Under the No Action Alternative, no construction would occur; therefore, no public services and utilities impacts would occur.
- **Proposed Action:** Overall, construction of the Proposed Action could temporarily increase calls for emergency response and could require law enforcement, emergency medical, and fire protection services during the construction period. SeaPort Sound's emergency response

plans would be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound would provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction. Therefore, it is anticipated that no adverse impact on fire protection, law enforcement, or emergency medical services would occur during construction of the Proposed Action. Construction of the Proposed Action would not result in impacts on public transit, electricity, natural gas, sewer, or solid waste services.

Long-Term Impacts

- **No Action Alternative:** Under the No Action Alternative, the facility would continue to operate under existing conditions, and demand for fire protection, law enforcement, emergency medical, public transit, electricity, natural gas, sewer, or solid waste services would not change at the Project site.
- **Proposed Action:** Impacts on public services and utilities under the Proposed Action would be similar to that of the No Action Alternative. Field deployment drills, security drills, and training in the use of emergency shutoff devices would continue to occur. A new fire water loop system would be installed that would expand fire response capabilities site wide.

Under the Proposed Action, installation of a more efficient hot oil heater would reduce natural gas consumption at the site. The proposed hot oil heater would operate at 9.9 million British thermal units (BTUs) or 9,750 cubic feet per hour (which is comparable to the existing steam boiler, which runs at that rate but has capacity for 21 million BTUs or 20,690 cubic feet of natural gas per hour). Replacement of the on-site boiler would result in a substantial energy savings at the facility (up to 30% energy savings) due to heat return efficiencies that the existing steam boiler does not have (because it lacks condensate return and loses heat and efficiency). Elimination of boiler blowdown water would also reduce the volume of water discharged to the on-site treatment system, with a proportionate reduction in treated water entering the sanitary sewer system. This upgrade would reduce on-site water consumption by approximately 5 million gallons annually.

Secondary Impacts

- An increase in demand could increase trips needed to transport bulk liquid products under any of the three market fuel mix scenarios. If an increase in trips occurs, it could indirectly result in increased potential for incidents requiring emergency response (fire, police, and medical) under both the No Action Alternative and Proposed Alternative. However, the number of bulk liquid transport trips from the Project site would remain within SeaPort Sound's permitted limits described in Chapter 2. In addition, transport-related incidents could occur anywhere that fuel products are transported along the supply chain. Incidents related

specifically to transporting products from the Project site would be unlikely and, if they do occur, would represent only a small percentage of incidents that occur throughout the region each year. With the regulations and emergency response plans in place at local, state, and federal levels, and mitigation measures, secondary impacts on emergency response services due to transporting fuel products off site under the Proposed Action would be negligible.

Cumulative Effects

- **No Action Alternative:** Under the No Action Alternative, minor cumulative effects to public services and utilities could occur due to an increased need for fire protection and emergency medical services, as well as an increased need for utilities such as electricity, natural gas, sewer, and solid waste within the Tideflats area. The SeaPort Sound Terminal uses various modes of transportation to transport products to and from the site, including truck, rail, and vessel transport. Transportation of products to and from the site would not exceed permitted levels that were determined through past projects requiring review of current and projected uses in the area.
- **Proposed Action:** Combined with present and reasonably foreseeable future projects, the Proposed Action could similarly contribute to minor cumulative impacts on public services and utilities. The Proposed Action is unlikely to result in a significant increase in fire response calls because of the fire suppression, spill prevention and control, and response measures in place at the Project site. The Proposed Action includes energy and water use reduction measures (e.g., replacement of the existing steam boiler with a more efficient hot oil heater) and would not substantially change the existing need for electricity, natural gas, sewer, or solid waste utilities. For these reasons, the Proposed Action is not expected to contribute to significant adverse impacts on public services and utilities.

1 Introduction

This Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS) has been prepared to identify and evaluate environmental impacts associated with a set of alternatives for the proposed SeaPort Sound Terminal, LLC (SeaPort Sound), Plant Modernization Project (Project). The Project is located at the SeaPort Sound Terminal on the Hylebos Waterway at 2628 Marine View Drive in Tacoma, Washington (Figure 1-1). SeaPort Sound's objective for the Project is to demolish components that are not needed at the terminal and replace them with new storage tanks, piping, and associated equipment, including wastewater treatment infrastructure upgrades, that will meet the functional, operational, and environmental needs at the terminal. The Project will remove existing refinery infrastructure and replace it with new tanks, increasing the storage capacity at the terminal for low-carbon and other bulk liquids to improve SeaPort Sound's flexibility in response to the increasing market demand for low-carbon fuels.

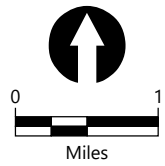
The Project includes demolishing the existing refinery equipment, boiler, building, storage tanks, containment berm, and piping and replacing them with a new containment wall and storage tanks. The new storage tanks will be installed within a similar footprint as the existing equipment and tanks. Existing wastewater treatment equipment located south of the refinery demolition area will be replaced, including replacing the oil-water separator used for wastewater treatment, corrugated plate interceptor induced air flotation, aeration pond, and rotating biological contactor and clarifier. A new stormwater line will be installed parallel to and around an existing blocked storm line on the east side of the property that discharged from Marine View Drive to the Hylebos Waterway. This storm line handles off-site stormwater that is outside of the purview of this facility's National Pollutant Discharge Elimination System (NPDES) permit. No changes to the existing NPDES permit will occur. New manholes will be installed along the new alignment for access to the line. The existing outfall will remain, and no outfall modifications or in-water work are proposed. Design and operational safety measures will be incorporated to avoid and minimize potential environmental impacts from operation and storage of materials, including installation of a 4-foot-tall concrete containment berm.

This chapter provides information on the location of the Project, background on the need for the Project, an explanation of the environmental review process for the Project, and a summary of the permitting process that ended with the City of Tacoma (City) issuing a Determination of Significance for the Project.



NOTES:

- 1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
- 2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).



Publish Date: 2023/10/09, 4:32 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Site Vicinity.mxd



**Figure 1-1
 Site Vicinity Map**

1.1 Background

SeaPort Sound is a storage and distribution company for bulk liquids, including fossil and renewable fuels such as biofuels, providing bulk liquids to the maritime and land-based consumer markets in the Pacific Northwest. The property has been used for various industrial purposes since the 1940s, including petroleum refining and storage. Refining activities were discontinued at the property around 2002 due to market factors.

The Renewable Fuel Standard (RFS) identified in the Energy Policy Act of 2005 and further expanded upon in the U.S. Energy Independence and Security Act of 2007 required that, over a 15-year period ending in 2022, the volume of renewable fuels used in the United States must increase from 7 to 36 billion gallons annually. The RFS, in particular, required that by 2009 biomass-based diesel (biodiesel) should be introduced as part of a national effort to use non-petroleum-based fuel feedstocks.³ Fuels in this category were required to demonstrate a life cycle greenhouse gas (GHG) emissions reduction of 50%. The RFS also required an increase in conventional, starch-based biofuels, representing a 20% life cycle reduction in GHG, to 15 billion gallons a year, and an increase in advanced biofuels (including cellulosic fuels) by 20 billion gallons with up to a 60% reduction in GHG.

Following the creation of the RFS, SeaPort Sound began developing facilities for providing biofuels to the region. The first tank of biodiesel at the terminal was installed in 2007, and by the end of the year, a permit application had been submitted to the Puget Sound Clean Air Agency (PSCAA) to allow SeaPort Sound to expand into the storage and throughput of starch-based biofuels (i.e., ethanol). In 2017, SeaPort Sound became a provider of renewable diesel, which would provide end users with access to advanced biofuels. This allowed SeaPort Sound to become a significant regional logistical source for the distribution of biofuels, addressing the requirements of the RFS schedule while aiding end users in complying with the U.S. Energy Independence and Security Act.

A portion of SeaPort Sound's business currently involves providing fueling support to the maritime industry in Puget Sound (e.g., container ships, local fishing fleets, and the cruise ship industry). Storage and product flexibility is required at the terminal to support maritime fueling because the vessels that SeaPort Sound serves vary in size and fuel types. Additionally, because the maritime customers determine when vessel fueling is needed, use of SeaPort Sound's facilities routinely changes depending on several factors, including vessel type and number.

Most of SeaPort Sound's business serves the Puget Sound region, with limited vessel transport along the West Coast, Hawaii, and Pacific Rim. SeaPort Sound also provides bulk liquid products to the land-based consumer markets in the Pacific Northwest and freight transportation (for use at regional

³ "Feedstocks" refers to the physical material from which the fuel is made: petroleum-based crude oil in the ground or non-petroleum live plant matter in the field. These materials were created through natural processes. For example, renewable plant material is a non-petroleum-based fuel feedstock for biofuels production.

truck stops), as well as to the road paving industry for construction materials and the manufacturing industry for renewable products (from low-impact wood preservation products to low volatile organic compound paints). Currently, SeaPort Sound transports products through the site using the following loading and unloading methods:

- Outbound loading to truck (via the truck rack) and vessel (via the SeaPort Sound dock)
- Inbound unloading via truck, rail, pipeline, and vessel

SeaPort Sound's operations, including facility throughput and emissions, are regulated by a variety of regulatory permits and approvals, including City land use permits and PSCAA Notices of Construction (NOCs) as described in Chapter 2. SeaPort Sound is not seeking to increase any permit limits associated with permitted facility throughput and emissions as part of the Project.

SeaPort Sound is an important distributor in the region's renewable and biofuels market. It is expected that low-carbon fuels will continue to displace traditional fuels as market demand for low-carbon fuels increases, notably, in response to the recent passage of Washington House Bill (HB) 1091 in 2021 ("Reducing greenhouse gas emissions by reducing the carbon intensity of transportation fuel"), with implementation of the Washington Clean Fuels Program.

The removal of the existing refinery, tanks, and wastewater treatment system, which will be replaced by new tanks, will result in an approximately 11% increase in existing storage capacity to improve flexibility for providing customers with a variety of products, including low-carbon energy products. This increase in storage capacity will allow SeaPort Sound to store a greater variety of products (namely low-carbon energy products) to better serve its customers by being more responsive to fluctuations in market demand. SeaPort Sound's throughput is regulated by the facility permits that limit product throughput volumes and emissions as described in Section 2.2. SeaPort Sound is not seeking permit modifications to increase its current authorizations and will continue to operate within the permitted throughput volume and emissions limits after the Project is completed.

SeaPort Sound is focused on maintaining its progress toward enhancing the regional availability of biofuels. While market demands may shift and impact fuel and fuel blends, SeaPort Sound sees the Washington Clean Fuels Program as an opportunity to further serve the community and help meet the growing needs of advanced biofuels in the marketplace. Ultimately, the use of the assets proposed by SeaPort Sound will be driven by market demand and equipment design. Compliance with stringent regulatory and operating requirements makes SeaPort Sound's operations safe, reliable, efficient, and responsible. With the state acceptance of the Washington Clean Fuels Program, SeaPort Sound believes there is a fast-approaching logistical need for increasing regional capacity to meet the demand for biofuels and low-carbon-intensity products.

The marketplace is quickly shifting toward a need for storing and transporting more renewable fuels, such as renewable diesel. For example, BP's Cherry Point Refinery located near Blaine, Washington,

has committed to meeting GHG reduction goals and is preparing to use renewable diesel to achieve those goals. This includes proposed refinery upgrades intended to enhance the production of renewable diesel, estimated to reduce GHG by up to 600,000 tons per year (BP 2022). Other refineries in the western states have also recently undertaken renewable fuel conversion projects, such as the Marathon Petroleum Corporation facilities in Dickinson, North Dakota, and Martinez, California; the Phillips 66 refinery in Rodeo, California; and the Montana Renewables facility in Great Falls, Montana (Marathon 2023; Phillip 66 2023; Montana Renewables 2023).

Since California's Low Carbon Fuels Standards program was introduced in 2011, that state's transportation fuels market has changed substantially, with growing volumes of low-carbon-intensity fuels. Renewable diesel and biodiesel have grown to represent approximately 29% of the total transportation diesel pool (Bates White Economic Consulting 2022). In Oregon, where the Clean Fuels Program started in 2016, biodiesel consumption has increased and now makes up close to 10% of the diesel fuel supplied in the state (ODEQ 2022).

Terminals such as SeaPort Sound need to modernize to adapt to this changing market. SeaPort Sound is in a position to accommodate the increased demand in renewable diesel, and the Project would allow the flexibility to adapt to this changing marketplace.

1.2 Environmental Review Process

SeaPort Sound submitted a SEPA Checklist to the City on May 21, 2020. The City, acting as the SEPA Lead Agency, notified the public that a Mitigated Determination of Nonsignificance was anticipated, and invited public comment. Due to an administrative process error for the public notice, two 30-day notices were issued: the first on July 17, 2020, and the second on August 20, 2020. Additionally, two public meetings were held, on July 30, 2020, and September 10, 2020. At each meeting, a presentation was given, and the public was instructed on how to submit comments. The City met with the Puyallup Tribe in July 2020, and comments were addressed at the meeting.

On February 4, 2021, the City withdrew the preliminary SEPA determination and issued a Determination of Significance for the Project based upon the unknown and probable significant adverse impacts from the increased storage of fossil fuels in a location that is proximate to human habitation, that is adjacent to sensitive critical habitat, and that is subject to liquefaction and other seismic risks (City of Tacoma 2021b). A scoping period occurred from February 4 to February 25, 2021, and a virtual scoping meeting was held on February 18, 2021. The public was invited to comment on the Project. The City reached out to the Puyallup Tribe during scoping in March 2021 with an opportunity to comment, and no comments were received. The City issued a scoping letter on March 9, 2021, based on scoping comments received on the Determination of Significance for the

Project. The scoping letter details the scope of work required for the EIS in addition to the environmental element descriptions set forth in Washington Administrative Code (WAC) 197-11.⁴

The Draft EIS was published in November 2022, and interested parties were notified electronically and via postcard mailer of the document's availability and opportunities to comment. A subsequent meeting between the City and the Puyallup Tribe was held in December 2022 during the Draft EIS public notice period to discuss preliminary feedback on the materials. Comments were accepted during a 45-day public comment period, which ended on December 27, 2022. The Draft EIS and its appendices were available for public review throughout the entire length of the public comment period on the City's Project website. The City's Project website was developed to provide information through the duration of the SEPA process. During the public comment period, the website included a link to the Draft EIS materials and an online comment form.

A public meeting was held at the City Council Chambers on December 5, 2022, to introduce the Draft EIS and direct interested parties on where and how to comment. In total, 215 comment letters were received by email from individuals, city and state agencies, organizations, businesses, and Tribes.

This EIS has been prepared to meet the SEPA procedural requirements outlined in Revised Code of Washington (RCW) Chapter 43.21C and Tacoma Municipal Code (TMC)⁵ Chapter 13.12. SEPA requires lead agencies to evaluate how the Project will be implemented, along with the potential impacts and mitigation that could result from the implementation of the action alternatives and the No Action Alternative, prior to making a project decision. Existing environmental documents are incorporated by reference, to the extent practicable, to support the evaluation of proposed actions, alternatives, or environmental impacts, consistent with TMC 13.12.700 and WAC 197-11-635. Information and analysis from the SeaPort SEPA Environmental Checklist are also incorporated by reference into the analysis and findings of this EIS, in accordance with the previously referenced regulations.

1.3 EIS Scope and Organization

The rest of this EIS is organized into the following chapters to meet the requirements of SEPA:

- **Chapter 2 – Project Description and Alternatives** describes the range of alternatives evaluated during the EIS process as well as alternatives that were considered but not carried forward.
- **Chapter 3 – Affected Environment, Impacts, and Mitigation Measures** describes the existing environment; analyzes potential impacts of the alternatives; and provides proposed avoidance, minimization, and mitigation measures.

⁴ The full permit record is available via the City of Tacoma's Planning and Development Services permitting website: <https://aca-prod.accela.com/TACOMA/Default.aspx>.

⁵ It should be noted that the TMC is reliant on national and state authority and laws (e.g., seismic codes and flood regulations).

- **Chapter 4 – Cumulative Effects** describes cumulative impacts of the Proposed Action relative to the No Action Alternative and identifies potential mitigation measures to reduce potential cumulative effects of the Proposed Action.
- **Chapter 5 – References** provides a list of references used to support preparation of this EIS.
- **Chapter 6 – List of Preparers** identifies individuals who participated in the preparation of this EIS.

The appendices to this EIS are as follow:

- **Appendix A** – Study Report: Inventory of Greenhouse Gases – SeaPort Sound Plant Modernization Project
- **Appendix B** – Distribution List
- **Appendix C** – Cost of GHG Mitigation for the SeaPort Sound Plant Modernization Project Memorandum
- **Appendix D** – Notices of Construction Summary
- **Appendix E** – Project Laws and Regulations
- **Appendix F** – Species Included on the Priority Habitats and Species List for Pierce County
- **Appendix G** – Transportation Assessment – SeaPort Sound Terminal Modernization Project
- **Appendix H** – Response to Comments

2 Project Description and Alternatives

2.1 Purpose and Need

The SeaPort Sound Terminal is operated for the distribution of bulk liquids, including fossil and renewable fuels, in response to market demand. The purpose of the Project is to provide SeaPort Sound operational flexibility and modernized facilities to better meet increasing market demand for renewable/low-carbon fuels. This increase in market demand is influenced by changes in legislation, such as the recently passed HB 1091 for reducing the carbon intensity of road fuel. The Project would increase storage capacity for low-vapor-pressure bulk liquids, including diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. Storage capacity at the site would increase by approximately 11%, but SeaPort Sound is not seeking to increase any permit limits associated with permitted facility throughput and emissions as part of the Project.

To accomplish its purpose, the Project will modernize the terminal by removing aging refinery infrastructure and replacing it with upgraded facilities. Removing the aging refinery infrastructure will remove on-site equipment that was capable of producing approximately 2 million barrels (84,000,000 gallons) of product per year, which had the capacity to generate approximately 89,000 metric tons carbon dioxide equivalent (tCO₂e) per year of direct emissions from refinery operations. In 2002, SeaPort Sound decommissioned the refinery equipment, and in 2012, PSCAA issued a prohibition on operating the refining equipment as an enforceable permit condition per NOC Order of Approval No. 10325. The refinery infrastructure will be replaced with new storage tanks, piping, and associated equipment and safety and environmental protection measures, including upgraded wastewater treatment systems to meet the functional, environmental, and operational needs at the terminal. The Project also includes replacing existing stormwater infrastructure that receives and conveys off-site stormwater that is outside of the purview of this facility's NPDES permit.

2.2 Existing Facility and Capacity

The Project is located within the City's industrial Tideflats area on the north side of Hylebos Waterway within the upland portion of the SeaPort Sound Terminal (North American Industry Classification System No. 493190: Storage

Fuel Types

- Fuel oil is a liquid petroleum product used to generate heat or power.
- A distillate is a type of fuel oil obtained from the condensation of vapors during a distillation process. Distillates include diesel, jet fuel, kerosene, and other transportation fuel additives.
- Diesel is a type of distillate used in motor vehicles that is suitable for use in compression-ignition engines.
- Biodiesel is a type of fuel typically made from vegetable oils, animal fats, or recycled grease.
- Gasoline is a fuel refined from crude oil or other petroleum liquids that is mainly used as an engine fuel in vehicles.
- Renewable diesel is similar to biodiesel but produced via hydrotreating, which removes metals and compounds containing nitrogen and oxygen.
- Renewable gasoline is a type of fuel refined from biomass suitable for use in spark-ignition engines.

and Warehouse; Figure 2-1). The Project will occur on a parcel (Pierce County No. 0321264046) owned by SeaPort Sound, within an industrial property made up of storage tanks and transportation infrastructure that is currently used for bulk liquids storage and transport (Figure 2-2). The Project will not change these existing land uses. Adjacent industrial properties include additional SeaPort Sound Terminal storage facilities to the west and Edman Company (a logging business) and a log yard and chip mill to the east. Hylebos Waterway is an industrial waterway that borders the south side of the terminal.

The existing refinery within the Project site includes a boiler and building, refinery equipment, and piping of various sizes located within a containment berm.



NOTES:

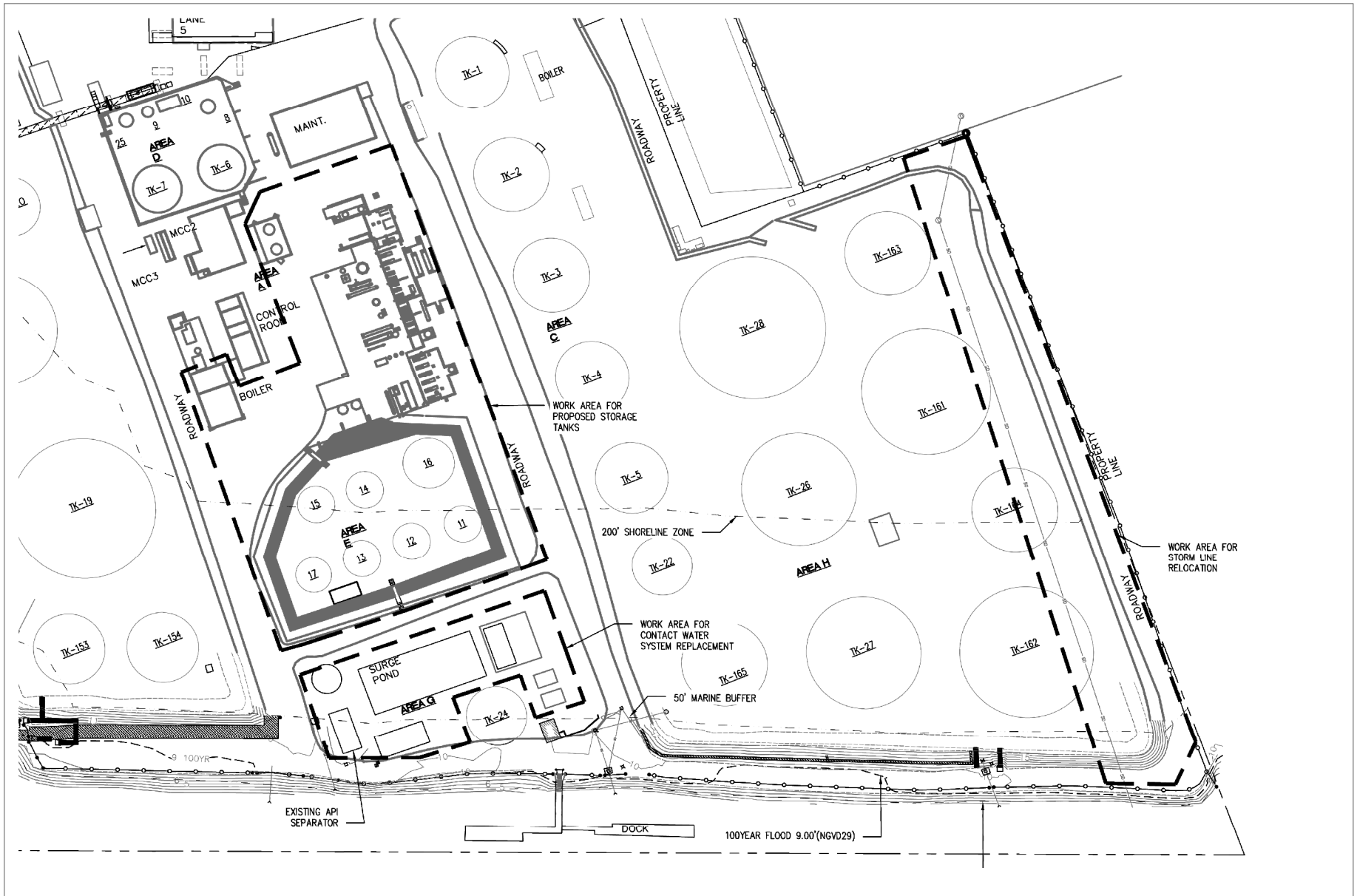
- 1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
- 2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).

Publish Date: 2023/10/09, 4:34 PM | User: tweldy
Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Site Map.mxd



**Figure 2-1
Site Map**

Final Environmental Impact Statement - October 2023
SeaPort Sound Plant Modernization Project



Publish Date: 2023/10/09, 4:35 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Existing Conditions Site Plan.mxd



NOTE:
 Site plan presented from SeaPort Sound Terminal Plant Modernization Project plans from Norwest Engineering, Inc. April 2020.

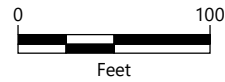


Figure 2-2
Existing Conditions Site Plan

Final Environmental Impact Statement - October 2023
 SeaPort Sound Plant Modernization Project

Nine existing tanks are present with varying capacities and ability to hold the product types listed as follows (note that 1 barrel equals 42 gallons):

- TK-11: 1,326 barrels of water, fuel oil, or distillates
- TK-12: 1,366 barrels of water, fuel oil, or distillates
- TK-13: 1,127 barrels of water, fuel oil, or distillates
- TK-14: 1,365 barrels of water, fuel oil, distillates, or diesel
- TK-15: 1,352 barrels of water, fuel oil, or distillates
- TK-16: 4,872 barrels of biodiesel, fuel oil, or distillates
- TK-17: 1,997 barrels of biodiesel, fuel oil, or distillates
- TK-23: 168 barrels of water
- TK-24: 200 barrels of water

Existing wastewater treatment equipment located south of the former refinery area includes a surge pond, aeration basin, corrugated plate interceptor, induced air flotation device, rotating biological disk, waste oil tanks, and an oil-water separator, along with a contact water drain line that connects from the truck rack and a discharge pipe that connects from the wastewater treatment equipment to the sanitary sewer.

The Project site is currently developed and covered by impervious, compacted gravel fill and paving, including an existing concrete pad under the refinery equipment. An existing stormwater line that handles off-site stormwater from right-of-way areas along Marine View Drive outside of the terminal is located on the east side of the Project site. The stormwater line is currently blocked and minimally discharges to the existing outlet to Hylebos Waterway. The existing outfall is still in good condition and will not be modified as part of the Project. The remainder of the property, outside of the Project vicinity, also contains a laboratory building, a loading terminal with 52 aboveground storage tanks (ASTs), a five-lane truck loading rack along Marine View Drive, and a vessel pier in Hylebos Waterway. The terminal also includes a rail facility located on the south side of Hylebos Waterway along Taylor Way, which connects to the main terminal via an underground pipeline.

2.2.1 Terminal Throughput

SeaPort Sound's facility permits have established throughput limitations on various products that are transported through the terminal. These limits are set by City land use decisions and PSCAA NOCs. Throughput limitations are set for gasoline (PSCAA NOC 11917: 501,875,000 gallons of gasoline per consecutive 12 months and not to exceed 4,800 gallons per minute or 40,000 gallons per 15 minutes) and natural gasoline (PSCAA NOC 11265: 151,500,000 gallons per year), crude oil at the marine terminal (PSCAA NOC 11069: 14,601,600 barrels of crude oil per consecutive 12 months), gasoline and ethanol at the marine terminal (PSCAA NOC 11069: 2,555,000 barrels of gasoline and ethanol per consecutive 12 months), and isooctane at the marine terminal (PSCAA NOC 11069:

3,000,000 barrels of isooctane per consecutive 12 months). Note that low-volatility materials (i.e., diesel or fuel-oil products) have no enforceable limitations in the existing PSCAA permits. SeaPort Sound currently operates below PSCAA Title V Air Operating Permit limits and sets throughput limitations on materials to remain below these operating limits.

Other product throughput is limited based upon the physical capacity of truck loading and vessel loading as described in the previously issued facility permits. Truck loading is, on average, up to 300 trucks per day (City of Tacoma 2011); truck loading for propane is up to 50 trucks per day (City of Tacoma 2006a); vessel calls are, on average, up to 68 vessels per month (City of Tacoma 2013a); and railcars are, on average, up to 540 cars per week. SeaPort Sound is not proposing to modify the loading capacity of the facility or limits set by these permits. SeaPort Sound's facility average throughput limits are set by the following approvals:

- *Sound Refining, Inc., Determination of Nonsignificance (File No. 40000062528)*. May 3, 2006. (City of Tacoma 2006a)
- Sound Refining, Inc., Shoreline Substantial Development Permit (SHR 40000062527). May 3, 2006. (City of Tacoma 2006b)
- Sound Refining, Inc., Wetlands Development Permit (WET 40000062526). May 3, 2006. (City of Tacoma 2006c)
- Targa Sound Terminal Shoreline Substantial Development Permit (SHR 2011-40000162962), FWHCA Development Permit (WET2011-40000162963), and Mitigated Determination of Nonsignificance (SEP2011-40000162964). April 4, 2012. (City of Tacoma 2011)
- Targa Sound Terminal Shoreline Substantial Development Permit (File No. SHR 2013-40000203722). December 5, 2013. (City of Tacoma 2013a)
- *Targa Sound Terminal Determination of Environmental Nonsignificance (SEPA File No. SEP2013-40000203723)*. December 5, 2013. (City of Tacoma 2013b)
- PSCAA NOC 11069. March 8, 2016.
- *Targa Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU 16-0211)*. January 6, 2017. (City of Tacoma 2017)
- PSCAA NOC 11403. July 31, 2018.
- *SeaPort Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU 19-0066)*. November 15, 2019. (City of Tacoma 2019b)
- PSCAA NOC 11917. December 24, 2020.

Actual truck and vessel loading for the 5 years prior to the City's Determination of Significance (2016 through 2020) is included in Table 2-1. Table 2-2 shows the corresponding throughput of materials over the same period. Note that during this time, the terminal has never operated at full nameplate capacity (or the installed capacity), and it would be physically impossible for it to do so. Due to the nature of logistics and standard operating procedures, the terminal cannot achieve 100% capacity.

**Table 2-1
SeaPort Sound Terminal Actual Facility Throughput by Year**

Year	Vessel Calls	Railcars Unloaded	Truck Loading
2016	478	3,838	56,444
2017	497	5,489	68,187
2018	527	6,521	67,987
2019	577	6,831	66,807
2020	414	6,514	58,953

**Table 2-2
SeaPort Sound Terminal Actual Product Throughput by Type (Barrels)**

Distributions	2016	2017	2018	2019	2020
Ethanol	1,736,017.81	2,534,589.93	3,106,342.31	3,506,624.05	2,780,066.51
Premium	1,205,019.69	1,342,859.95	1,342,041.60	1,259,439.60	1,161,418.26
Regular	5,862,450.17	6,578,791.62	6,558,461.55	5,998,675.50	4,753,918.19
Ultra-Low-Sulfur Diesel	2,110,516.43	2,633,870.86	2,389,141.64	2,471,816.05	2,263,908.24
Biodiesel	48,189.40	40,771.05	40,958.00	54,653.62	41,912.57
Renewable Diesel	0.00	1,682.74	4,074.98	11,775.19	13,413.43
Propane	162,683.14	151,886.05	172,991.55	202,207.52	235,476.86
Transmix	1,634.14	0.00	0.00	495.88	936.93
Asphalt (tons)	61,064.62	52,674.83	47,298.05	41,436.60	59,443.97
Crude Oil	0	0	0	0	0
Fuel Oil	1,773,502.08	1,908,893.53	3,327,090.41	3,015,772.90	2,185,749.77

Note:

The information provided in Table 2-2 presents actual throughput for these years and does not represent throughput limits at the facility.

2.2.2 Previous Permitting and SEPA Review

The SeaPort Sound Terminal has been developed over time in response to customer and market demands. As a result, development has occurred through separate and independent projects occurring on an as-needed basis. The following summarizes past projects undertaken by various entities that have owned and operated the terminal since 2006:

- 2006:** Taylor Way Rail Spur Project (Sound Refining, Inc.), located along Taylor Way. Two rail spurs were constructed south of Hylebos Waterway at 1501 (now 1621) Taylor Way. Wetland and marine buffer mitigation was required along the west and north sides of the property to remove invasive species and restore a native plant community. Mitigation construction was combined with the rail modification proposed in 2013 (see the third bullet). Plantings were

installed in 2016. Four years of maintenance and monitoring has been completed. The final Year 5 monitoring report was due for submittal to the City in October 2021 to fulfill mitigation requirements.

- **2008:** Hylebos bore line connections. Sound Refining, Inc., bored a tunnel underneath the Hylebos Waterway to establish a connection for bulk liquids exchange between the Taylor Way property and the terminal.
- **2012:** Sound Refining Renewable Fuels Project (Sound Refining, Inc.), located in the western portion of the facility. Twelve tanks were constructed, and a pipeline was installed along East 11th Street. Marine buffer mitigation included restoration along the shoreline. The City required 5 years of maintenance and monitoring, which was successfully completed and approved by the City on November 20, 2020.
- **2013:** Rail Modification and Tank Expansion Project (Targa Sound Terminal, LLC), located along Taylor Way. One additional rail spur was constructed south of Hylebos Waterway at 1501 (now 1621) Taylor Way. Two tanks were modified, and two tanks were constructed as part of this project. No mitigation was required beyond the wetland and marine buffer mitigation described in the 2006 Taylor Way Rail Spur Project (Sound Refining, Inc.).
- **2015:** Targa Sound Terminal Maintenance Dredge Project (Targa Sound Terminal, LLC). This project involved removal of accumulated sediment in Hylebos Waterway. No mitigation was required.
- **2015:** Targa Sound Terminal Tank 21 Replacement Project (Targa Sound Terminal, LLC). This project involved the replacement of Tank 21 located north of the proposed Project site. The project was considered exempt from procedural requirements by the City (under SEPA) with conditions. No mitigation was required.
- **2016:** Targa Sound Terminal Security Fence Replacement Project (Targa Sound Terminal, LLC). This project was considered exempt from procedural requirements by the City with conditions but was never constructed.
- **2017:** Targa Sound Terminal Dock Restoration Program (Targa Sound Terminal, LLC). This project involved maintenance and replacement of components of the marine terminal. Mitigation was required by the City, including removal of creosote-treated piles and replacement of a portion of the dock structure with grating to allow light passage to intertidal areas along Hylebos Waterway. Mitigation construction was approved by the City in 2018.
- **2018:** Targa Sound Terminal Stormwater Treatment System Installation (Targa Sound Terminal, LLC). This project involved installation of stormwater treatment systems. No mitigation was required.
- **2019:** Taylor Way Project (SeaPort Sound). This project includes installation of four new rail spurs with transfer equipment to reduce the number of railcar switches on and off of the site from Taylor Way, along with enhancements to rail safety and site-wide fire suppression safety. No mitigation measures were required.

2.3 Market Fuel Mix Scenarios

The No Action and Proposed Action alternatives are each evaluated under three market fuel mix scenarios: Static, Central, and State Goal. A range of scenarios was selected for the purposes of this EIS to assess the potential impacts of future variable market conditions. Each market fuel mix scenario includes a future potential market mix of six road fuels that SeaPort Sound might store and distribute through the terminal. Road fuels are used in this analysis because they represent 80% of total product volume distributed through the terminal and are subject to recent regulations. Other bulk liquids handled by SeaPort Sound Terminal are modeled to maintain their current, collective proportions. The six road fuels included in this analysis and evaluated in the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* (Appendix A) are shown in Table 2-3.

Table 2-3
Road Fuels

Fuel Type	Spark-Ignition	Compression-Ignition
Fossil Fuel	Gasoline	Diesel
Drop-In Fuel	Renewable gasoline	Renewable diesel
Biofuel	Ethanol	Biodiesel

The three market fuel mix scenarios are intended to cover a range of future, additional renewable and biofuels market penetration from none (Static scenario) to very high (State Goal scenario). The market fuel mix scenarios have been developed consistent with fuel production volumes reported by the U.S. Energy Information Administration (EIA) to the geographic scale of Petroleum Administration for Defense Districts (PADDs). SeaPort Sound Terminal is located in PADD 5, which includes the states of Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington. As of 2020, the PADD 5 market fuel mix was as shown in Table 2-4 on a volume basis.⁶

⁶ Based on direct reports of production within PADD 5. EIA also issues “product supplied” estimates that relate more tightly to consumption, but the methodology that EIA uses for estimating these is too coarse to produce meaningful values for renewable fuels. The EIA State Energy Data System derives consumption values by fuel for state-level geographies, but these lag the PADD reports (which represent primary rather than secondary data) by more than a year.

**Table 2-4
PADD 5 2016–2020 Market Fuel Mix**

Fuel	Percentage
Gasoline	73.4%
Diesel	25.4%
Ethanol	0.8%
Other Renewable Fuels	0.4%

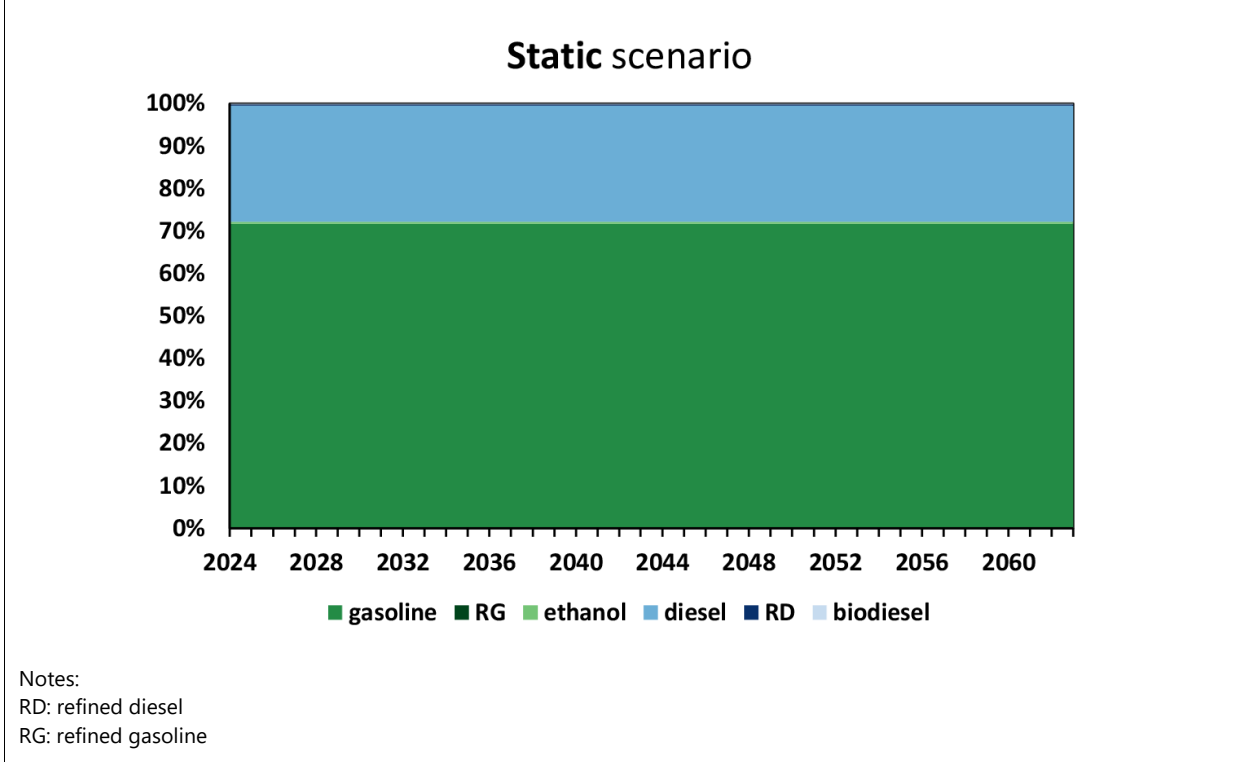
Note:
Regional fuel production is reported to the EIA for the PADD 5 region. These data are commonly used for forecasting because they provide a clear baseline. Future changes to SeaPort Sound actuals are modeled proportionately to the PADD 5 market fuel mix for the purposes of estimating potential market fuel mix scenarios as part of this analysis.

The proposed starting point for all three market fuel mix scenarios is 2024. To account for the Project’s indirect impacts on product storage across the terminal, the market fuel mix scenarios apply terminal-wide, not just the section of the terminal where the Proposed Action would be constructed.

2.3.1 *Static Scenario*

The **Static** scenario simply presumes continuation of the status quo market fuel mix. This is equivalent to a scenario in which the new Washington Clean Fuels Program is struck down in the courts. In this scenario the market fuel mix would remain unchanged throughout the analysis period. This is the least likely of the three market fuel mix scenarios because it would require a lawsuit to be filed to reverse existing legislation. No lawsuit has been filed, and the outcome of a potential lawsuit is uncertain. However, this scenario is being included to present a range of market fuel mix scenarios for consideration in this EIS. The forecasted market fuel mix for the Static scenario is shown in Figure 2-3.

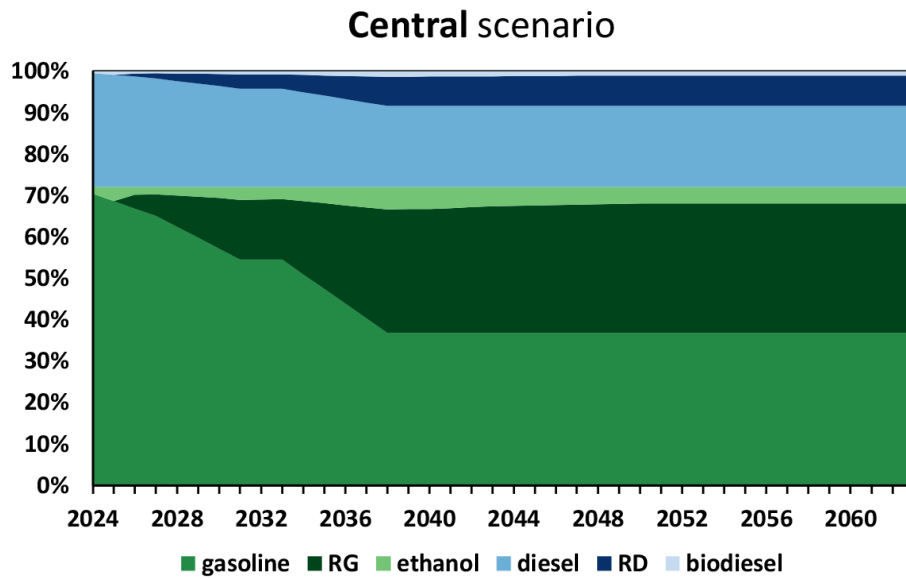
**Figure 2-3
Static Market Fuel Mix Scenario**



2.3.2 Central Scenario

The **Central** scenario assumes that PADD 5 market fuel mix ratios change over time according to legislation that has been enacted. This is the same approach used by the EIA for its annual energy forecasts. In Washington State, the mix of road fuels will change in response to HB 1091, the recently passed Washington Clean Fuels Program. The Washington Clean Fuels Program requires that the average carbon intensity of road fuels delivered in Washington State be reduced by up to 10% as of 2033 and by 20% as of 2038. Use of low-carbon road fuels is expected to increase as a result of HB 1091. Using these values, year-by-year changes in the market fuel mix can be forecasted through 2038. After 2038, this scenario assumes that the market fuel mix does not change further because no other changes are currently legislated. See Figure 2-4 for an outline of these changes.

**Figure 2-4
Central Market Fuel Mix Scenario**

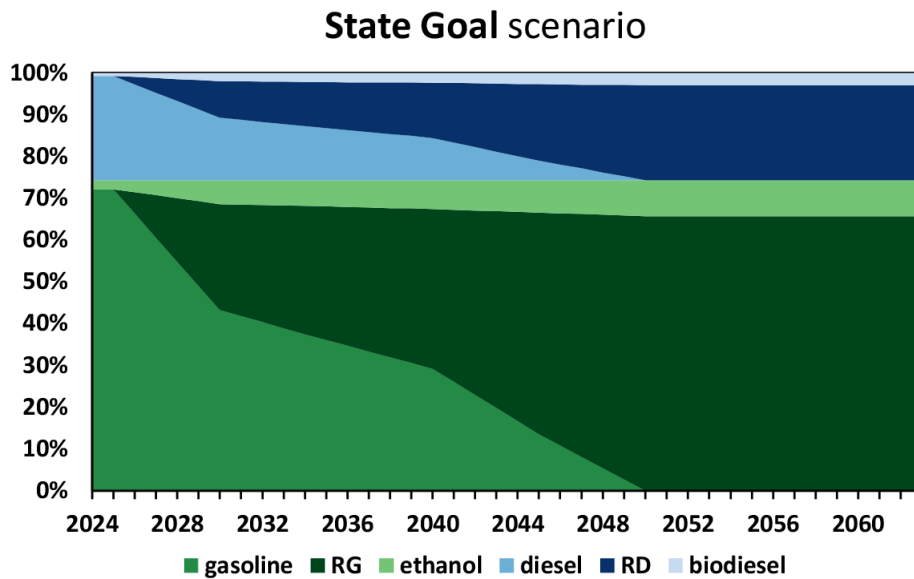


Notes:
RD: refined diesel
RG: refined gasoline

2.3.3 State Goal Scenario

The **State Goal** scenario is derived from the “Transport Fuels” scenario constructed for the Washington State Department of Commerce’s (Commerce’s) *2021 State Energy Strategy* (Commerce 2021). This scenario posits less electrification of transportation than other state energy strategy scenarios, instead achieving GHG reduction targets by substituting biofuels and synthetic fuels for petroleum products. Commerce’s analysis provides absolute forecast quantities of both biofuels and synthetic fuels in 5-year increments from 2025 to 2050. To produce the gasoline substitute and diesel substitute quantities needed for analysis, Commerce’s synthetic fuels and biofuels forecasts were summed and then reallocated to match the ratio of gasoline-like and diesel-like fuels in SeaPort Sound’s bulk liquid mix. See Figure 2-5 for an outline of these changes.

**Figure 2-5
State Goal Market Fuel Mix Scenario**



Notes:
RD: refined diesel
RG: refined gasoline

2.4 Alternative 1: No Action Alternative

Under Alternative 1, the No Action Alternative, the Project would not be constructed, and SeaPort Sound would continue to operate the facility using its existing infrastructure without necessary upgrades. The existing unused refinery equipment would remain in place. Maintaining the existing infrastructure may require SeaPort Sound to adjust the mix of bulk liquids stored at the terminal or modify existing tanks to hold different bulk liquids in response to market demand. This EIS considers three potential market fuel mix scenarios as described in Section 2.3. Under the No Action Alternative, throughput and mix of bulk products would continue to fluctuate within the terminal's permitted limits based on market and customer demand. Similarly, the demand for specific products would continue to fluctuate, and terminal infrastructure may require future modifications to accommodate changes in the bulk liquids marketplace.

2.5 Alternative 2: Proposed Action

Under Alternative 2, Proposed Action, a portion of the SeaPort Sound Terminal would be upgraded to provide operational flexibility and modernized facilities to better meet increasing market demand for renewable/low-carbon fuels. The marketplace is quickly shifting toward a need for storing and transporting more renewable fuels, such as renewable diesel, and requires terminals such as

SeaPort Sound to modernize to adapt to this market. It is anticipated that renewable diesel may displace fossil fuel capacities at terminals in response to current and future legislation and increased demand. With the passage of House Bill 1091, it is expected that low-carbon fuels will continue to displace traditional fuels as market demand for low-carbon fuels increases. SeaPort Sound is in a position to accommodate the increased demand for renewable diesel, and the Project would allow the flexibility to adapt to this changing marketplace.

The Proposed Action includes demolishing the existing refinery at the terminal and replacing it with fixed cone roof storage tanks and upgraded wastewater and stormwater infrastructure. The Proposed Action would increase existing bulk liquids storage capacity at the SeaPort Sound Terminal by up to 11% to accommodate low-vapor-pressure bulk liquids, including diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. However, SeaPort Sound is not seeking to increase any permit limits associated with permitted facility throughput and emissions as part of the Project.

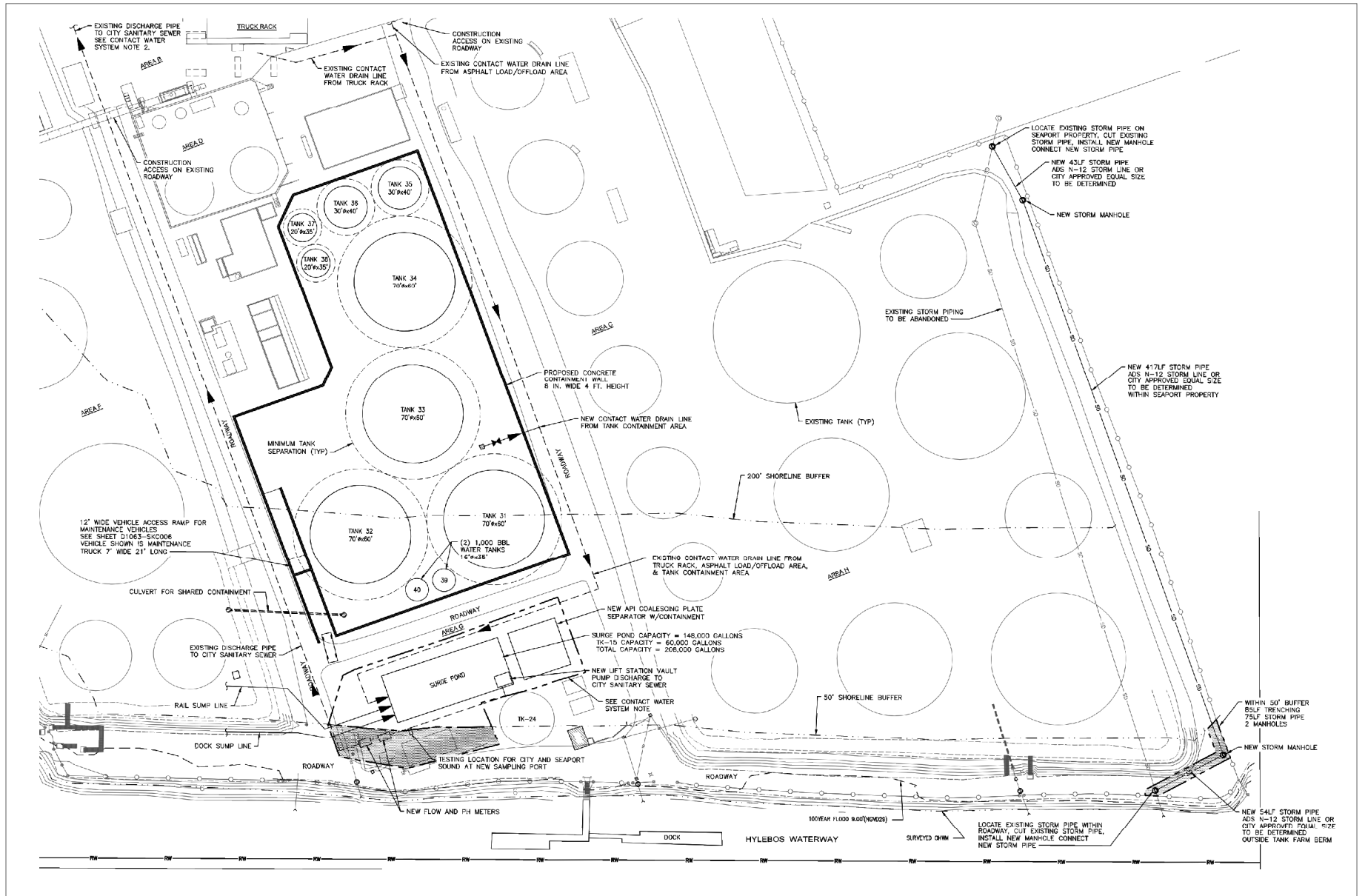
The Proposed Action would require demolition and construction activities within the 200-foot S-10 Port Industrial Area shoreline district. A portion of the work will occur within the 50-foot marine buffer but will be limited to replacing equipment and stormwater utilities within the footprint of existing development. All activities will be completed within existing developed areas that are actively used to support the existing industrial property use. No in-water work will occur as part of the Project. Construction is expected to begin in 2025, with operations beginning in 2026.

The Project includes the following elements (Figure 2-6):

- Demolishing existing refinery equipment including stacks, towers, pumps and electrical systems, a boiler and building, seven storage tanks, piping, and a containment berm
- Installing eight new storage tanks, two new process water tanks, and piping within a 4-foot-high concrete containment wall around the impervious new storage tank area
- Demolishing and removing the existing wastewater treatment equipment, including replacing the oil-water separator (specifically, a coalescing plate separator with containment) and removing two water tanks, a rotating biological disk, a water clarifying unit, and an induced aeration basin
- Upgrading wastewater treatment system equipment as practicable with best available technologies (i.e., surge pond, aeration pump)
- Filling and abandoning in place the existing blocked community stormwater line on the east side of the property and diverting stormwater through a realigned pipe to be constructed parallel to the existing pipe that will discharge through the existing outfall; the existing outfall will be retained, and no outfall modifications are proposed. This realigned stormwater line handles stormwater that originates from off-site right-of-way areas along Marine View Drive.
- Installing new manholes along the new stormwater line

The decommissioning of existing tanks will be completed by the contractor, which has not yet been selected to construct the Project. However, the remaining liquid from the tanks will be pumped out and repurposed, and the tanks will be completely emptied and cleaned prior to decommissioning. Spill prevention and control measures will be in place during the decommissioning process. Steel from the tanks will be recycled at an approved off-site facility as applicable.

Figure 2-7 shows the potential segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal that could be restored as part of MM-34. If restoration of this area is selected as a mitigation option, periodic monitoring reports would be submitted to the City to evaluate whether the Project is meeting its performance standards and a bond (financial security) would be posted by SeaPort Sound through the completion of the restoration monitoring period. The restoration site would be protected in perpetuity.



Publish Date: 2023/10/09, 4:37 PM | User: twelzy
 Filepath: \\corcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Proposed Conditions Site Plan.mxd



NOTE:
 Site plan presented from SeaPort Sound Terminal Plant Modernization Project plans from Norwest Engineering, Inc. April 2020.

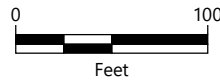


Figure 2-6
Proposed Conditions Site Plan

Final Environmental Impact Statement - October 2023
 SeaPort Sound Plant Modernization Project



LEGEND:

- Existing Shoreline Areas With Restoration Potential

Publish Date: 2023/10/09, 4:38 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Shoreline Restoration Areas.mxd

Prior to demolition activities, a stormwater pollution prevention plan (SWPPP) will be prepared, and dust control best management practices (BMPs) will be implemented. Demolition activities will include removing the existing refinery equipment, boiler, and 24-foot by 41-foot building and foundation (984 square feet); seven storage tanks of varying sizes (plus two water storage tanks in the wastewater treatment system area); the 450-linear-foot earthen containment berm associated with the removed tanks (approximately 400 cubic yards [cy]); and appurtenances including various pumps, equipment, and related piping. Approximately 13,000 square feet of pavement within the demolition area will be removed. Excavation several feet below the existing grade will be required to remove approximately 100 linear feet of existing stormwater and contact water piping within the demolition area. In total, approximately 8,320 cy of excavation will be required for demolition of the refinery area.

New storage tanks will be constructed to replace the demolished tanks. The new tanks will range in diameter from 20 to 70 feet and will be between 35 and 60 feet tall. Construction of the new tanks will include installing a new reinforced concrete circular footing for each tank. An impervious bentonite liner and sand layer will be placed inside the circular footing to seal any exposed soil underneath the tanks. The new tanks will be constructed within an area contained by a 4-foot-tall concrete wall, meeting secondary containment requirements (per 40 *Code of Federal Regulations* [CFR] 112 and WAC 173-180-320). During operation, tanks will be filled via pumps and piping that will be connected to existing conveyance infrastructure. The tanks will be operated similar to existing tanks on the site and will be maintained by SeaPort Sound staff.

The new containment area will be connected to the containment area to the west by a culvert for shared containment. A new contact water drain line will also be installed from the containment area to the replaced wastewater treatment system to the south. A vehicle access ramp will be located at the southwest entrance. In total, approximately 7,800 cy of fill will be placed over the demolition area (approximately 5,200 cy of native compacted fill and approximately 2,600 cy of gravel fill).

Portions of the existing contact water system will also be removed, including the existing oil-water separator and other related equipment and piping. Wastewater treatment system equipment will be upgraded as practicable with best available technologies (i.e., surge pond or aeration pump). No soil excavation will be required for removing the existing structures and appurtenances within the contact water system area. The contact water system will be replaced with new, upgraded features, including replacing the contact water drain line and oil-water separator. Flow and pH meters will be replaced within the 50-foot marine shoreline buffer along the existing discharge pipe to the sanitary sewer. These features will be installed over the existing impervious gravel and compact fill surfaces and within the existing contact water system development footprint. Approximately 390 cy of clean fill material will be used as backfill to support installation of the replaced contact water system features. Very

limited vegetation is present on site, and no vegetation will be altered or removed from anywhere within the Project vicinity.

A new fire loop system supplied by City fire lines will be installed at the terminal to expand fire control capabilities on site. The fire system and Project infrastructure will be designed to meet current codes for fire systems.

The existing stormwater line that extends beneath the terminal to the east of the Project vicinity has a restricted flow and will also be replaced. The existing line drains stormwater from off-site right-of-way areas along Marine View Drive and does not serve the property. To replace the stormwater line, the existing line will be filled with controlled density fill and abandoned in place. A realigned stormwater line will be installed parallel and east of the existing stormwater line. Approximately 702 cy of excavation will be required to install the replacement line. New manholes will be installed along the new stormwater line alignment, including two manholes within the 50-foot marine shoreline buffer. Approximately 631 cy of clean backfill material will be required to restore the area. The realigned stormwater line will connect to the existing outfall to Hylebos Waterway. No new outfalls will be constructed, and no in-water work will be required to support the stormwater line realignment. This realigned stormwater line handles stormwater that originates off site.

Construction will be completed using heavy equipment that may include backhoes, excavators, mobile and stationary cranes, vactors,⁷ dump trucks, and watering trucks (for dust control if needed). Demolished materials and excavated soils will be removed and disposed of or recycled at an approved off-site facility. Table 2-5 includes a summary of grading activities. Table 2-6 includes a summary of impervious surface changes within the Project vicinity.

⁷ Vactors are equipment used to suction wet or dry material, typically loading materials onto a truck or storage tank via a pump.

**Table 2-5
Grading Activities Summary**

Project Element	Cubic Yards		Square Feet	
	Outside 50-Foot Marine Buffer	Within 50-Foot Marine Buffer	Outside 50-Foot Marine Buffer	Within 50-Foot Marine Buffer
Existing refinery, tank farm, and boiler building area				
Excavation at existing berm	520	0	5,500	0
Excavation at existing gravel area, concrete area, and tank farm area	7,800	0	53,000	0
Place compacted native material	5,200	0	53,000	0
Place gravel fill over clay liner	2,600	0	53,000	0
Contact water system area				
Place clean fill in abandoned structures	156	234	150	250
Stormwater relocation area				
Excavation associated with trenching	650	52	2,200	200
Fill associated with trenching	585	46	2,200	200
Containment culvert area				
Excavation associated with trenching	360	0	750	0
Fill associated with trenching	360	0	750	0

**Table 2-6
Impervious Surfaces Summary**

Project Element	Impervious Surface Removed (square feet)		Impervious Surface Replaced (square feet)	
	Outside 50-Foot Marine Buffer	Within 50-Foot Marine Buffer	Outside 50-Foot Marine Buffer	Within 50-Foot Marine Buffer
Refinery concrete slab	13,000	0	0	0
Tank farm	17,500	0	53,000	0
Boiler building	980	0	0	0
Gravel area	21,520	0	0	0
Contact water system	150	250	0	0
Total Proposed Impervious Surface Removed or Replaced	53,400		53,000	
Total Proposed Impervious Surface Net Change	-400			

2.5.1 *Mitigation Measures and Best Management Practices*

The following are proposed mitigation measures and BMPs (using the numbering MM-#) that would be used to address potentially significant environmental effects from the Proposed Action as identified in this EIS. Proposed mitigation measures were identified as required by SEPA consistent with WAC 197-11-660, which states that mitigation shall be reasonable, capable of being accomplished, and imposed to the extent attributable to the identified adverse impact of the proposal. Mitigation measures included in permit conditions would become legal requirements of the Applicant.

2.5.1.1 **Permit Compliance**

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.

2.5.1.2 **Project Design Features**

- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-6:** The Project will be designed so that any contact water generated during facility operation will be treated and managed in compliance with existing regulations.
- **MM-7:** The current on-site wastewater treatment system will be replaced with modern equipment to reduce electricity consumption at the facility.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.
- **MM-9:** All work will occur in the footprint of existing development and will not disturb any existing shoreline vegetation or habitat.

2.5.1.3 Construction Best Management Practices

- **MM-10:** SeaPort Sound will obtain a Construction Stormwater General Permit (CSWGP) from the Washington State Department of Ecology (Ecology) for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and other construction water discharges. SeaPort Sound will prepare and implement a SWPPP, with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.
- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.
- **MM-13:** Additional security patrols will be provided, and all work areas will be fenced to prevent public access during construction. The Project site will continue to comply with its Facility Security Plan requirements.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-15:** Water that is used to clean decommissioned refinery equipment prior to removal from the site will be treated and disposed of properly.
- **MM-16:** All electrical and natural gas connections to the decommissioned refinery equipment will be properly disconnected and secured.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-19:** Unused equipment on the Project site that is demolished (e.g., refinery and wastewater treatment equipment) will be properly disposed of or recycled at an approved off-site facility.
- **MM-20:** Construction will occur during times allowed by the City's noise ordinance in TMC Title 8 or an approved extension.
- **MM-21:** Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable.
- **MM-22:** Erosion control measures will be implemented during construction per the Temporary Erosion Control Plan to be prepared for the Project.

- **MM-23:** The contractor will be responsible for the preparation of a spill prevention and control plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-25:** The construction contractor will be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils or groundwater potentially encountered during excavation.
- **MM-26:** SeaPort Sound will provide asbestos and lead abatement requirements and procedures to the contractor prior to construction. Asbestos and other hazardous wastes used or encountered during construction will be properly disposed of in accordance with appropriate regulations.
- **MM-27:** An Inadvertent Discovery Plan will be prepared and would be followed in the event of a discovery of cultural resources during construction.

2.5.1.4 Operational Safety Plans and Procedures

- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's Industrial Stormwater Individual Permit (ISIP); Industrial Wastewater Discharge Permit (IWDP); Spill, Prevention, Control, and Countermeasure (SPCC) Plan; *SeaPort Sound Terminal LLC Facility Contingency Plan*; Facility Security Plan; Emergency Response Plans; and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.

- **MM-33:** SeaPort Sound’s vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.

2.5.1.5 Additional Mitigation

- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City’s Urban Forestry Program. This mitigation measure is consistent with the City’s *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.
 - Purchase third-party-verified GHG offsets.
- **MM-35:** SeaPort Sound will install tanks within the proposed expansion area with fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require a separate SEPA review and NOC issued through PSCAA. The NOC applicability for the Proposed Action will be completed after the EIS is complete as part of project permitting.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-37:** There will be annual reporting of established baseline capacity, throughput, and facility emissions per regulations in TMC 13.06.080.F.
- **MM-38:** To support and promote methods for reducing marine vessel risks to southern resident killer whales (SRKWs), SeaPort Sound will include language in its *Terminal Information Manual*, which is distributed to marine operators calling at the terminal. The language will encourage vessel operators to hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional WhaleReport Alert System and emerging resources, such as the upcoming Cetacean Desk of the Vessel Traffic Service in U.S. Coast Guard’s (USCG’s) Puget Sound sector, to slow down near SRKWs in near real time.

It will also encourage vessel operators to minimize the distances that secondary and service vessels (escorts, fueling, etc.) travel and/or to choose routes and timing that reduce overlap with SRKW foraging areas.

- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

The methodology and calculations for MM-34 are described in the *Cost of GHG Mitigation for the SeaPort Sound Plant Modernization Project* memorandum in Appendix C.

2.5.2 *Direct Effects of Proposed Action*

The construction and routine operation of the Proposed Action has the potential to cause direct effects on the following elements of the environment, as described in Chapter 3:

- Earth
- Air
- Water
- Plants and wildlife
- Energy and natural resources
- Archaeological, historic, and cultural resources
- Environmental health and safety
- Land and shoreline use
- Transportation
- Public services and utilities

2.5.3 *Secondary Effects of Proposed Action*

Secondary effects, also known as indirect impacts, are reasonably foreseeable environmental impacts that may be caused by a proposed action but occur later in time or are further removed than direct impacts. Secondary effects may result from transportation during construction or operation of the Proposed Action. This could include minor temporary increases in construction vehicle traffic on the

road during construction. During operation, increases in rail, truck, or vessel traffic may occur within the terminal's permitted throughput limits in response to increases in market demand for either the No Action or Proposed Action alternatives. Other secondary impacts may be related to the extraction and combustion of fuels that are transported through the terminal. These are evaluated as secondary effects because SeaPort Sound is not directly responsible for the extraction and combustion of materials. As a storage and distribution terminal, the rates of extraction and combustion of materials are influenced by market demand and are expected to occur independent of SeaPort Sound's actions in the marketplace.

2.5.4 Elements of the Environment Determined to Have No Probable Adverse Impact

The following elements of the environment were considered but are not expected to be adversely affected by the Proposed Action. This was based in part on input provided during the public scoping period. Therefore, the EIS does not further address the following:

- Housing
- Recreation
- Agricultural crops
- Parking
- Schools
- Parks or other recreational facilities
- Maintenance of public services and utilities
- Communications
- Scenic resources

2.6 Other Alternatives Considered

Alternative 2, the Proposed Action, is the only alternative considered by SeaPort Sound for removing aging infrastructure and replacing it with modernized facilities intended to provide operational flexibility and better meet increasing market demand for renewable/low-carbon fuels.

3 Affected Environment, Impacts, and Mitigation Measures

3.1 Earth

This section describes the existing geology in the Project vicinity, including geologic considerations (soils, slope, and stability), geologic hazards, and site conditions (e.g., potential for contamination from past uses). This section also evaluates potential impacts from the No Action Alternative, construction impacts from the Proposed Action, and long-term construction and operational impacts from the Proposed Action. Where appropriate, mitigation measures are identified to avoid or minimize these potential impacts.

3.1.1 *Affected Environment*

The study area for the earth affected environment considered for the proposed Project includes the area currently within the SeaPort Sound property footprint, particularly where earthwork is proposed to occur, and adjacent properties within approximately 0.25 mile of the property footprint. Analysis of the study area was based on previous geological site reviews, U.S. Geological Survey (USGS) maps, Washington Department of Geology and Earth Resources surveys maps, and a review of existing geotechnical engineering reports.

3.1.1.1 Topography

The Project site consists of imported fill and gravel materials and is generally flat (approximately 1% to 2% slopes). The Project site is on approximately 10 to 20 feet of historically placed fill above what was once the open water of Commencement Bay (Hudson and White 2006; Patterson 2015). The property is currently developed and covered by impervious, compacted gravel fill and paved surfaces. Elevation at the Project site ranges between approximately 2 feet and 16 feet mean lower low water (MLLW).

3.1.1.2 Geologic Conditions

A review of the Washington Division of Geology and Earth Resources Map Series 2015-03, Geologic Map of the Tacoma 1:100,000-scale Quadrangle, Washington, shows the geologic unit description of the Project site to be quaternary unconsolidated deposits of Holocene artificial fill and modified land area (Qf). This geologic unit typically consists of gravel, sand, silt, concrete, garbage, slag, and other materials used as fill, as well as natural deposits mixed and reworked by excavation and/or redistribution that obscures or substantially alters the original geologic deposit. The study area is in the area affiliated with development of the Port of Tacoma at Commencement Bay, which is the largest area of fill and modified land within the referenced map series (Schuster et al. 2015).

3.1.1.3 Geologic Hazards

3.1.1.3.1 Seismic Hazards

The Project vicinity is considered seismically active due to the interaction of the Pacific, Juan de Fuca, and North American plates. Interactions between these plates at the Cascadia Subduction Zone produces both intercrustal and intracrustal earthquakes. Physical evidence suggests that several large (magnitude 8 to 9) earthquakes have occurred along the Canadian Subduction Zone in the last 1,500 years, the most recent of which occurred in January 1700 (Atwater et al. 2005).

Shallow crustal earthquakes also occur in western Washington and are associated with earth movement along a fault. Active faults in the greater Pierce County area include Tacoma, Seattle, and Rattlesnake Mountain fault zones, which are capable of magnitude 6.0 to 7.5 earthquakes. The Tacoma Fault is approximately 42 miles long. USGS and Washington State Department of Natural Resources map shows the fault running generally west to east across the Kitsap Peninsula, then trending southeast toward Federal Way, Auburn, and Tacoma. Branches of the Tacoma Fault are mapped extending into and near the Tideflats area (Pierce County 2020; USGS 2010, 2023; DNR 2023).

A strong earthquake can also result in landslides, soil liquefaction, tsunamis, and seiches, which are discussed in the following subsections.

3.1.1.3.2 Landslide Hazards

The Project vicinity is not considered to be within a landslide hazard area based on the City's criteria for landslide hazard because the site is sloped at less than 5%. Figure 3-1 shows adjacent sloped areas within the study area. Outside the Project vicinity, on the northeast side of Marine View Drive, are steep slopes (greater than 40%) classified by the City as a landslide hazard. These slopes are stable under static conditions but may not be stable during an earthquake event (Pierce County 2018).

3.1.1.3.3 Liquefaction Hazards

Liquefaction occurs when loosely packed, waterlogged sediments at or near the ground surface lose their strength in response to strong shaking, commonly during earthquakes. The subsequent reduction in soil shear strength can result in settlement and lateral spreading. Figure 3-1 shows the Project vicinity is in an area identified as having a high potential for liquefaction on the City's Seismic Hazard Areas map (City of Tacoma 2004).

3.1.1.3.4 Tsunami and Seiche Hazards

The City defines "tsunami hazard" areas as coastal areas susceptible to flooding and inundation as a result of excessive wave action due to seismic or other landslide events. The 2009 Tsunami Hazard Map of Tacoma, Washington (Walsh et al. 2009) indicates that tsunami wave inundation is not likely in the Project vicinity. A seismic tsunami coinciding with low tide would not affect the Project vicinity. Only a

seismic tsunami coinciding with normal high tides would encroach on the Project vicinity. The predicted maximum water depth is about 4.5 feet with a current of about 0.9 mile per hour (Walsh et al. 2009).

More recent mapping indicates tsunami wave runup from a magnitude 7.1 earthquake on the Tacoma Fault Zone reaching elevations of approximately 12 feet on the Puyallup River Delta (USGS 2010). Recent mapping for a large Seattle Fault Zone earthquake scenario (Dolcimascolo et al. 2022) shows a maximum leading wave amplitude of 12 feet at a simulated tidal gauge in Commencement Bay and an approximate inundation depth at the site on the order 6 feet. Figure 3-1 illustrates the tsunami hazard area in the project vicinity.

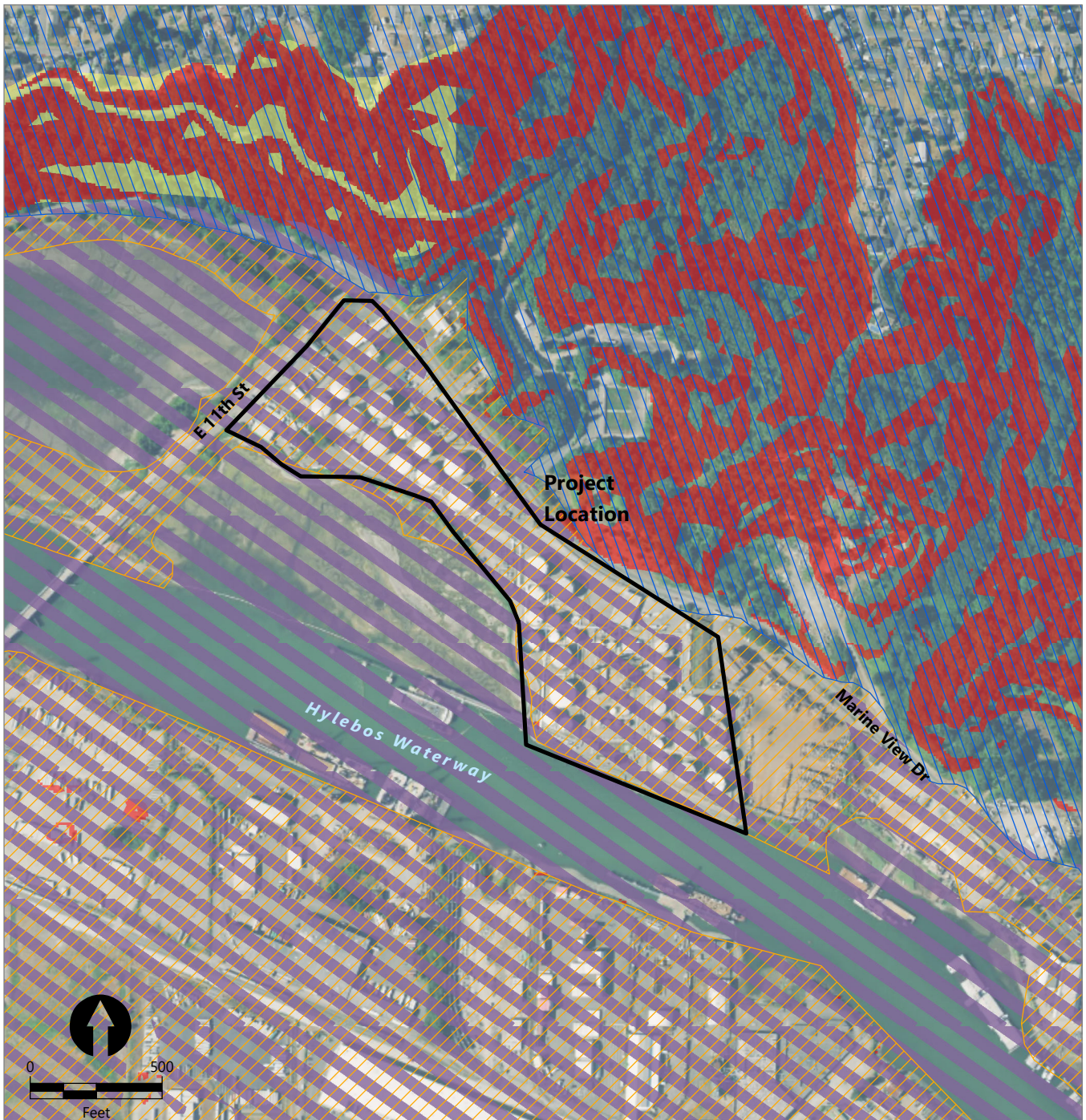
Mapping by the American Society of Civil Engineers (ASCE) indicates tsunami wave runup of up to approximately 3 feet mean high water (MHW) (9 feet North American Vertical Datum of 1988 [NAVD88]) at the Project site. This mapping tool also indicates earthquake-induced subsidence at the site of 0.33 foot. (ASCE 2023).

Like tsunamis, seiches can be triggered by earthquakes or landslides (as well as strong winds or rapid changes in atmospheric pressure). They typically occur in enclosed or partly enclosed bodies of water and consist of oscillations or standing waves in the water surface, similar to water sloshing in a bathtub. A seiche can last for hours or days and can contribute to flooding (NOAA 2023).


3.1.1.3.5 *Lahar Hazards*


Volcanic hazards include pyroclastic flows, lava flows, debris avalanches, and inundation by debris flows, lahars,⁸ mud flows, or flooding resulting from volcanic activity. Pierce County hazard maps indicate the Project vicinity lies within the inundation zone for Case II lahars. Case II lahars are areas that could be affected by relatively large noncohesive lahars, which are most commonly caused by the melting of snow and glacier ice by hot rock fragments during an eruption, but which can also have a noneruptive origin. Because the average time interval between Case II lahars from Mount Rainier is near the lower end of the 100- to 500-year recurrence range, it is common engineering practice to consider these flows analogous to the 100-year flood (USGS 1998).

⁸ A hot or cold mixture of water and rock fragments that flows down the slopes of a volcano and typically enters a river valley.



LEGEND:


 Tsunami Hazard Area

 Landslide Hazard

 Erosion Hazard

Liquefaction Susceptibility

 High

 Very Low

NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Landslide and erosion hazards data acquired from City of Tacoma.
4. Liquefaction susceptibility data acquired from Washington Department of Natural Resources.
5. Tsunami Hazard Area data acquired from Washington State Department of Natural Resources

Publish Date: 2023/10/09, 4:40 PM | User: twelody

Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Critical Areas Geologic Hazards.mxd



**Figure 3-1
Geologic Hazards**

3.1.1.3.6 Erosion Hazards

The potential for erosion is typically dependent on soil type, slope, groundwater seepage, or surface runoff. Areas characterized by slopes greater than 15% and as having artificial fill and alluvial soils, or slopes steeper than 25% and with a vertical release of 10 or more feet, are defined by the City as an erosion hazard area. The Project vicinity, shown in Figure 3-1, is not classified as an erosion hazard area because it is relatively flat and developed.

3.1.1.4 Soil Contamination

Some soil contamination could be present on the Project site as a result of historical activities at and around the facility, as described in Section 3.7.

3.1.2 Potential Impacts from the No Action Alternative

Under the No Action Alternative, the site would continue to be used for bulk liquid storage and distribution. No grading would occur within the refinery area. Additionally, the existing tanks within the refinery area and wastewater treatment system would not be replaced or upgraded with infrastructure to current building code standards. SeaPort Sound would continue to operate the existing facility in compliance with current local, state, and federal regulations. The site and terminal infrastructure would continue to be subject to similar geologic hazards, with older infrastructure being more at risk to geologically hazardous events.

Overall, the No Action Alternative would have no impacts on earth resources from construction because no construction would occur. In the long term, the No Action Alternative would result in minor impacts on earth resources during operations, with potential impacts being nominally greater than the Proposed Action because infrastructure would not be replaced or upgraded to current building code standards.

3.1.3 Construction Impacts and Mitigation Measures from the Proposed Action

The Proposed Action would include upland excavation and filling activities as part of demolition of existing structures, grading to prepare the site for construction, and trenching associated with the stormwater line and shared containment culvert between storage tank areas. Excavation activities are anticipated to occur within the footprint of existing fill material and would not extend to native soils. During construction, because of the potential for soils with petroleum or other contaminants to be encountered, the contractor will have soils tested and disposed of at an approved off-site disposal facility (see also Section 3.7.3). The construction contractor will be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils encountered during excavation. All activities would be completed within existing developed areas that are actively used to support the existing industrial property use. All

applicable permits for the Proposed Action would be obtained prior to construction. Construction and operation would be performed according to the requirements and conditions of these permits. Filling and grading activities are described in Section 2.5.

3.1.3.1 Construction Mitigation Measures and Best Management Practices

Potential impacts on earth resources from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-10:** SeaPort Sound will obtain a CSWGP from Ecology for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and other construction water discharges. SeaPort Sound will prepare and implement a SWPPP, with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-22:** Erosion control measures will be implemented during construction per the Temporary Erosion Control Plan to be prepared for the Project.

3.1.4 *Long-Term Impacts and Mitigation Measures from the Proposed Action*

The Proposed Action would install eight new ASTs that are designed and constructed according to modern engineering standards and specifications, which are generally more protective than design standards from the mid- to late 1960s and are also consistent with International Building Standards. The new ASTs would be constructed according to the City's current seismic and development code requirements. A new reinforced concrete circular footing for each tank would be installed, including a bentonite liner and sand layer placed inside the circular footing to seal any exposed soil underneath the tanks. The new tanks would be constructed within an area contained by a 4-foot-tall concrete wall meeting secondary containment requirements (per 40 CFR 112 and WAC 173-180-320). The new containment area would be connected to the existing containment area to the west by a culvert for shared (and greater) containment.

SeaPort Sound would provide information required by the City to support its review of the Proposed Action, including geotechnical information required for development in liquefaction-prone areas (per TMC Title 2 – Building and Development Code and TMC Chapter 13.11 – Critical Areas Preservation, which includes geologically hazardous areas). Detailed geotechnical investigations, studies, and

analyses will be conducted in the future in accordance with local building code and ASCE 7 requirements. After these are completed, the results will inform the selection of the best suited liquefaction mitigation techniques for the Project.

The Proposed Action would result in the removal of concrete, asphalt, and gravel. There will be a total net decrease in impervious surfaces of 400 square feet on the property compared to existing conditions as described in Section 2.5.

3.1.4.1 Secondary Impacts

The Proposed Action would not result in secondary impacts on area geology and would not exacerbate geologic hazards that occur within the Project vicinity.

3.1.4.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on earth resources would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.

- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.
- **MM-33:** SeaPort Sound’s vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.

3.2 Air

This section describes the existing air quality conditions in the Project vicinity, including attainment, nonattainment, and maintenance status of the study area, existing air quality conditions, sources of criteria air pollutants, and changes to GHG emissions. This section evaluates potential impacts from the No Action Alternative, construction impacts from the Proposed Action, and long-term construction and operational impacts from the Proposed Action. Where appropriate, mitigation measures are identified to avoid or minimize these potential impacts.

3.2.1 *Affected Environment*

The study area for the air affected environment considered for the proposed Project includes the construction area within the SeaPort Sound property footprint and Tacoma-Pierce County attainment area, within the Puget Sound Intrastate Air Quality Control Region (AQCR). Analysis of the study area was based on review of PSCAA and U.S. Environmental Protection Agency (EPA) publications and resources.

3.2.1.1 *Attainment, Nonattainment, and Maintenance*

For the purpose of implementing the Clean Air Act, Section 107 necessitates the establishment of AQCRs. AQCRs may be wholly intrastate, composed of an entire region within a single state; or interstate, composed of similar geographic areas that may be within more than one state. A State Implementation Plan (SIP) outlining control measures for compliance with the National Ambient Air Quality Standards (NAAQS) would be submitted to and approved by EPA. NAAQS have been

established for six of the most common air pollutants: carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide. Collectively these six pollutants are known as “criteria air pollutants.”

The proposed Project would occur within the Puget Sound intrastate AQCR and specifically within the Tacoma-Pierce County attainment area. The Tacoma-Pierce County attainment area comprises areas within the City and unincorporated Pierce County. EPA, Ecology, and PSCAA maintain a network of air quality monitoring stations to measure existing air quality and determine whether areas are designated as attainment or nonattainment areas for the six NAAQS criteria air pollutants.

Air quality throughout the entire AQCR must comply with NAAQS emission standards for a particular pollutant; otherwise, the entire AQCR is designated by EPA as nonattainment for the pollutant. Attainment for a given pollutant indicates that the air quality in an area complies with the NAAQS for that pollutant. For an area designated as nonattainment, Ecology and PSCAA must develop an EPA-approved SIP to achieve attainment of the NAAQS. If an area designated as nonattainment meets applicable NAAQS emission standards, the area is redesignated as “maintenance” and requires a maintenance plan to ensure that ambient concentrations and air quality do not deteriorate back to nonattainment levels. Maintenance areas that continually meet NAAQS standards for several years, typically 10 years, may be reclassified as in attainment.

In 2009 Tacoma-Pierce County was designated as nonattainment for the 2006 24-hour fine particulate matter (PM_{2.5}) standard. In 2012 EPA determined that Tacoma-Pierce County had met the 24-hour 2006 PM_{2.5} NAAQS based on 2009 to 2011 monitoring data. In 2012, Ecology submitted a SIP to meet the remaining attainment plan requirement, a 2008 Baseline Emissions Inventory, and strengthened woodsmoke control measures. In 2013, EPA reviewed 2010 to 2012 monitoring data, which showed continued attainment of the 24-hour PM_{2.5} standard, and approved 2011 motor vehicle emission budgets for the purpose of meeting transportation conformity requirements.

In 2014, Ecology submitted a request to redesignate the Tacoma-Pierce County nonattainment area to attainment and submitted a maintenance plan demonstrating that the control measures already in place will continue to ensure attainment over the next 10 years. EPA approved the maintenance plan submitted by Ecology and redesignated the entire area to attainment of the 2006 24-hour PM_{2.5} standard in 2015 (EPA 2021a). The Tacoma-Pierce County attainment area is currently designated as “in attainment” for the NAAQS.

3.2.1.2 Existing Air Quality Conditions

Of greatest concern for the Puget Sound AQCR, and the Tacoma-Pierce County attainment area, is ground-level ozone (smog), which is created by chemical reactions with different types of air pollution such as vehicles, industrial facilities, and gasoline fumes; PM_{2.5} that comes from

home-heating wood stoves, wildfires, industrial facilities, and vehicles; and black carbon from diesel exhaust.

PSCAA currently has two air quality monitoring stations active in the Tacoma area: Tideflats Station and South L Street Station. These monitoring stations are specific to PM_{2.5}. The 3-year average of annual maximum 98th percentile PM_{2.5} values between 2018 through 2020 was 24.6 micrograms per cubic meter (µg/m³) at the Tideflats Station and 32.9 µg/m³ at the South L Street Station (PSCAA 2021a). PM_{2.5} values for both stations are below the 35 µg/m³ EPA standard.

Except for days that experienced high levels of smoke from wildfires, air quality within the Tacoma-Pierce County attainment area is generally good. Approximately 81% of days in 2020 were below the EPA standard of 35 µg/m³ for PM_{2.5} and were considered to be in the “Good” category of the EPA Air Quality Index, 16% were in the “Moderate” category, 1.1% were in the “Unhealthy for Sensitive Groups” category, 1.1% were in the “Unhealthy” category, and 0.8% were in the “Very Unhealthy” category (PSCAA 2021b).

3.2.1.3 Existing Sources of Criteria Air Pollutants

Existing sources of criteria air pollutants within the Tacoma-Pierce County attainment area include on-road sources, nonroad sources, and existing industrial facilities. On-road sources include trucks and cars within the Port of Tacoma and on adjacent roadways. Nonroad sources of criteria air pollutants include marine vessels (such as oceangoing vessels like ocean freighters) and harbor vessels (such as assist tugs and bunkering tugs). Railroad locomotives are another source of criteria air pollutants and operate throughout the greater Port of Tacoma area. Equipment that is used to handle and facilitate intermodal transfer of cargo includes gantry cranes, yard tractors, front- and side-loading forklifts, and heavy-duty off-road vehicles. Existing industrial facilities include a refinery, a pulp mill, and SeaPort Sound. Industrial facilities also generate emissions of criteria air pollutants from the combustion of fossil fuels, most commonly in boilers and heaters. Other notable pollutant sources include combustion engine vehicles, wood stoves, and wildfires.

3.2.1.4 Permitted Operations

SeaPort Sound is a tank farm and terminal that receives and dispenses products such as crude oil, gasoline, ethanol, diesel fuel, renewable diesel, biodiesel, fuel oil, asphalt, and propane. These products are then transported elsewhere by the facility’s customers and consumed for transport energy or heat or used as a component in other products. The facility has the capacity to receive and dispense crude oil; however, this product was not offered during the reference period of January 1, 2016, to December 31, 2020, that was used in the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* (Appendix A).

Most of SeaPort Sound’s throughput volume is regulated under NOCs issued by PSCAA. Authorization and product throughput limits are captured across multiple NOCs rather than by a

single operating permit. Appendix D provides a summary of SeaPort Sound's active NOCs and lists past NOCs that are superseded by the active NOCs. Throughput volume in the PSCAA permits is measured as the volume of product leaving the facility by loading trucks and loading vessels. Air emission sources from the facility are below major source limits and managed under required permits from PSCAA. SeaPort Sound is not requesting any changes to throughput limits regulated under the NOCs as part of the Proposed Action. Note that low-volatility materials (i.e., diesel or fuel-oil products) have no enforceable limitations in the existing PSCAA permits. SeaPort Sound currently operates below Title V operating limits and sets throughput limitations on materials to remain below these operating limits.

3.2.2 Greenhouse Gas Emissions

As outlined in Section 2.3, and in depth in Appendix A, the analysis prepared for this EIS models 40 years of throughput and includes three market fuel mix scenarios (Static, Central, and State Goal) based on EIA data from the geographic division of PADD 5 states, recent legislation passed by the Washington State Legislature, and the Washington State Energy Strategy. Because the recent Washington Clean Fuels Program legislation is primarily intended to address GHG emissions from transportation fuels, the analysis focuses on conventional road fuels such as gasoline (73.4% of all road fuels) and diesel (25.4%), which make up the greatest percentage of the PADD 5 market fuel mix and are the most carbon intensive. In contrast, gasoline and diesel substitutes (ethanol and other renewable fuels) combined equal 1.2% of the PADD 5 market fuel mix. Substitute fuels can include drop-in fuels such as renewable gasoline and renewable diesel, and biofuels such as ethanol and biodiesel.

Drop-in renewable fuels are hydrocarbon biofuels produced from biomass sources through a variety of biological, thermal, and chemical processes. These products are chemically identical to petroleum gasoline or diesel. Because they meet the same ASTM International fuel quality standards as the petroleum fuels they replace, drop-in fuels can be used in existing engines and infrastructure to reduce GHG emissions. Biofuels such as ethanol and biodiesel vary greatly in chemical composition from the fossil fuels they are intended to replace and generally require significant modification to existing engines or infrastructure to support their use.

As stated in Section 2.3, it is expected that the percentage of both renewable fuels and biofuels within the facility's product mix will increase as a result of the Washington Clean Fuels Program and as acceptance of these alternative fuels results in a greater market share within the energy industry as the Washington Clean Fuels Program mandate is more broadly implemented.

3.2.3 Potential Impacts from the No Action Alternative

Under the No Action Alternative, the Project site would continue to be used for bulk liquids storage and transport. SeaPort Sound would continue to operate the existing facility in compliance with

current local, state, and federal regulations, as described in Section 2.2. The facility would continue to operate in compliance with local, state, and federal regulations and within the facility's permitted throughput limits.

As described in Appendix A, operations emissions under each of the three market fuel mix scenarios are projected to be largely unaffected by the proportion of renewable to fossil fuels in the throughput product mix because the majority of facility equipment and infrastructure will continue to operate using the same fuel types currently used to maintain facility operations.

In comparison, operations emissions are expected to change under the Proposed Action versus the No Action Alternative because the Proposed Action would replace some of the facility equipment and expand the facility's capacity. For this reason, operations emissions are considered to be sensitive only to the choice of alternatives (No Action or Proposed Action), not to specific market fuel mix scenarios (Static, Central, or State Goal).

Modeling of emissions for the No Action and Proposed Action alternatives indicates only a minor difference between the two. Over the analysis period (2024 through 2063), the on-site, cumulative operating GHG emissions under the No Action Alternative are anticipated to be approximately 291,900 tCO_{2e}. These numbers assume that operations would increase linearly to meet the Proposed Action's increase to gross storage capacity as of 2033.

SeaPort Sound employs a variety of technologies to reduce on-site emissions and odors and maintain compliance with its PSCAA permits. PSCAA also regularly inspects the facility to ensure compliance and that no unacceptable emissions or odors have been identified that would require further control. SeaPort Sound's technologies to control GHG and other emissions and odors include a bottom-load truck rack that vacuums emissions and returns them to the storage tanks, floating roofs in some tanks, a vapor detection system for propane loading, a blower that pulls vapors from asphalt oil trucks and processes them through a vapor control device and carbon filter, and a marine vapor combustion unit that is used during product transfers. This equipment controls emissions in compliance with PSCAA permit requirements. Operation of these systems would continue under the No Action Alternative and would have no adverse impact on regional air quality.

Overall, impacts on air from the No Action Alternative are expected to be minor. No temporary and localized construction emissions would occur. The terminal would continue to operate in compliance with current permits and regulations. Emissions control measures implemented during operation to address potential impacts on air would also continue.

3.2.4 *Construction Impacts and Mitigation Measures from the Proposed Action*

The construction of the Proposed Action would include large machinery and equipment such as excavators, front-end loaders, welders, and forklifts. Construction impacts and emissions associated with construction equipment would be short term. Equipment would be expected to be in service for approximately 26 weeks, and the construction site would be active for approximately 40 hours per week. GHGs accounted for in this phase of the Proposed Action include carbon dioxide, methane, and nitrous oxide. SeaPort Sound would comply with air emissions standards and would obtain any necessary air quality permits associated with the Proposed Action.

Expected on-site GHG emissions of machinery used during construction are summarized in Appendix A. The highest emissions-emitting equipment is anticipated to include excavators and front-end loaders. Using the EPA MOVES model, on-site emissions would total approximately 221 tCO₂e during construction of the Proposed Action.

Expected upstream GHG emissions of steel, concrete, and aggregate expected to be used during the construction process are summarized in Appendix A. Emissions for fabrication and transport of materials consumed during construction were calculated using the Argonne National Laboratory Greenhouse gases, Regulated Emissions, and Energy use in Technologies model. In total, emissions for off-site fabrication and transport of materials would total approximately 3,734 tCO₂e to construct the Proposed Action.

3.2.4.1 **Construction Mitigation Measures and Best Management Practices**

Potential impacts on air from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-26:** SeaPort Sound will provide asbestos and lead abatement requirements and procedures to the contractor prior to construction. Asbestos and other hazardous wastes used

or encountered during construction will be properly disposed of in accordance with appropriate regulations.

- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City’s Urban Forestry Program. This mitigation measure is consistent with the City’s *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.
 - Purchase third-party-verified GHG offsets.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

3.2.5 *Long-Term Impacts and Mitigation Measures from the Proposed Action*

The Proposed Action would permanently demolish existing refinery infrastructure and ASTs and increase storage capacity 11% by installing eight ASTs designed to store low-vapor-pressure bulk liquids. Demolition of the refinery infrastructure under the Proposed Action removes the on-site equipment that was capable of producing approximately 2 million barrels (84,000,000 gallons) of

petroleum products per year, which had the capacity to generate 89,000 tCO₂e per year of direct emissions from refinery operations. Under both the No Action and Proposed Action alternatives, the facility would continue to operate within permitted throughput limits.

Emissions from the fuel streams passing through the plant are considered secondary effects from the terminal. The new tanks will be used to store fuel streams for transfer and will not be used to produce or refine any products. Additionally, fuel types that can be stored in the new tanks installed as part of the Project will be limited due to the proposed fixed-roof tank design that is intended for low-vapor-pressure fuels such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. Asphalt cannot be stored in the tanks, even though it also has low vapor pressure and is currently stored on site. To store high-vapor-pressure fuels such as gasoline and ethanol in the new tanks, modifications would need to be made to the tanks (e.g., installing a floating roof). PSCAA considers this type of modification new construction and would require a SEPA determination from the City and a PSCAA NOC to be issued prior to any tank modifications.

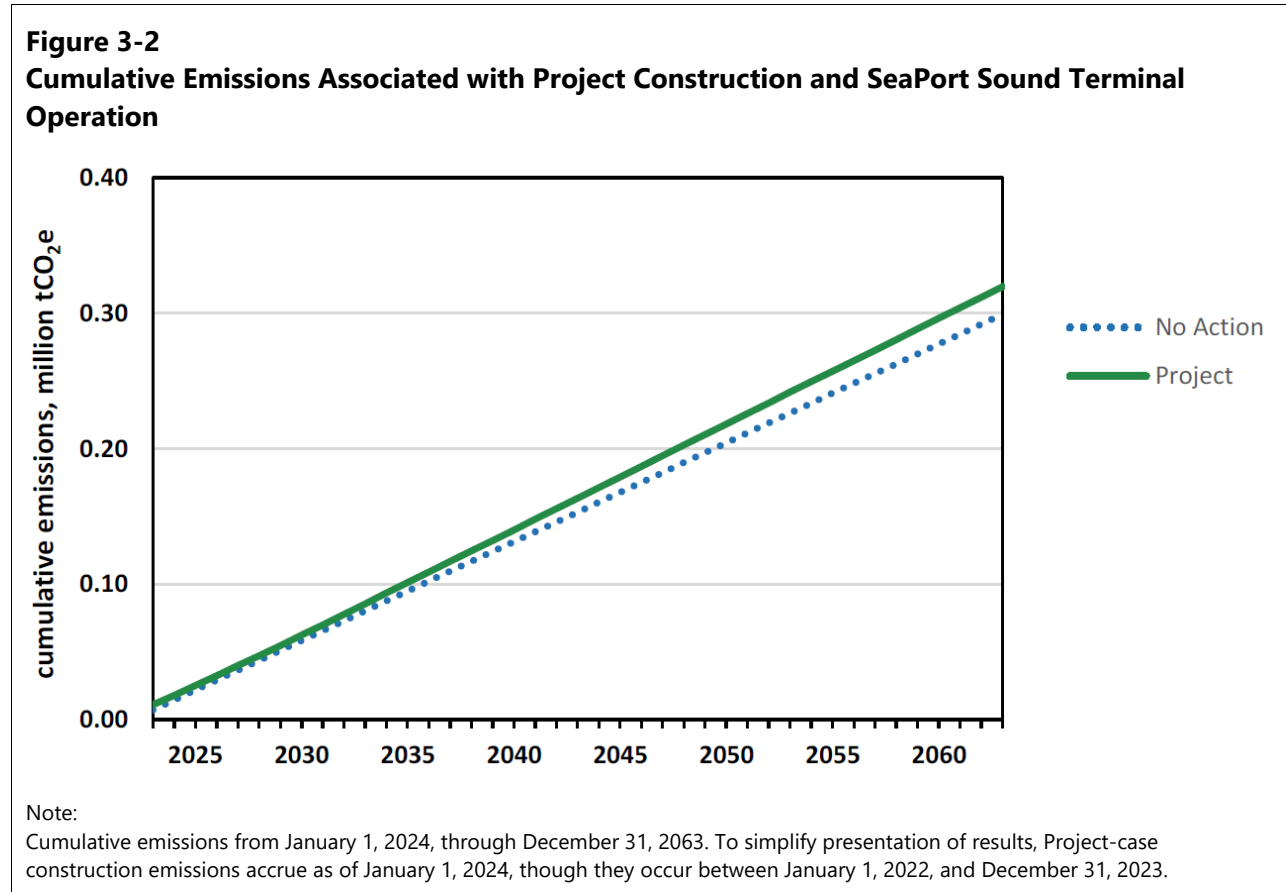
Construction impacts and emissions associated with construction equipment would be short term; on-site emissions would total approximately 221 tCO₂e during construction of the Proposed Action.

On-site GHG emissions from operation of the Proposed Action are anticipated to total approximately 16,800 tCO₂e over the analysis period (2024 through 2063). This is the difference between gross, cumulative operating emissions under the No Action Alternative (approximately 291,900 tCO₂e) and the Proposed Action (approximately 308,700 tCO₂e).

Direct impacts from construction and operation, or emissions over which SeaPort Sound has control, are summarized in Figure 3-2 for both the No Action and Proposed Action alternatives. As of 2063, cumulative construction and operation emissions will be 0.313 million tCO₂e in the Proposed Action and 0.292 million tCO₂e in the No Action Alternative.

Operations at the site are not anticipated to change drastically from existing conditions, and emissions control measures would continue to be implemented. This is because the permitted throughput would not increase, and on-site operations would remain largely similar to the No Action Alternative. Emissions of operations under the Proposed Action are different than the No Action Alternative because facility equipment will be replaced, and storage capacity will be expanded. Emissions at the facility are largely unaffected by the quantity of renewable versus fossil fuels in the throughput product mix because emissions associated with storage make up a relatively small part of overall facility emissions. Therefore, operations emissions would be largely the same under all market fuel mix scenarios, and long-term air impacts from operation of the Proposed Action are anticipated to be minor.

Figure 3-2 includes emissions from construction and operations. Emissions from construction are computed under the assumption that they occur during calendar years 2022 and 2023 but accrue to the cumulative results during calendar year 2024 for simplicity of presentation. Cumulative emissions associated with construction and operation are anticipated to be minimal over the duration of the 40-year analysis period.



3.2.5.1 Secondary Impacts

Secondary impacts on air from the Proposed Action result from off-site transportation of the throughput products from their point of origin to their destination, and the combustion or consumption of the products, similar to the No Action Alternative. As a third-party storage and distribution terminal, SeaPort Sound does not extract or refine feedstock materials for the products that it holds in inventory. The *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* in Appendix A has modeled upstream and downstream emissions of throughput products that pass through the SeaPort Sound Terminal. Changes at the SeaPort Sound Terminal are unlikely to impact the regional demand for these products or the manner in which those products are manufactured. Ultimately, combustion of fuels or consumption of materials sold to its customers is based on market demand and is expected to occur within the greater fuels

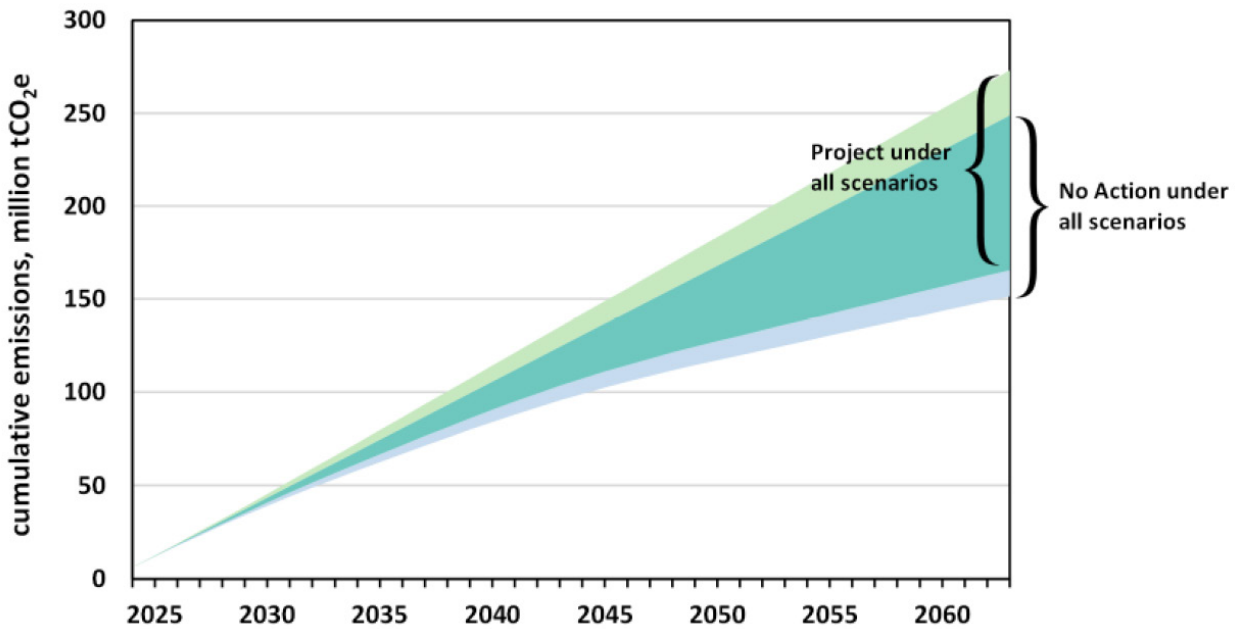
marketplace regardless of SeaPort Sound's actions due to the relative inelasticity of demand for fuel products. The Proposed Action may reduce secondary off-site emissions associated with the transport of fuel products compared to the No Action Alternative if it is providing more efficient pathways between manufacturers and consumers.

Under both alternatives, regional population growth will likely continue, potentially leading to an increase in market demand for fuel products and the need to transport them via SeaPort Sound and its competitors (OFM 2021). Using modeling, the predicted quantities of off-site, secondary GHGs generated by those external users who combust products handled by SeaPort Sound will increase by approximately 9% under each market fuel mix scenario. This value is not an increase in total global GHG emissions. It is only an increase in the share of fuels underlying global GHG emissions that would pass through SeaPort Sound under the Proposed Action.

Increased use of renewable and biofuel alternatives is expected to reduce GHG emissions over time, particularly in this region where the use of renewable and biofuel alternatives is more encouraged through policymaking. Under the Central and State Goal scenarios, as compared to the Static scenario, there may be a minor benefit to air as more carbon-intensive road fuels continue to be offset by renewable and biofuels. It is expected that under the Proposed Action, SeaPort Sound will be better equipped to provide the flexibility to offer an expanded inventory of renewable and biofuel products as the demand increases for low-carbon road fuels. Overall, the Proposed Action is anticipated to have minor secondary impacts on air compared to the No Action Alternative. As described in the previous paragraphs, secondary impacts are market-driven and associated with off-site actions that would occur independently of any changes to the SeaPort Sound Terminal capacity.

Figure 3-3 describes the range of secondary off-site emissions that could result under the suite of scenarios evaluated. The blue region represents potential secondary off-site emissions associated with the No Action Alternative. The green region represents potential secondary off-site emissions associated with the Proposed Action. The turquoise region represents overlap of outcomes from the No Action and Proposed Action alternatives. The upper edge of each region represents the Static scenario, while the lower edge of each region represents the State Goal scenario. The two regions overlap substantially, as represented by the turquoise-colored region. Figure 3-3 shows that the range of off-site emissions outcomes are more strongly driven by policy and less influenced by the Proposed Action.

Figure 3-3
Range of Secondary Off-Site Emissions Under the Action and No Action Alternatives



Note:

The blue region represents the range of possible outcomes under the No Action Alternative, and the green region represents the range of possible outcomes under the Proposed Action. The blue and green regions overlap, demonstrating that each alternative covers a range of possible results that are influenced by a variety of external market factors. Under either scenario, the modernized facility is able to store a larger fraction of the Pacific Northwest's total liquid fuels flow, which includes both renewable and fossil fuels.

Under the three market fuel mix scenarios, secondary emissions modeled from the potential combustion of fuels under the Static scenario would be the greatest (approximately 273 million tCO₂e under the Proposed Action). The secondary emissions under the Central and State Goal scenarios would be less (approximately 230 and 166 million tCO₂e, respectively). The reductions realized from the Central and State Goal scenarios compared to the Static scenario are due to the change in emissions from a greater share of renewable spark-ignition and compression-ignition road biofuels in the market mix as a response to policies.

This document attempts to estimate off-site GHG reductions by computing differences between policy scenarios. Differences between action alternatives are de-emphasized because off-site GHGs are not actually changed by the Project; rather, the Project is only associated with a greater or lesser share thereof (see Appendix A).

Table 3-1 provides projections of off-site road fuels GHG emissions associated with the No Action and Proposed Action alternatives. Factors used for each alternative were identical; only predicted quantities of throughput products differ. As shown in Table 3-1, secondary emissions projected for

all scenarios are approximately 9% more compared to the same No Action Alternative scenarios. The greatest difference in projected secondary emissions can be attributed to regulatory changes that are influencing the distribution and use of low-carbon fuels. Relative to the Static scenario, there is an approximately 16% reduction in GHGs under the Central scenario and an approximately 40% reduction in GHGs under the State Goal scenario under both the No Action and Proposed Action alternatives. See Appendix A for additional information.

**Table 3-1
Predicted Road Fuels Off-Site Emissions Shares**

Product	No Action			Proposed Action		
	Static (million tCO ₂ e)	Central (million tCO ₂ e)	State Goal (million tCO ₂ e)	Static (million tCO ₂ e)	Central (million tCO ₂ e)	State Goal (million tCO ₂ e)
Totals	249	210	151	273	230	166

Note:

This table shows the total predicted off-site emissions for both combustion and noncombustion emissions for the purposes of this EIS. Under either scenario, the modernized facility is able to store a larger fraction of the Pacific Northwest’s total liquid fuels flow, which includes both renewable and fossil fuels.

When considering secondary off-site emissions, the Central and State Goal scenarios each show a decrease in emissions over time relative to the 2016 to 2020 baseline period. This is expected to result from higher fractions of renewable and biofuels displacing fossil fuels in the regulated vehicle fuels market and from biomass-based fuels increasing their share of throughput products. The Static scenario under the Proposed Action is predicted to result in an increase in emissions over time relative to the 2016 to 2020 baseline period because it assumes existing low-carbon fuels legislation would be overturned; it does not assume changes in the regulated fuels market; and regional population growth is likely to continue, potentially leading to an increase in market demand for SeaPort Sound bulk liquid products and the need to transport them (OFM 2021).

Overall, the Proposed Action is anticipated to have minor secondary impacts on air compared to the No Action Alternative. Secondary off-site emissions associated with fuel products are market-driven and associated with off-site actions that would occur regardless of changes to the SeaPort Sound Terminal capacity. An increase in storage capacity will provide SeaPort Sound with the flexibility to offer an expanded inventory of renewable and biofuel products as the demand for these increases. Operations will continue similarly to existing conditions, with the potential for the increased use of renewable and biofuels expected to reduce relative emissions over time. Under the Central and State Goal scenarios, there may be a minor benefit to air as more carbon-intensive road fuels are offset by renewable and biofuels that the terminal will be better equipped to provide compared to the Static scenario.

3.2.5.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on air would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City’s Urban Forestry Program. This mitigation measure is consistent with the City’s *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.
 - Purchase third-party-verified GHG offsets.
- **MM-35:** SeaPort Sound will install tanks within the proposed expansion area with fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require a separate SEPA review and an NOC

issued through PSCAA to complete. The NOC applicability for the Proposed Action will be completed after the EIS is complete as part of project permitting.

- **MM-37:** There will be annual reporting of established baseline capacity, throughput, and facility emissions per regulations in TMC 13.06.080.F.

Note that the mitigation measure related to providing funding to the Urban Forestry Program has a clear and direct tie to the City's *2030 Climate Action Plan* (City of Tacoma 2021a), which includes specific goals related to supporting urban forestry initiatives, expanding urban forestry and natural stewardship to facilitate planting and/or care of 10,000 trees annually, and expanding urban forests.

3.3 Water

This section describes water resources in and near the Project site, including surface water (marine, estuarine, and freshwater), groundwater, frequently flooded areas, and water supplies. It assesses the potential for impacts that could result under the No Action Alternative or as a result of the construction and operation of the Proposed Action. Finally, this section presents measures identified to mitigate impacts of the Proposed Action. Wetlands and aquatic species are discussed in Section 3.4, Plants and Wildlife. Laws and regulations that are applicable to the Project and that were referenced for determining potential impacts on water resources are summarized in Appendix E.

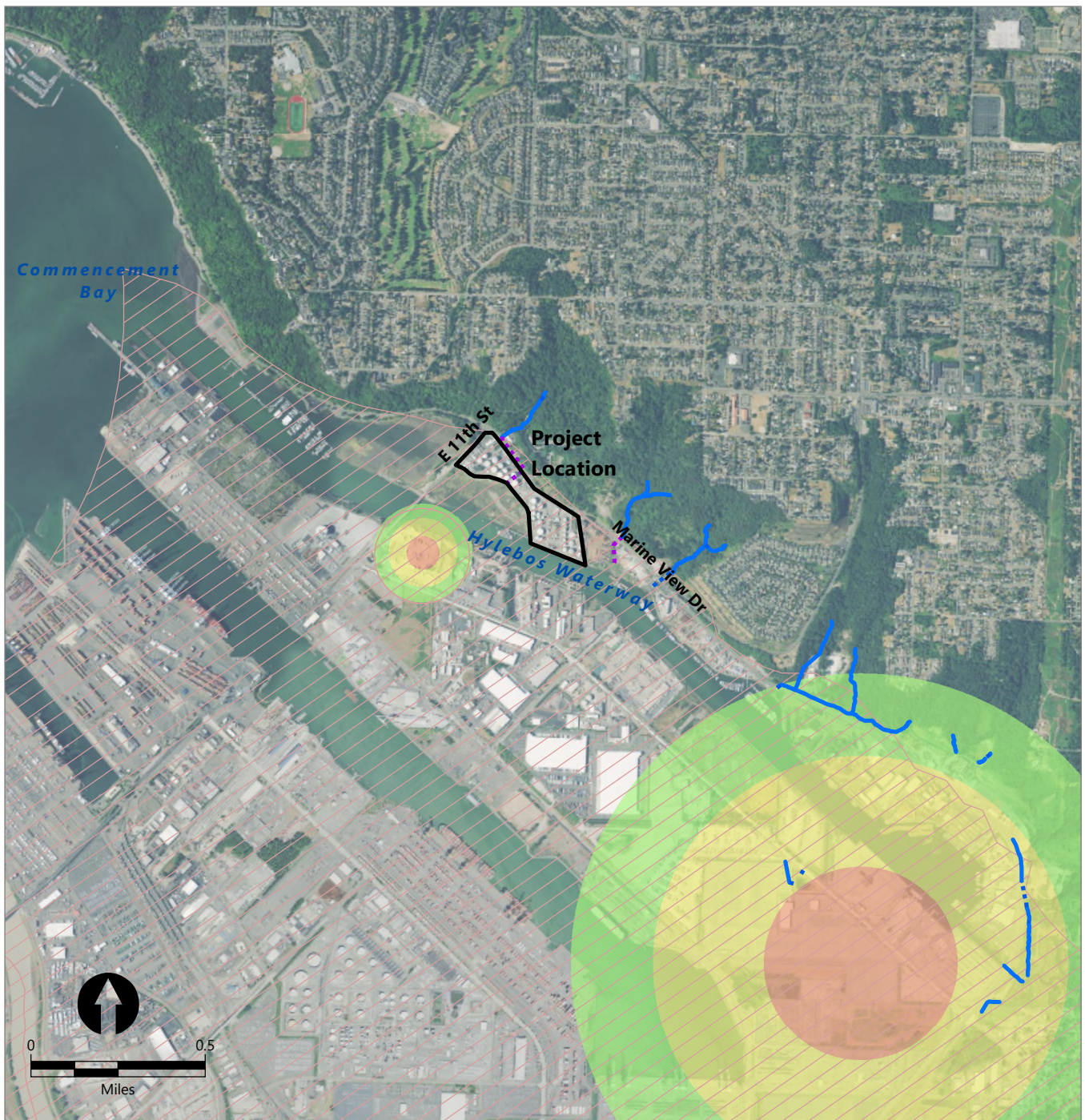
3.3.1 *Affected Environment*

The study area for water resources encompasses a 1-mile area surrounding the Project site (Figure 3-4). Hylebos Waterway, which is located adjacent to the Project site, is discussed in detail. Other waterbodies located within approximately 1 mile of the Project site are discussed at a more general level.

The Project site is located adjacent to the north bank of Hylebos Waterway, one of several navigation channels located in the Tideflats area on Commencement Bay, an embayment in southern Puget Sound. The waterway is an estuarine environment where marine and freshwaters mix. The Tideflats area has been heavily modified and industrialized over the past century, as discussed in Section 3.4.

Hylebos Waterway is a straightened channel, ranging from about 460 to 1,000 feet wide and approximately 3 miles long, that is regularly dredged to accommodate shipping. Under typical conditions, Hylebos Waterway experiences two major tidal flushing events per day, similar to other bays and waterbodies in Puget Sound. The water level within the waterway varies markedly between high and low tides, affecting local groundwater levels to some extent.

No freshwater streams or drainage channels are located within the Project site. Several freshwater streams within the study area flow from slopes on the north side of Marine View Drive under the roadway into Hylebos Waterway. Streams are discussed in more detail in Section 3.4.



LEGEND:

- Stream
- - - Culvert
- - - Pipe

Wellhead Protection Areas

- FWPA (1-yr)
- FWPA (5-yr)
- FWPA (10-yr)

- Critical Aquifer Recharge Area

NOTES:

1. Streams, culverts, and pipe data are acquired from Pierce County.
2. Wellhead Protection Area travel times acquired from City of Tacoma Shoreline Inventory and Characterization.
3. Critical aquifer recharge area acquired from Pierce County.

Publish Date: 2023/10/09, 4:42 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Water Study Area.mxd



Figure 3-4
Water Study Area

3.3.1.1 Water Quality

3.3.1.1.1 Surface Water and Sediment

In 1983, Hylebos Waterway was added to EPA's National Priorities List as part of the Commencement Bay Nearshore/Tideflats (CB N/T) Superfund Site, which encompasses several square miles of shallow water, shorelines, and adjacent land. As a result of a century of industrial use, water and sediments in this area were contaminated with heavy metals, hydrocarbons, pesticides, and other chemicals. A record of decision issued for the entire CB N/T Superfund Site in 1989, and subsequent Explanation of Significant Differences, established regulatory responsibilities through cooperative agreements that designated Ecology as the lead agency for controlling sources of pollutants and EPA as the lead agency for sediment cleanup. Contaminated sites are discussed in Section 3.7.

Cleanup efforts have been ongoing for decades, and conditions have improved. However, portions of Hylebos Waterway are still listed by Ecology as not meeting water quality or sediment quality standards for some types of pollutants. These include chlorinated pesticides, DDT, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs) in water within the upper part of the waterway (east of the Project site toward the head of the waterway) at levels requiring improvement (known as impaired, Category 5, or 303(d) list waters). The lower part of the waterway (west of the Project site toward the mouth of the waterway) contains waters of concern (Category 2) for levels of benzene, tetrachloroethylene, and trichloroethylene. The Ecology mapping shows Category 4B sediments throughout the waterway, meaning there is a pollution control program in place that is expected to resolve pollution problems (Ecology 2021a).

Dredging to remove contaminated sediments from Hylebos Waterway was conducted as part of the Superfund sediment cleanup in the early 2000s and for maintenance dredging purposes. Relatively recent navigation dredging that was permitted as a maintenance project was conducted in 2017 near the SeaPort Sound dock. In other parts of the waterway, contaminated sediments have been covered with a layer of clean material, such as sand, to decrease exposure to contaminants. In addition, a process of "natural recovery" is occurring as currents deposit clean sediments on the bottom of the waterway.

Several upland cleanup projects have occurred along Hylebos Waterway to remove contaminated soils in an effort to control sources of contamination to the aquatic environment (see Section 3.7). The Project site was not included in EPA's list of major ongoing contaminant sources to the Hylebos Waterway, which was part of EPA's Superfund Explanation of Significant Differences document published in 2000 (Anchor QEA 2019). In 2020, Ecology concluded that additional sediment sampling near the Project site's stormwater outfalls was not required as part of NPDES monitoring activities, in part because of installation of new stormwater treatment systems at the facility in 2018 (Ecology 2020a).

EPA is continuing to review the status of cleanup in the CB N/T Superfund Site and issues 5-year review reports. The latest report (EPA 2020) states that sediment cleanup actions to date in the mouth of Hylebos Waterway area have been adequate to address unacceptable risks, but that until all cleanup objectives have been met, site use restrictions (i.e., fish and shellfish consumption advisories) will remain in effect to limit human exposure to contaminated seafood.

3.3.1.1.2 *Groundwater*

Ecology defines groundwater as “water that collects or flows beneath the earth’s surface, percolating through and filling the porous spaces in soil, sediment, and porous rocks, as well as fractures in hard rock. Groundwater originates from rain, melting snow and ice, irrigation, surface water, and infiltrated stormwater” (Ecology 2021b). Groundwater provides water supply through wells, which are important in the Tacoma area, and it supports flows in streams and rivers during the summer months.

Geology directly affects the presence and movement of groundwater. In the Puget Sound lowland region, a series of glaciers during the last Ice Age deposited gravel, boulders, sand, and sediments in layers up to thousands of feet thick over the underlying bedrock. Layers of coarse materials (known as unconsolidated) are interspersed with layers of fine-grained (consolidated) materials. In some places, bedrock is exposed at the surface. Regional geology was also affected by volcanoes, mudflows, and earthquakes. This complex geology means that local patterns of groundwater presence and movement are also complex (Vaccaro et al. 1998). (See Section 3.1 for additional discussion.)

Groundwater tends to move laterally through unconsolidated glacial deposits and vertically through consolidated deposits. The vertical movement is usually downward, but near streams, rivers, and saltwater bodies groundwater tends to move upward (Vaccaro et al. 1998). An aquifer is a layer of rock or sediment that can hold groundwater. The boundaries of an aquifer are where a barrier, such as consolidated sediment, blocks the movement of groundwater.

At a watershed scale, groundwater in the Puyallup River Valley moves toward and eventually discharges to Commencement Bay. Shallow groundwater discharges to streams and waterways as it flows toward the bay. Groundwater also seeps from the bluffs along the bay in some areas (Conestoga-Rovers & Associates 2006). The lower Puyallup River Valley has one of the highest densities of flowing artesian wells in all of Washington State. Artesian wells occur where low-permeability or consolidated layers confine and pressurize underlying high-permeability or unconsolidated layers. When penetrated by a well, this pressure results in artesian flows, where water flows from the surface without pumping (Conestoga-Rovers & Associates 2006; Vaccaro et al. 1998).

Groundwater movement is also influenced by the presence of saltwater. Fresh groundwater and saltwater have different densities. Where the two meet, such as along Commencement Bay, there is a mixing zone. In some parts of the valley, saltwater intrudes or pushes inland within the groundwater table for more than a mile.

According to EPA, areas of subtidal groundwater discharge appear to be more diffuse toward the mouth of the Hylebos Waterway, where native sand is present underneath the fill material that was placed as the Tideflats area were developed. Farther upstream in Hylebos Waterway, groundwater discharges appear to occur from discrete aquifers beneath the waterway surface (EPA 2020).

Groundwater was monitored in several locations at the Project site following closure of the refining facility and a soil removal action. During well monitoring in November 2012, the depth to groundwater in the monitoring wells ranged from approximately 4 to 15 feet below ground surface. None of the five on-site monitoring wells contained contaminants above state Model Toxics Control Act (MTCA) standards at that time (Targa 2013).

3.3.1.2 Stormwater

3.3.1.2.1 On-Site Stormwater Management

Stormwater flows from the Project site into Hylebos Waterway through three outfalls that discharge approximately 108,000 gallons per day on average (Ecology 2020a). The facility's stormwater discharge is permitted under an NPDES ISIP that is administered by Ecology (Ecology 2018). This does not include industrial wastewater, which is routed and treated separately at the on-site wastewater treatment system and discharged to the City sewer system under a separate permit (see Section 3.3.1.3). The portions of the Project site that are currently covered under each permit are illustrated in Figure 3-5.

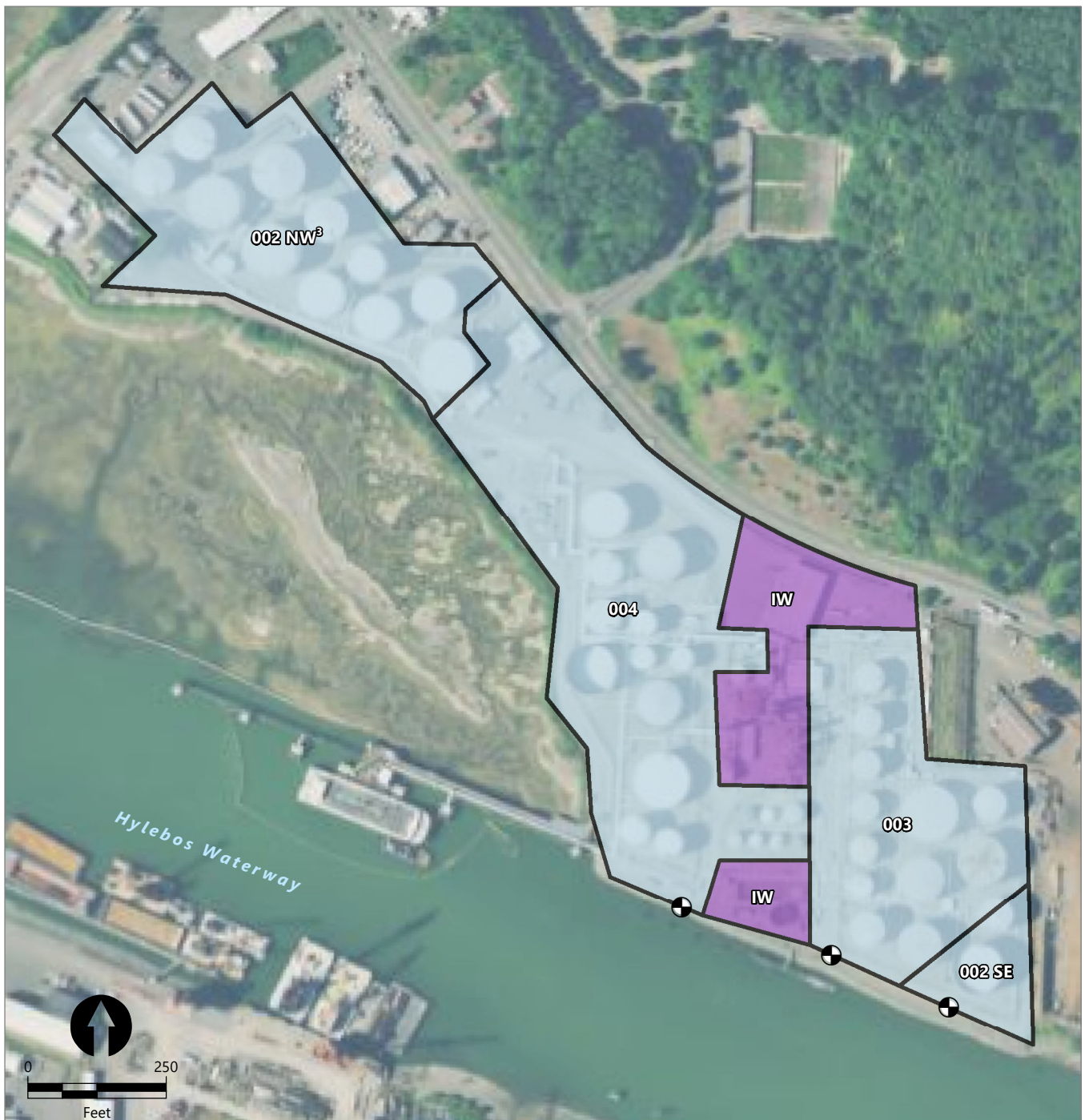
The ISIP (No. WA0003204) for stormwater has been continually maintained since 1992, was last updated in 2018, and will expire in 2023. The ISIP includes requirements for regular stormwater monitoring, testing, and reporting; an up-to-date spill control plan and SWPPP; and proper operation and maintenance of all treatment, control, and conveyance systems. The permit sets limits on the amount of pollutants that can be contained in site stormwater discharged to Hylebos Waterway. Recent sediment sampling offshore of the Project site indicates that stormwater discharge from the site does not contribute to elevated levels of contaminants in Hylebos Waterway sediments (Anchor QEA 2019).

SeaPort Sound uses numerous procedures and systems to prevent discharge of contaminated stormwater from the Project site. Examples include the following:






Secondary Containment and Visual Inspection. Three stormwater drainage areas are located within the Project site (Figure 3-5). The storage tanks on the Project site are all located in secondary containment (bermed) areas within these drainage areas. Stormwater (including precipitation, exhaust water from internal steam heating coils from heated tanks, and tank roof water) follows the natural grade of the tank containment areas to low points where stormwater accumulates. When a significant amount of stormwater is accumulated, SeaPort

Sound employees visually check for floating oil before the containment valves are opened. If stormwater retained in the secondary containment area has a hydrocarbon sheen or oil, the impacted water is skimmed off and reclaimed. If skimming does not sufficiently remove the oil, the stormwater is routed to the on-site wastewater treatment system.

- **Stormwater Treatment System.** Three Aquip stormwater treatment systems were installed at the Project site in 2018. This is a passive sorptive media filtration stormwater treatment system. Because the treatment systems are above grade, pumps have been fitted to modified weir boxes in drainage areas 002 and 004 that convey stormwater to the Aquip system. Drainage areas 002 and 003 have parallel interconnected treatment systems, each equipped with Aquip model R300 treatment systems. If needed, the flows from either drainage area can be directed into either treatment system. The combined post-Aquip flows discharge through outfall 003. Drainage area 004 is equipped with a single Aquip model R400, which discharges to existing outfall 004.
- **Employee Training.** Employees are trained on the visual inspection and system operational criteria to prevent releases of visual petroleum products. Training includes an understanding of SPCC requirements for tank farm containment, including the storage and handling of stormwater, as well as the proper handling of regulated materials. The training program meets the state's requirements for a Class 1 Facility as outlined in WAC 173-180-510. Additionally, operators are trained on established procedures for the handling of stormwater.
- **Catch Basin BMPs.** Each stormwater catch basin is outfitted with a filter fabric sock insert designed to retain solids. The catch basins are monitored frequently to ensure the filter fabric insert is operating as designed and the filter fabric is replaced as necessary.
- **Spill Response Materials.** Suitable cleanup materials, such as absorbent materials, booms for containing small spills, and covers for stormwater grates, are kept on site to facilitate prompt cleanup should a spill occur.
- **Fueling Transfer.** Appropriate employees are instructed on the proper use of fuel dispensers. Appropriate maintenance and production employees are instructed on the procedures for fuel transfer from tanker truck to tank to reduce the risk of spills.
- **Weir Box Plates.** Weir box structures that are fitted with sorbent fabrics are integrated into the stormwater conveyance system as the final structure prior to discharge. The weir plates within the structure are set to retain non-emulsified products within the structure and allow for product to be retained and removed for disposal. The structures are regularly inspected and maintained to ensure proper operation.
- **Planning:** As required by regulations, SeaPort Sound maintains up-to-date stormwater pollution prevention, spill control, oil spill prevention, and other plans that include procedures and BMPs to prevent contaminated water from entering Hylebos Waterway.



LEGEND:

-  Approximate Outfall Location
-  Facility Drainage Area
-  Storwater discharge per Ecology NPDES Permit No. WA0003204
-  Industrial Wastewater Area;
-  Discharge per City of Tacoma (Permit No. TAC0035-2016)

NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. 002 NW pumps to 002 SE sub-drainage area.

Publish Date: 2023/10/24, 1:54 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Site Drainage Map.mxd



**Figure 3-5
Site Drainage**

3.3.1.2.2 *Off-Site Stormwater Pipe*

An existing stormwater line that handles off-site stormwater from right-of-way areas along Marine View Drive is located on the east side of the Project site (Figure 2-1). The stormwater line is currently blocked and minimally discharges to the existing outfall to Hylebos Waterway.

3.3.1.3 **Industrial Wastewater**

SeaPort Sound operates under a City of Tacoma IWDP issued in 2021 (Permit No. TAC-035-2021; City of Tacoma 2021c). This permit covers areas where stormwater may contact potential pollutants. This contact water receives on-site treatment through the industrial wastewater treatment system before discharge to the City's sewer system and ultimately the Tacoma Central Treatment Plant. Industrial wastewater may contain contaminants and cannot be discharged directly to surface waters. Industrial wastewater from the facility includes contact stormwater not suitable for discharge to Hylebos Waterway and boiler wastewater (SeaPort Sound 2021). The IWDP limits the volume and rate of wastewater discharge to the City sewer system and the level of certain contaminants allowed to remain in wastewater following on-site treatment. The current permit limit is 100,800 gallons of maximum flow per day (City of Tacoma 2021c).

The on-site wastewater treatment system, located south of the former refinery area (Figure 3-5), includes a surge pond, aeration basin, corrugated plate interceptor, induced air flotation device, rotating biological disk, recovered oil tanks, an oil-water separator, and a contact water drain line that connects from the truck rack and a discharge pipe that connects from the wastewater treatment equipment to the sanitary sewer.

SeaPort Sound is required to regularly sample and test wastewater from the on-site treatment system for permit compliance before it is discharged to the City sewer system. Monitoring reports are submitted to the City each month. Any accidental spills affecting the City sewer system are reported to the City immediately. SeaPort Sound is also required to maintain and implement an up-to-date accidental spill prevention plan.

Pre-treated wastewater from the Project site is routed to the Tacoma Central Treatment Plant located on the Tideflats area along the Puyallup River (City of Tacoma 2021d). The plant discharges treated effluent to Puget Sound. The Central Treatment Plant receives wastewater from the interlocal agreement areas of Fife, Fircrest, portions of Pierce County, and the majority of Tacoma. The City's treatment plant discharges are subject to NPDES municipal discharge permit requirements.

3.3.1.4 **Water Supply**

Tacoma Water supplies water to the study area. Municipal water sources include the Green River watershed and groundwater wells. In a normal weather year, groundwater wells supply approximately 5% of Tacoma Water's total annual water requirements (Tacoma Water 2021).

The Project site is located within a critical aquifer recharge area mapped by Pierce County that encompasses the entire Tideflats area (Figure 3-4). The potential for groundwater recharge is likely low to moderate within the Project site because the property is developed and covered by impervious, compacted gravel and paved surfaces over several feet of imported fill (described in Section 3.1).

Wellhead protection areas mapped by the City are located off site but in the Project vicinity (approximately 0.25 mile or more from the Project site; Figure 3-4). The South Tacoma Groundwater Protection District is located more than 3 miles southwest from the study area. Tacoma Water has identified one potential future well located in the study area; it corresponds to the wellhead protection area located on the west side of Hylebos Waterway mapped by the City (City of Tacoma 2008; Tacoma Water 2019).

The Project site is located more than a mile outside of the central Pierce County sole-source aquifer designated by EPA. A sole-source aquifer supplies at least 50% of the drinking water for its service area, and there are no reasonably available alternative drinking water sources should the aquifer become contaminated (EPA 2021b).

3.3.1.5 Flood Hazard Areas

The Project site lies outside of any mapped flood hazard areas and is protected by an existing berm located along the shoreline of Hylebos Waterway. Flood mapping indicates that Hylebos Waterway is within Zone AE (a regulatory flood zone). The shorelines of Commencement Bay adjacent to the Tideflats area are within zone Coastal A (a coastal area inundated by 1% annual chance flooding) and Zone VE (an area inundated by 1% annual chance flooding with velocity hazard) (City of Tacoma 2021e). Tsunami risk is discussed in Section 3.1.1.

3.3.1.6 Sea Level Rise

The University of Washington (Lavin et al. 2019) has developed sea level rise visualizations using data from *Projected Sea Level Rise for Washington State – A 2018 Assessment* (Miller et al. 2018). They provide sea level rise projections for the Puyallup-White River watershed (where the Project site is located) through 2150. The predictions incorporate low and high GHG emissions levels and are based on probabilities. With low GHG emissions, there is a 99% probability that sea level rise will exceed 0.8 foot and only a 1% probability that it will exceed approximately 9 feet in the Puyallup-White River watershed. With high GHG emissions, there is a 99% probability that sea level rise will exceed 1.6 feet and only a 1% probability that it will exceed approximately 11 feet in the watershed. These projections do not include ground subsidence during a major earthquake, which would have the effect of raising local sea level relative to ground elevation.

These projections indicate that sea level rise is likely to occur gradually, with increases of a few inches to a foot over each decade. Higher sea levels will increase the likelihood of flooding, particularly during high tides, storms, and king tides.

3.3.2 Potential Impacts from the No Action Alternative

3.3.2.1 Water Quality, Stormwater, and Industrial Wastewater

Under the No Action Alternative, the on-site stormwater system and industrial wastewater pretreatment system would be operated, maintained, and repaired consistent with permit requirements. The No Action Alternative would not provide improved wastewater treatment or spill prevention measures. Furthermore, the existing wastewater treatment system is an older and aging system, and repair materials are becoming harder to obtain. The No Action Alternative could lead to a scenario where the wastewater treatment system equipment is no longer sufficient to meet on-site wastewater permit requirements, which would eventually require an update or modification if this Project does not occur.

The blocked stormwater line that drains off-site stormwater from the Marine View Drive right-of-way that crosses the site would continue to be blocked with restricted flow and would not be replaced. Excavation to construct the Project would not occur, and there would not be a need to manage groundwater that might be present in excavation areas. SeaPort Sound would continue to operate the existing facility in compliance with local, state, and federal regulations. Compliance with regulations and required plans (SWPPP, emergency response action plan, and facility response plan) would continue in order to avoid or minimize the risk of impacts on water quality near the Project site during operation. No impacts on water quality in surface waters or groundwater are anticipated from the No Action Alternative.

3.3.2.2 Water Supply

The amount of water used at the Project site from the municipal supply system would remain similar to current use under the No Action Alternative. No impacts on water supply would occur.

3.3.2.3 Flood Hazard Areas

The No Action Alternative would not modify on-site facilities, and no impacts related to existing flood hazards would occur. Projected sea level rise will increase the likelihood of flooding.

3.3.2.4 Sea Level Rise

Rising sea levels are anticipated to occur gradually over the coming decades, requiring updates or modifications to parts of the facility if not completed as part of this Project. Modifications being proposed as part of the Proposed Action would not occur, including installing new infrastructure and relocated wastewater system infrastructure aboveground.

3.3.3 *Construction Impacts and Mitigation Measures from the Proposed Action*

3.3.3.1 **Water Quality, Stormwater, and Industrial Wastewater**

All delivery of construction materials, and all construction work, would take place on land. The Proposed Action would include upland excavation and filling activities within both the 200-foot shoreland area and the 50-foot marine buffer for Hylebos Waterway. Earthwork is described in Chapter 2 and discussed in Sections 2.5 and 3.1.

Excavation several feet below the existing grade would be required to remove approximately 100 linear feet of existing stormwater and contact water piping within the demolition area. Excavation may encounter groundwater, particularly at depths of 5 feet or more. Ground-disturbing construction activities may encounter contaminated soils or groundwater. These activities have the potential to result in contaminated water being discharged from the construction site and impacting water quality in the Hylebos Waterway or Commencement Bay. However, permit requirements and plans are in place to avoid and minimize these potential impacts.

Ecology's CSWGP applies to ground-disturbing activities affecting 1 acre or more that discharge stormwater to surface waters of the state. The Proposed Action would occur over approximately 1.4 acres, and a CSWGP would be required. The CSWGP covers stormwater, groundwater, water used for dust control, and other construction water discharges. Discharges must not cause or contribute to a violation of state surface water, groundwater, or sediment management standards or human health-based criteria. All known, available, and reasonable methods of prevention, control, and treatment must be applied before discharging water from the construction site. This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of the permit. Discharges of groundwater from dewatering activities, including discharges from dewatering of trenches and excavations, must be managed according to Special Condition S9.D.10 of the CSWGP (Ecology 2021c). If construction stormwater will be discharged from outfalls covered under the facility's NPDES permit (No. WA0003204), the Industrial Section of Ecology will be notified.

As discussed in Section 3.3.1, the Project site has not been identified by EPA as a source of contamination to the Hylebos Waterway. However, because of the potential to encounter contaminants during excavation, soils would be tested and disposed of at an approved off-site disposal facility (see also Section 3.7.3). If groundwater is encountered during construction, it would be treated on site in accordance with permit requirements.

The construction contractor would be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils or groundwater encountered during excavation.

To minimize risks of soil contamination, the refinery equipment, tanks, and associated piping would be drained of any liquids prior to demolition. Tanks would be cleaned by qualified contractors. SeaPort Sound intends to recover or recycle any petroleum materials when possible. All washwater would be disposed of properly. All materials designated as a solid waste that would be generated during the demolition portion of the Proposed Action would meet the transportation and disposal requirements of the receiving facility. Equipment that contained petroleum would be cleaned prior to transportation.

Additional BMPs that would be used to minimize the risk of impacts on water quality in Hylebos Waterway and Commencement Bay during construction are described in Section 2.5. With these BMPs and the permits and plans described earlier in place, there is a low risk of contaminated water leaving the construction site and entering surface waters. No water quality impacts are anticipated.

3.3.3.2 Water Supply

SeaPort Sound does not anticipate a need for substantial amounts of additional water during construction beyond what is currently used. Minimal water would be needed for dust suppression and wheel washing of construction vehicles. The water supplied by Tacoma Water would be adequate to meet on-site construction needs.

3.3.3.3 Flood Hazard Areas

Construction of the Proposed Action would occur outside of mapped flood hazard areas. No impacts related to existing flood hazard areas are anticipated.

3.3.3.4 Sea Level Rise

SeaPort Sound will design its facilities to accommodate and adapt to anticipated changes in sea levels and the potential for increased flooding, including measures to prevent release of hazardous substances from the site. Modifications being proposed as part of the Proposed Action include installing new infrastructure and relocating wastewater system infrastructure aboveground, at higher elevations than the current equipment.

3.3.3.5 Construction Mitigation Measures and Best Management Practices

Potential impacts on water resources from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-10:** SeaPort Sound will obtain a CSWGP from Ecology for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and

other construction water discharges. SeaPort Sound will prepare and implement a SWPPP, with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.

- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-15:** Water that is used to clean decommissioned refinery equipment prior to removal from the site will be treated and disposed of properly.
- **MM-23:** The contractor will be responsible for the preparation of a spill plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.

3.3.4 Long-Term Impacts and Mitigation Measures from the Proposed Action

3.3.4.1 Water Quality, Stormwater, and Industrial Wastewater

Following construction, on-site stormwater and industrial wastewater would continue to be managed under the facility's ISIP and IWDP, which would be updated as required to reflect the modified on-site treatment system. SeaPort Sound will provide notice to Ecology of planned changes to the facility, as well as required applications, engineering reports, updated plans, and specifications, as required under the conditions of NPDES Permit No. WA0003204. The new tanks, their footings, and the new containment area would be designed to current safety standards as described in Chapter 2, reducing the risk of on-site spills and potential localized water quality impacts. Removal of any existing contaminated soils or groundwater from the site (if encountered during construction) would also remove a potential source of stormwater or groundwater contaminants.

The Proposed Action would modify stormwater patterns on the Project site. With the addition of tanks in the former refinery area, the Proposed Action may reduce the area of the Project site that currently drains contaminated stormwater directly to the on-site wastewater treatment system. The new tank area would have a containment berm where stormwater would be inspected and directed either to the Aquip treatment systems and then to the Hylebos Waterway outfalls, or to the on-site wastewater treatment system, as described in Section 3.3.1. In addition, the Proposed Action would

result in a net decrease of 400 square feet of impervious surface on the site compared to existing conditions as described in Section 3.1.

The change in the amount of stormwater that would be discharged to Hylebos Waterway versus the municipal sewer system would depend on rainfall and other factors and cannot be quantified. However, both the quantity and quality of stormwater and industrial wastewater discharged from the Project site would be compliant with permit requirements. SeaPort Sound would continue to maintain and update its SWPPP and the *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020) as required by regulations and provide its employees with training to address potential spills. With regulatory compliance and required plans in place to prevent and respond to spills, no additional impacts on water quality in the study area are anticipated beyond what is present under the No Action Alternative.

The *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020) would be updated upon completion of the Proposed Action to reflect the new tanks and storage capacity, consistent with WAC 173-182. The Proposed Action would not affect SeaPort Sound's response capabilities or tactics because the completed Proposed Action would remain within the Project site's spill response measures for a worst-case scenario, and Proposed Action upgrades would be reflected in the *SeaPort Sound Terminal LLC Facility Contingency Plan*.

The on-site wastewater treatment system would be replaced with new and improved equipment, including the contact water drain line, oil-water separator, and flow and pH meters. The existing surge pond and aeration pump would be repaired as needed to serve the Project site. These upgrades would improve the function of the wastewater treatment system that currently operates on site. Wastewater from this system is routed to the City's municipal treatment system. In addition, the Proposed Action would replace the existing steam boiler with a hot oil heater. The existing steam boiler generates steam condensate and boiler blowdown water that is discharged into the on-site wastewater treatment system. The new hot oil heater would not create discharge water and would reduce on-site water consumption by approximately 5 million gallons annually. Because wastewater from the Project site represents a small volume relative to overall discharge from the Central Treatment Plant, these improvements would have minimal effects on municipal wastewater discharge and water quality in Commencement Bay. SeaPort Sound anticipates a new IWDP will be issued by the City, which may have new conditions and discharge limitations assigned to it, considering maintenance and operation of the City's treatment facilities.

The stormwater line that would be relocated as part of the Proposed Action would be replaced in coordination with the City and would be installed consistent with City stormwater standards. Replacement of the blocked stormwater line that crosses the Project site would allow for more efficient drainage to Hylebos Waterway from off-site areas along Marine View Drive.

With the required safety measures in place, and ongoing facility compliance with permit requirements, no impacts on stormwater quality discharged from the Project site to Hylebos Waterway are anticipated under the Proposed Action, with minor benefits occurring from repair and replacement of wastewater treatment system infrastructure, a slight reduction in water usage from replacement of the steam boiler with a more efficient hot oil heater, and replacement/relocation of the existing stormwater line.

3.3.4.2 Water Supply

The Proposed Action would reduce facility water use by replacing the existing steam boiler with a hot oil heater. The existing steam boiler generates steam condensate and boiler blow down water that is discharged into the on-site wastewater treatment system. The new hot oil heater that would be installed as a part of the Proposed Action would not use water and would reduce on-site water consumption by approximately 5 million gallons annually. This reduction in water usage would result in a minor benefit from the Proposed Action.

The study area is located within a Pierce County-mapped aquifer recharge area but outside of wellhead protection areas mapped by the City (Figure 3-4). A bentonite liner and sand layer would be placed inside the circular footing around the new tanks to seal any exposed soil from potential incidental spills. The Project would comply with regulations and site-specific spill response plans intended to prevent or respond to spills. Due to design measures and BMPs that would be implemented through operation, the Proposed Action is not anticipated to further encroach upon or adversely impact the underlying aquifer recharge area.

3.3.4.3 Flood Hazard Areas

The Proposed Action would be located outside of mapped flood hazard areas. New tanks would have containment berms and other safety measures in place. No impacts related to existing flood hazard areas are anticipated.

3.3.4.4 Sea Level Rise

SeaPort Sound will design its facilities to accommodate and adapt to anticipated changes in sea levels and the potential for increased flooding, including measures to prevent release of hazardous substances from the site.

3.3.4.5 Secondary Impacts

In the future, the number of truck, rail, and marine vessel trips carrying product from the Project site under any of the three market fuel mix scenarios could change compared to current conditions under both the No Action Alternative and the Proposed Action and will fluctuate depending on market demand. Appendix G provides a transportation assessment for the Proposed Action. Overall, the assessment concludes that the Proposed Action is expected to result in an additional three vessel

calls on average per month, an additional 78 railcars unloaded per month, and an additional 12 truck loading trips per day at the SeaPort Sound facility. This represents an increase of 6%, 14%, and 7% for vessels, rail, and trucks over the facility's existing trips, respectively. As shown in Appendix G, the total of the existing trips plus those projected under the Proposed Action would constitute 76%, 28%, and 64% of the facility's permit limits for marine vessels, railcars, and trucks, respectively. To date, the facility has never reached its maximum permitted limits, and this is unlikely to occur in the future.

Transporting fuel products by truck, rail, or marine vessel has inherent risks of a spill that could degrade water quality or groundwater proportional to the amount of fuel transferred. An increase in transport trips could result in a nominal increase in associated spill or collision risk along truck haul routes, railroads, and vessel routes. A major spill anywhere along the supply chain that reaches freshwaters or marine waters could have significant impacts if not properly responded to and quickly contained.

SeaPort Sound does not operate off-site transport vessels, trains, or trucks. Third-party vessels that access the facility are required to adhere to federal and Washington State regulations that comprehensively regulate vessel safety, spill prevention, and discharges of ballast water. Similarly, state and federal regulations require safety measures for trains and trucks transporting bulk liquids to provide for human safety, but also for the protection of natural resources and the environment. Adherence to these regulations would minimize but not eliminate the risk of a large spill and associated impacts on water quality under the No Action Alternative and Proposed Action.

See Sections 3.4.4, 3.7, and 4.3.4 for additional discussion of mitigation measures and regulatory requirements related to spill prevention and response.

3.3.4.6 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on water resources would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.

- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-6:** The Project will be designed so that any contact water generated during facility operation will be treated and managed in compliance with existing regulations.
- **MM-7:** The current on-site wastewater treatment system will be replaced with modern equipment to reduce electricity consumption at the facility.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.
- **MM-33:** SeaPort Sound's vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.

3.4 Plants and Wildlife

This section addresses wildlife, plants, fish and other aquatic species, and habitats including streams and wetlands located near the Project site. This section also assesses the potential for impacts that could result under the No Action Alternative or as a result of the construction and operation of the Proposed Action. Finally, this section presents measures identified to mitigate impacts of the Proposed Action. Laws and regulations that are applicable to the Project and that were referenced for determining potential impacts on plants and wildlife are summarized in Appendix E.

3.4.1 *Affected Environment*

The study area for plants and animals includes a 1-mile radius around the Project site. The study area encompasses the lower middle portion of Hylebos Waterway, as well as Marine View Drive and forested areas to the east (Figure 3-6). Commencement Bay lies just outside the study area, but the bay is referenced in this section where relevant to wider use of the marine environment by wildlife species.

The Project site is located on the Tideflats area, a former intertidal estuarine area that was filled over the past century to accommodate industrial development. The Tideflats area provides highly modified habitat for vegetation or wildlife because of active industrial and port uses. Noise and activity levels are high. Noise in the study area is also contributed by a shooting range located north of Marine View Drive. Hylebos Waterway, adjacent to the Project site, has been straightened and is regularly dredged to accommodate shipping and ongoing contaminant cleanup. Little native shoreline vegetation is present along the waterway except where restoration work has occurred, some of which has been constructed by SeaPort Sound associated with previous construction activities. However, wildlife use of the Project site and surrounding areas still occurs.

3.4.1.1 **Habitat Types**

Habitat types in the Project vicinity (within 1 mile of the Project site) include industrial sites, wetlands, estuarine and marine areas (Commencement Bay and the waterways), streams, and forested and riparian areas north of Marine View Drive.

3.4.1.1.1 *Industrial Sites*

The Project site itself consists of paved and gravel areas, tanks, refinery infrastructure, and other equipment. Upland vegetation on site is limited to narrow patches of non-native plants such as Himalayan blackberry (*Rubus armeniacus*) along the shoreline, except on the western portion of the shoreline, where SeaPort Sound installed native vegetation in 2015 to restore the shoreline buffer associated with a previous terminal expansion. Conditions on the site are similar to other developed industrial properties throughout the study area. Regular wildlife use of industrial sites is unlikely because of ongoing human activity and lack of vegetation or other habitat features. However, wildlife

species that can tolerate human disturbance may occasionally use rooftops or other structures for perching or may pass through these sites while moving to other habitats in the surrounding area.



NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Culverts, pipes, and Pierce County Wetlands Inventory are acquired from Pierce County.
4. Streams are acquired from City of Tacoma, and Pierce County.
5. National Wetlands Inventory acquired from U.S. Fish and Wildlife Service.
6. Port of Tacoma habitat sites from <https://www.portoftacoma.com/environment/habitat-restoration>

LEGEND:	Stream	National Wetland Inventory	Habitat Sites (Port of Tacoma)
	Culvert	Estuarine and Marine Deepwater	
	Pipe	Estuarine and Marine Wetland	
		Freshwater Emergent Wetland	
		Freshwater Forested/Shrub Wetland	
		Freshwater Pond	
		Riverine	

Publish Date: 2023/10/09, 4:43 PM | User: twelody
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Plants and Wildlife Study Area.mxd



Figure 3-6
Plants and Wildlife Study Area
 Final Environmental Impact Statement - October 2023
 SeaPort Sound Plant Modernization Project

3.4.1.1.2 *Wetlands*

The Project site does not contain any freshwater wetlands. Within the study area, freshwater wetlands have been mapped by the U.S. Fish and Wildlife Service (USFWS) on the Blair Peninsula (south side of Hylebos Waterway) and in other portions of the Tideflats area (Figure 3-6). Some of these wetlands are part of restoration or mitigation projects. Additional freshwater wetlands are mapped or considered highly likely to be present within the forested area north of Marine View Drive (City of Tacoma 2021f; USFWS 2021a). Estuarine wetlands are located off site, as discussed in Section 3.4.1.

3.4.1.1.3 *Estuarine and Marine Habitats*

The Project site is located in the Tideflats area on Hylebos Waterway, approximately 1.3 miles from where the waterway empties into Commencement Bay, an embayment of Puget Sound. The Tideflats area was historically a large delta of estuarine wetlands and mudflats where the Puyallup River emptied into the bay. Over the past century, the river was diked, and the delta was filled, channelized, and developed to facilitate industries such as timber and wood product manufacturing, chemical plants, and transportation facilities.

Today, Hylebos Waterway is one of several waterways in the Tideflats area. The waterway is an estuarine environment where marine water from Commencement Bay and freshwaters from local streams mix. The Hylebos Waterway is a straightened channel ranging from about 460 to 1,000 feet wide and approximately 3 miles long, which is regularly dredged to accommodate shipping. The upland shoreline of Hylebos Waterway is dominated by industrial facilities constructed on top of a thick layer of fill.

Under typical conditions, the waterway experiences two major tidal flushing events per day, similar to other bays and waterbodies in Puget Sound. The water level within the waterway varies markedly between high and low tides. Estuarine wetland areas are present in the study area along the shoreline of Hylebos Waterway, including areas directly adjacent to the Project site, northwest of the 11th Street bridge, and near stream mouths east of the Project site (Figure 3-6). Several estuarine wetland restoration sites have been constructed along portions of the shoreline (Figure 3-6). These include an estuarine wetland restoration area located immediately west of the Project site, known as the Sound Refining Cove restoration project (Figure 3-6). This site (21 acres) is located adjacent to SeaPort Sound property on an intertidal area owned by the Port of Tacoma. The restoration was constructed and is maintained by Occidental Chemical as part of Superfund activities in the waterway (Port of Tacoma 2021a; USFWS 2021a; WDFW 2021a; City of Tacoma 2021f). Estuarine wetlands provide foraging, resting, and breeding sites for birds and may be used by small mammals.

3.4.1.1.4 *Streams*

No freshwater streams or surface drainage channels are located within the Project site. Several off-site freshwater streams are present in the study area. They flow from slopes on the north side of Marine View Drive, under the roadway into Hylebos Waterway (Figure 3-6). Those that are closest to the Project site include McMurray Gulch to the west and Coski Gulch to the east. The upper portions of these streams flow through forested areas, whereas the lower portions flow through culverts and pipes into the waterway. Hylebos Creek (just outside of the study area) flows into the head of the waterway about 1.7 miles southeast of the Project site (City of Tacoma 2021f). Restoration projects are ongoing at the mouth of Hylebos Creek where it enters the waterway.

3.4.1.1.5 *Forested and Riparian Areas*

Riparian areas are the lands located directly along streams. Riparian areas containing native vegetation provide foraging, breeding, and nesting habitat and movement corridors for birds, mammals, amphibians, reptiles, and invertebrates. Riparian vegetation overhanging streams provides shade that moderates water temperatures, and the plants provide a source of organic material and insects to the aquatic ecosystem.

The Project site and the Tideflats area in general do not provide forested or riparian habitat; these habitat types are present off-site in the study area to the north of Marine View Drive (Figure 3-6). The Washington Department of Fish and Wildlife (WDFW) maps this forested area as a biodiversity area or corridor, which is a type of state priority habitat. WDFW describes this area as providing raptor habitat and a refuge for bird and mammal species (WDFW 2021b). Species that use these forested and riparian areas may also occasionally use Hylebos Waterway as part of foraging or movement corridors.

3.4.1.2 **Plants**

The Project site consists of industrial facilities and paved and gravel areas that are devoid of native vegetation. The shoreline of Hylebos Waterway adjacent to the site is armored with riprap. This is similar to other industrialized properties in the study area. However, terrestrial, wetland, and aquatic plants are present off-site in the study area.

The wetlands and forested and riparian areas discussed in Section 3.4.1.1.5 contain both native and non-native plant species. Estuarine wetlands are typically dominated by salt-tolerant sedges and other emergent species. Puget Sound lowland and riparian forests usually have a multi-layered canopy of trees, shrubs, and emergent plants. Non-native species are common in disturbed forests, particularly along forest edges and trails.

Aquatic plants are limited in the study area and are not located within the Project site. According to the *Washington Marine Vegetation Atlas* (DNR 2021a), no eelgrass or kelp is present in Hylebos

Waterway or the adjacent portion of Commencement Bay. “Other macroalgae” are mapped in Hylebos Waterway, including sea lettuce (*Ulva* sp.) and red algae. Macroalgae often attaches to rock and other hard surfaces in the marine nearshore. The nearest mapped kelp and seagrass to the Project site is along the outer portion of Browns Point on Commencement Bay.

No state-mapped rare plants or rare or high-quality vegetation communities are present on or within 1 mile of the Project site (DNR 2021b). USFWS indicates that one Endangered Species Act (ESA)-listed plant species may occur in the Tideflats area: marsh sandwort (*Arenaria paludicola*), which is federally listed as endangered (USFWS 2021b). However, while this species historically occurred in Pierce County, it is now believed to be extirpated from Washington State (USFWS 2008).

3.4.1.3 Wildlife

3.4.1.3.1 Birds

The Project site is unlikely to be used by birds except for species that are highly tolerant of human activities and that may occasionally perch on buildings or other structures. In the study area, numerous bird species use Hylebos Waterway, Commencement Bay, and surrounding undeveloped areas such as the forested corridor north of Marine View Drive. Bird species that may use the Project vicinity include songbirds, raptors, waterfowl, wading birds, and seabirds. The site is located within the Pacific Flyway, a major flight corridor for migratory birds extending from Alaska to Mexico and South America.

Table F-1 in Appendix F lists bird species and groups that are included on the state Priority Habitats and Species (PHS) list and that occur in Pierce County (WDFW 2021b). Some of these species, though they occur somewhere in Pierce County, are unlikely to occur in the study area because suitable habitat is lacking. Table 3-2 lists PHS bird species that have been observed or mapped in the study area or for which suitable habitat is available in the study area. The table also includes bald eagle, which is not on the PHS list but potentially uses the study area and is covered under state and federal regulations.

**Table 3-2
State-Listed and Regulated Bird Species Known or Likely to Occur in the Study Area**

Species	Status ¹	Known or Potential Habitat Use in the Study Area
Waterfowl: common loon, western grebe, harlequin duck, cackling geese	On PHS list	Commencement Bay and Hylebos Waterway for resting, roosting, foraging; nearby structures for roosting (cackling geese)
Shorebirds and wading birds: great blue heron, plovers, curlews, sandpipers, snipes, phalaropes	On PHS list	Estuarine wetlands and shorelines for resting, foraging; nearby structures for perching (great blue heron); forested area east of Marine View Drive for nesting (great blue heron) ²

Species	Status ¹	Known or Potential Habitat Use in the Study Area
Cavity-nesting ducks: bufflehead, goldeneye	On PHS list	Commencement Bay and Hylebos Waterway for resting, foraging
Seabirds: cormorants, terns, pigeon guillemot, auklets	On PHS list	Commencement Bay and Hylebos Waterway for resting, foraging; cliffs north of Marine View Drive for nesting (pigeon guillemot); structures near waterway for roosting (double-crested cormorant)
Songbirds: band-tailed pigeon	On PHS list	Forested areas north of Marine View Drive for foraging, breeding, roosting
Purple martin	No longer on PHS list but included in PHS mapping	Nest sites documented in the study area, on dolphins and pilings in Hylebos Waterway
Bald eagle	Not listed; protected under the Bald and Golden Eagle Protection Act, state Bald Eagle Protection Rules, and the Migratory Bird Treaty Act	Large trees north of Marine View Drive for perching and roosting; estuarine wetlands and shorelines for foraging; human structures near water for perching (no mapped nesting sites in study area according to PHS mapping)

Notes:

1. See Appendix F for details of species and species groups listings.
2. A great blue heron rookery is mapped by WDFW within the study area. The mapped location is approximately 0.9 mile from the Project site. The latest nesting activity recorded in the rookery by WDFW was in 2000.

Sources: WDFW 2021a, 2021b, 2021c; USFWS 2021b

Citizens have recorded numerous additional bird species in the Hylebos Waterway area (eBird 2021). These include several species of gulls, waterfowl, songbirds, seabirds, and shorebirds that are not state or federally listed but are considered to be relatively common in the Puget Sound region or are migratory species. All native birds are regulated under the Migratory Bird Treaty Act.

Five federally listed or proposed bird species regulated under the ESA may occur in Pierce County: marbled murrelet, yellow-billed cuckoo, northern spotted owl, streaked horned lark, and Oregon vesper sparrow. None of these species are likely to occur in the study area due to a lack of suitable habitat (Appendix F).

3.4.1.3.2 Terrestrial Mammals

The Project site and other industrialized portions of the Tidelands area provide potentially suitable habitat for small mammal species typically associated with urban and industrial areas (e.g., rats, mice, raccoons, coyotes, muskrats, eastern gray squirrels, and Virginia opossum). The lack of vegetation reduces the habitat value for most native terrestrial mammals, particularly those that are sensitive to human disturbance or have other specific habitat requirements.

Table F-2 in Appendix F lists terrestrial mammals that are included on the state PHS list and that occur in Pierce County (WDFW 2021b). Some of these species, while they occur somewhere in Pierce County, are unlikely to occur in the study area because suitable habitat is lacking. The study area

north of Marine View Drive provides potential habitat for PHS-listed bats and for black-tailed deer. Bats may roost in tree cavities and forage for insects in the vicinity. Columbian black-tailed deer are common in forested areas.

One federally listed terrestrial mammal species occurs in Pierce County: the Mazama or western pocket gopher. This species is limited to areas with specific soil types typical of south Puget Sound prairies, which are not present in the study area.

3.4.1.3.3 *Other Terrestrial Species*

Table F-3 of Appendix F lists five amphibian species, one reptile species, and six insect species that are included on the state PHS list and that occur in Pierce County (WDFW 2021b). Two of the species on the PHS list are also federally listed species: Oregon spotted frog and Taylor's checkerspot butterfly. The Cascade torrent salamander and the western pond turtle have been petitioned for federal listing.

Of these species, only the western toad is likely to occur in the study area, potentially using forested areas north of Marine View Drive for dispersal and overwintering. The other amphibian, reptile, and insect species are not likely to occur in the study area because suitable habitat is lacking, or because the species are largely extirpated in Washington and known to occur only in a few isolated populations.

In addition, USFWS indicates that the monarch butterfly, a federal candidate species, could occur in the study area (USFWS 2021b). Individual adult monarchs could pass through the study area during migrations, possibly using native vegetation in forested areas or wetlands for resting and feeding. However, the study area is mostly developed and does not provide abundant milkweed plants needed for feeding by monarch butterfly larvae.

3.4.1.3.4 *Marine Fish*

Table F-4 in Appendix F lists the marine fish species included on the WDFW PHS list for Pierce County (WDFW 2021b). The list includes forage fish, rockfish, bottomfish, and other marine fish species. All of these species may occur in Commencement Bay and could also use Hylebos Waterway during certain life stages.

Forage fish breed on beaches that provide the right conditions for spawning; these known spawning areas are mapped by WDFW. No forage fish spawning is mapped within the study area.

Three federally listed marine fish species may occur in the study area: bocaccio, canary rockfish, and yelloweye rockfish (Appendix F).

Commencement Bay supports numerous other marine fish species that are not PHS or federally listed, such as flathead sole (*Hippoglossoides elassodon*), C-O sole (*Pleuronichthys coenosus*), sand

sole (*Pegusa lascaris*), starry flounder (*Platichthys stellatus*), and speckled sand dab (*Citharichthys stigmaeus*) (EPA 2020). These species may also be present within Hylebos Waterway at some times.

3.4.1.3.5 *Anadromous and Freshwater Fish*

Table F-5 in Appendix F lists the anadromous and freshwater fish species included on the WDFW PHS list (WDFW 2021b). They include salmon, trout, steelhead, white sturgeon, and lamprey, all of which may occur in the study area. These species move between freshwater streams and marine/estuarine areas for spawning, rearing, and growth. They could be present in Commencement Bay and Hylebos Waterway at some times of the year.

Hylebos Waterway is a migratory corridor for salmon and trout moving between Hylebos Creek (at the head of the waterway) and Commencement Bay. Fall Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), fall chum salmon (*O. keta*), and winter steelhead (*O. mykiss*) have been documented in Hylebos Creek (WDFW 2021c). These species are likely to be present in Hylebos Waterway at different times of year.

Federally listed marine fish species likely to occur in the study area include bull trout, Chinook salmon, and steelhead. Bull trout are documented in the Puyallup River and may occur in nearshore habitats in the study area. Adult Chinook salmon migrate through the study area in late summer and fall to reach spawning sites in Hylebos Creek upstream of the waterway. Juvenile salmon out-migrate through the Hylebos Waterway on their way to Commencement Bay during the spring and summer months. Local adult winter steelhead may be present in the study area throughout the year, and juveniles may be present during outmigration (Anchor QEA 2015).

In addition to the species listed in Appendix F, the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) indicates that eulachon or Pacific smelt (*Thaleichthys pacificus*) and green sturgeon (*Acipenser medirostris*), both federally listed species, may occur in the study area (NOAA Fisheries 2021a). However, WDFW maps these species as occurring in counties along the outer coast of Washington, Strait of Juan de Fuca, and in the Columbia River, but not in central Puget Sound or Pierce County (WDFW 2021b). Therefore, they are unlikely to occur in the study area.

3.4.1.3.6 *Shellfish*

Several priority shellfish species are present in Pierce County, including butter clam (*Saxidomus giganteus*), native littleneck clam (*Protothaca staminea*), Pacific geoduck (*Panopea generosa*), Dungeness crab (*Cancer magister*), pandalid shrimp (*Pandalus* spp.), Manila (Japanese) littleneck clam (*Venerupis philippinarum*), and Pacific oyster (*Crassostrea gigas*) (WDFW 2021b). None of these species are state or federally listed. The Olympia oyster (*Ostrea lurida*)

is a state candidate species. All these shellfish species have recreational, commercial, or Tribal importance and vulnerable aggregations.

All the shellfish species noted above may occur in Commencement Bay and potentially within shallower portions of the Hylebos Waterway. Shellfish harvesting for clams, geoduck, scallops, mussels, and oysters is closed in Commencement Bay and the waterways of the Tideflats area due to pollution (DOH 2021a).

3.4.1.3.7 *Marine Mammals*

Table F-6 in Appendix F lists the marine mammal species included on the WDFW PHS list for Pierce County (WDFW 2021b). All these species are regulated by the Marine Mammal Protection Act.

Harbor seals have been observed in Hylebos Waterway; along with California sea lions, they are known to haul out on buoys, floats, and log booms near the waterway mouth on Commencement Bay (WDFW 2020). Harbor porpoises are common in Puget Sound. These three species could use the waters of the study area for foraging. In late 2021, a beluga whale was sighted in Commencement Bay. This individual was far south of the species' typical range. It is unknown whether this individual belonged to the federally listed Cook Inlet population (Orca Network 2023).

The SRKW distinct population segment was federally listed as endangered under the ESA in 2005. Federally designated critical habitat for SRKWs includes marine areas of Puget Sound with water at least 20 feet deep, as well as coastal areas (71 *Federal Register* 69056; NOAA Fisheries 2022). In its listing of SRKW, NOAA Fisheries identified three main threats to SRKW survival: 1) scarcity of prey; 2) high levels of contaminants from pollution; and 3) disturbance from vessels and noise. The small population size of SRKWs and their social structure (traveling in pods) also put them at risk for a catastrophic event, such as an oil spill, that could affect the entire population (NOAA 2021b). In its recent 5-year review of SRKW status, NOAA Fisheries states the following: "Despite being studied for more than 40 years, it is unclear which threat to this killer whale population is the most important for recovery. Furthermore, the threats likely interact to produce additive or synergistic effects" (NOAA Fisheries 2021b).

Based on SRKW sighting data from 2018 to 2022, SRKWs occur in southern Puget Sound (including Commencement Bay) less commonly than in central and northern Puget Sound and around the San Juan Islands, as shown in Table 3-3 (Orca Network 2023).

Table 3-3**Total Killer Whale Sightings and SRKW Sightings in Elliott Bay, Commencement Bay, Nisqually Estuary, and San Juan Islands, 2018–2022 (Orca Network 2023)**

Year	Elliott Bay		Commencement Bay		Nisqually Estuary		San Juan Islands	
	Total	SRKW ¹	Total	SRKW ¹	Total	SRKW ¹	Total	SRKW ¹
2018	32	12	31	3	13	0	239	70
2019	39	18	20	5	8	0	205	59
2020	43	10	9	3	15	0	213	59
2021	47	4	17	4	20	5	251	60
2022	30	10	24	5	34	0	290	94

Note:

1. Markers to indicate observations of resident whales were not included in data until October 2021, so SRKW estimates include uncategorized observations and may be an overestimate of SRKW sightings.

Transient or Bigg’s killer whales also occur in Puget Sound but are not federally listed. Transient killer whales have been sighted in Commencement Bay over the past few years (Orca Network 2023). In February 2021, a transient killer whale calf entered Blair Waterway while the rest of its pod was in Commencement Bay (Port of Tacoma 2021b). This was an unusual occurrence. Killer whales (both transient and SRKW) are unlikely to enter the waterways, particularly adult whales, because the area is heavily modified by shoreline development and is a high-traffic area for vessels. On Hylebos Waterway, the 11th Street Bridge crosses the waterway approximately 4,300 feet from the mouth of Commencement Bay. Hylebos Waterway is narrow, at approximately 505 feet wide at the crossing of the bridge. Killer whales could pass through this opening and occur near the Project vicinity; however, the bridge, narrow passageway, and high vessel and human activity may act as a strong deterrent. Water depth will also likely deter killer whales from entering nearby the Project vicinity. The maximum depth of the Hylebos Waterway is approximately 50 feet. The majority of the Hylebos Waterway, except for the deepest portions, is too shallow to be considered typical killer whale habitat (Anchor QEA 2015).

The State of Washington has recognized the importance of and threats to SRKWs. In 2018, the Governor established the Southern Resident Orca Task Force (Executive Order 18-02), which includes a Vessel Working Group to address issues specific to marine vessels. In 2019, the Washington State Legislature passed additional requirements to strengthen spill prevention measures in Puget Sound in recognition that “a catastrophic oil spill could cause potentially irreversible damage to the endangered SRKWs and other species, damage commercial fishing, violate Tribal treaty rights, and cause severe economic and public health consequences in Washington” (Ecology 2020b). These recent requirements and programs are incorporated in RCW 88.46, Vessel Oil Spill Prevention and Response, and in RCW 88.16, the Pilotage Act. Additional regulations and voluntary programs to address the risk of spills and threats to SRKWs on a broad scale are described in Section 4.3.4.

Gray whales are also a federally listed marine mammal species. Gray whales have recently been sighted around Vashon and Anderson islands (Orca Network 2023), and it is possible that gray whales could enter Commencement Bay. Like killer whales, gray whales are typically too large to enter Hylebos Waterway. Steller sea lions, another federally listed species, are known to use Puget Sound in the Tacoma area and could occasionally use the study area for foraging (Smultea et al. 2017).

3.4.2 Potential Impacts from the No Action Alternative

Under the No Action Alternative, the proposed facilities would not be constructed. Existing facilities would continue to be maintained and operated similarly to existing conditions. Terminal infrastructure may be modified in the future to accommodate changes in demand in the bulk liquids marketplace. As an active industrial facility, the Project site would continue to provide minimal habitat for plants and wildlife, with high levels of ongoing noise and human activity. SeaPort Sound would continue to operate the existing facility in compliance with local, state, and federal regulations to minimize the risk of stormwater contamination or spills that could impact aquatic species, shorebirds, or waterfowl; however, the No Action Alternative would not provide improved stormwater treatment or spill prevention measures (see Sections 3.3 and 3.7). Direct impacts on plants and wildlife in the study area resulting from operation and maintenance of the existing facilities would not occur because habitat conditions would remain the same at the Project site.

3.4.3 Construction Impacts and Mitigation Measures from the Proposed Action

Construction activities at the Project site would occur over approximately 61,300 square feet (1.4 acres) of developed area used for storage and transport of bulk liquids. Birds and mammals using the study area may be temporarily disturbed or displaced due to construction noise, lights, and activities. However, wildlife species that regularly use the study area are likely to be at least somewhat tolerant of these types of disturbances because of the industrial setting. Background noise levels in the study area are already relatively high because of both the industrial activities and the presence of a shooting range located north of Marine View Drive. Therefore, negligible impacts on terrestrial animals are anticipated.

No in-water construction is proposed as part of the Proposed Action. Construction is not expected to result in impacts on killer whales or other marine mammals. Whales could be present in Commencement Bay near the study area during the construction period but would likely be offshore in the deeper waters of Commencement Bay, outside of the Hylebos Waterway. Smaller marine mammals, such as seals, sea lions, and porpoises, could be present in Hylebos Waterway during construction, but construction noise is expected to remain within background noise levels and would not impact these species.

Measures described in Section 3.3 would minimize the risk of adverse water quality impacts that could affect aquatic species during construction as a result of soil erosion or an accidental spill. No impacts on fish, shellfish, or marine mammals are likely to occur with these measures in place during construction.

3.4.3.1 Construction Mitigation Measures and Best Management Practices

Potential impacts on plants and wildlife from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-10:** SeaPort Sound will obtain a CSWGP from Ecology for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and other construction water discharges. SeaPort Sound will prepare and implement a SWPPP, with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.
- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-22:** Erosion control measures will be implemented during construction per the Temporary Erosion Control Plan to be prepared for the Project.
- **MM-23:** The contractor will be responsible for the preparation of a spill plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.

3.4.4 *Long-Term Impacts and Mitigation Measures from the Proposed Action*

The Proposed Action would not substantially change the level of human activity or noise occurring at the Project site once the new facilities are operational. The Project site is currently an industrial property, and it would remain so, providing little wildlife habitat due to ongoing human disturbance and lack of vegetation or other habitat features.

The Proposed Action would include replacing existing tanks and refinery infrastructure with new tanks. The new tanks would include all required containment and safety measures. The Proposed Action also includes improving wastewater treatment at the Project site. The *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020) for safe materials handling and spill response would remain in place and be implemented in compliance with state and federal regulations and permits (discussed in Sections 3.3 and 3.7). In addition, the facility complies with numerous regulations to avoid, minimize, and respond to potential spills. For purposes of spill reporting, planning, and prevention, the SeaPort Sound facility is defined as a Class 1 Facility under WAC 173-180-025. Class 1 facilities are large, fixed shoreside facilities, such as refineries and refueling terminals; they include facilities that transfer to or from tank vessels and pipelines (Ecology 2023a). Class 1 facilities must meet the following requirements (Ecology 2023a):

- Advance notice of oil transfer
- Contingency plans
- Facility inspection and site visits
- Oil spill drills
- Oil transfers and transfer inspections
- Operations manuals
- Out of service requirements
- Pre-booming, alternative measures, and equivalent compliance
- Prevention plans
- Response plans
- Safe and effective threshold determination reports
- Seismic measures
- Training and certification programs

The Proposed Action would not affect SeaPort Sound's response capabilities because the completed Project would remain within the facility's spill response measures for a worst-case scenario. Therefore, no direct impacts on plants or wildlife are anticipated under any of the market fuel mix scenarios for the Proposed Action.

3.4.4.1 Secondary Impacts

In the future, the number of truck, rail, and marine vessel trips carrying product from the Project site under any of the three market fuel mix scenarios could change compared to current conditions under both the No Action Alternative and the Proposed Action. The Proposed Action would increase storage capacity on the Project site by 11%. However, the number of transport trips under both alternatives would continue to fluctuate in response to market demand and would remain within SeaPort Sound's permitted throughput limits.

Appendix G provides a transportation assessment for the Proposed Action. Overall, the assessment concludes that the Proposed Action is expected to result in an additional three vessel calls on average per month, an additional 78 railcars unloaded per month, and an additional 12 truck loading trips per day at the SeaPort Sound facility. This represents an increase of 6%, 14%, and 7% for vessels, rail, and trucks over the facility's existing trips, respectively. As shown in Appendix G, the total of the existing trips plus those projected under the Proposed Action would constitute 76%, 28%, and 64% of the facility's permit limits for marine vessels, railcars, and trucks, respectively. To date, the facility has never reached its maximum permitted limits, and this is unlikely to occur in the future.

Transporting bulk liquid products by truck, rail, or marine vessel has inherent risks of a spill and, in the case of vessel transport, risk of collision with marine life. Marine vessels also cause noise that can disturb wildlife, including SRKWs. An increase in transport trips during times of peak demand could result in a nominal increase in associated spill or collision risk along truck haul routes, railroads, and vessel routes. The anticipated increase in marine vessel trips under the Proposed Action is expected to be minor, as described previously and in Appendix G. A major spill anywhere along the supply chain could degrade wetlands, streams, marine waters, and other plant and wildlife habitats where they are present along the transportation route, including critical habitat for the federally listed SRKWs.

SeaPort Sound does not operate off-site transport vessels, trains, or trucks. Transportation of products to and from the SeaPort Sound Terminal is conducted by other parties that are subject to local, state, and federal regulations for safety and spill response measures. For water-based transport, third-party vessels that access the facility are required to adhere to Washington State regulations that comprehensively regulate shipping lanes, vessel speeds, and setback zones for the protection of killer whales. These regulations are intended to reduce noise levels that are harmful to killer whales and maintain safe distances between vessels and wildlife. Similarly, state and federal regulations require safety measures for trains and trucks transporting fuel products to provide for human safety, but also for the protection of natural resources and the environment. Measures include the following:

- **Spill Risk Reduction and Response**
 - Under the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300), area committees have been established for each area of the United States that has been designated by the president. The area committees include personnel from federal and state agencies who coordinate response actions with Tribal and local governments and the private sector. Area committees, under the coordinated direction of federal on-scene coordinators, are responsible for developing area contingency plans. In the Pacific Northwest, planning for significant oil and hazardous spills is conducted through the three-state (Washington, Oregon, and Idaho) Northwest Area

Contingency Plan (NWACP). The NWACP provides policies and tools to ensure a rapid and aggressive response occurs. It includes command, operations, and logistics and specific response tools for different types of spills (RRT/NWAC 2020).

- Geographic response plans (GRPs) are one tool implemented under the NWACP. They guide early actions when oil spills happen. GRPs are made up of pre-identified strategies for specific areas of the state at risk from oil spills. The strategies are designed to minimize impacts to sensitive environmental, cultural, and economic resources. Commencement Bay and the Project site are located in GRP Central Puget Sound Sector CPS-8 (Ecology 2023b). There are several contingency plans in place for the Hylebos Waterway, including a plan for SeaPort Sound (Ecology 2023c), as well as booms and a tug vessel.
- To help protect shorelines and waterways, the maritime industry has permanently stationed an emergency response towing vessel (ERTV) at Neah Bay. The towing vessel is an important safety net to prevent disabled ships and barges from grounding off the Pacific Coast or in the western Strait of Juan de Fuca. The industry-funded ERTV is managed by the Marine Exchange of Puget Sound (Ecology 2023d).
- Currently, as required under RCW 88.16.260, the Washington State Board of Pilotage Commissioners (BPC) and Ecology are working to adopt tug escort rules for Puget Sound. The rules will address tankers between 5,000 and 40,000 deadweight tons and articulated tug barges and towed waterborne vessels or barges greater than 5,000 deadweight tons that are designed to transport oil in bulk internal to the hull. This rulemaking will cover all of Puget Sound and may also adjust previous tug escort requirements for Rosario Strait and connected waterways that were adopted in 2019. Updated rules must be adopted by the end of 2025. The Board of Pilotage Commissioners defines “oil” to include the types of bulk liquid products that are anticipated to be transported on vessels calling at the SeaPort Sound facility (BPC 2020).
- Ecology is also developing a quantitative modeling framework to assess current and potential future risks of oil spills in Washington waters as required by RCW 88.46.250. It includes a quantitative assessment of whether an ERTV serving Haro Strait, Boundary Pass, Rosario Strait, and connected navigable waterways will reduce oil spill risk and an analysis of tug escorts for oil tankers, articulated tug barges, and towed oil barges to be completed with BPC. Reports are due to the Washington State Legislature by September 1, 2023 (Ecology 2023e).
- The Advanced Notice of Oil Transfer (ANT) system (33 CFR 156.118) describes the federal rules regarding notification prior to the transfer of oil over water to or from facilities to vessels and vessel-to-vessel transfers. To help prepare for and prevent oil spills, Washington State also requires advance notice of oil transfers for transfers over

water (WAC 173-184-100). Ecology's ANT system is a web-based application that captures and administers ANT information submitted for oil transfer activities (<https://secureaccess.wa.gov/ecy/ants/>). The application satisfies oil transfer reporting requirements of both Ecology and USCG. The system contains data on overwater bulk oil transfers of more than 100 gallons from vessels and shore-based facilities that transfer to nonrecreational vessels or facilities.

- **SRKWs and Other Marine Mammals**

- In 2018, Governor Inslee established the Washington State Southern Resident Orca Task Force (Executive Order 18-02), which includes a Vessel Working Group to address issues specific to marine vessels. Detailed information about the task force recommendations and progress toward implementation is available here: <https://orca.wa.gov/>.
- In 2019 the Washington State Legislature passed Engrossed Substitute House Bill 1578 titled "Reducing Threats to Southern Resident Killer Whales by Improving the Safety of Oil Transportation Act." This act amended RCW 88.16, 88.46, and 90.56 with the goal of closing safety gaps related to carrying oil in bulk. It required tug escorts for larger laden tankers, laden articulated tug barges, and oil barges when operating in Rosario Strait and connected waterways to the east but did not include Puget Sound. These requirements became effective September 1, 2020.
- In 2022, the Quiet Sound program was established to better understand and reduce the cumulative effects of acoustic and physical disturbance from large commercial vessels on SRKWs. Quiet Sound implements voluntary shipping noise-reduction initiatives and monitoring programs in Puget Sound in coordination with Canadian and U.S. authorities. Information is available here: <https://quietsound.org/>.
- The WhaleReport Alert System was established in Canada in 2018 to broadcast pertinent details of whale presence to large commercial vessels. Information on whale presence is obtained from real-time observations reported to the B.C. Cetacean Sightings Network via the WhaleReport app. The alerts inform shipmasters and pilots of whales in their vicinity, allowing them to take adaptive mitigation measures, such as slowing down or altering course and reducing the risk of collision and disturbance. Commercial vessel operators can voluntarily sign up for the app. The WhaleReport Alert System is currently active in the waters of British Columbia, Washington State, and southeastern Alaska (OceanWise Canada 2023).
- NOAA Fisheries recently published an updated action plan for SRKWs (NOAA Fisheries 2021c). It identifies four key actions needed for SRKWs: 1) protect killer whales from harmful vessel impacts through enforcement, education, and evaluation; 2) target conservation of critical prey; 3) improve our knowledge of SRKW health to advance recovery and support emergency response; and 4) raise awareness about the recovery needs of SRKWs and inspire stewardship through outreach and education. Action 1

(vessel impacts) includes the Quiet Sound program, broader application of the WhaleReport Alert System, sound monitoring, and other measures.

Sections 3.7 and 4.3.4 and Appendix E further describe requirements for spill control and reducing effects to SRKWs. Section 4.3.4 also discusses current voluntary programs and agency actions specific to SRKWs and other marine mammals.

Adherence to these regulations and programs would minimize but not eliminate the risk of a large spill and associated impacts on plants and wildlife under the No Action Alternative and the Proposed Action. However, with these regulations and programs in place, and the mitigation measures described in Section 3.4.4.2, impacts resulting from the Project would be minor under any of the three market fuel mix scenarios for the No Action and Proposed Action alternatives.

It also important to note that SRKWs face numerous threats, including not only spills, vessel strikes, and vessel noise, but also high levels of pollution and scarcity of their favored prey, Chinook salmon. SeaPort Sound can only address issues that are under its control as part of this Project. BMPs and mitigation measures to avoid or minimize potential impacts on water quality from the Proposed Action are described in Section 3.3. Additional regulations and voluntary programs to address the risk of spills and threats to SRKWs on a broad scale are described in Section 4.3.4.

3.4.4.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on plants and wildlife would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).

- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-6:** The Project will be designed so that any contact water generated during facility operation will be treated and managed in compliance with existing regulations.
- **MM-9:** All work will occur in the footprint of existing development and will not disturb any existing shoreline vegetation or habitat.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-38:** To support and promote methods for reducing marine vessel risks to SRKWs, SeaPort Sound will include language in its *Terminal Information Manual*, which is distributed to marine operators calling at the terminal. The language will encourage vessel operators to hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional WhaleReport Alert System and emerging resources, such as the upcoming Cetacean Desk of the Vessel Traffic Service in USCG's Puget Sound sector, to slow down near SRKWs in near real time. It will also encourage vessel operators to minimize the distances that secondary and service vessels (e.g., escorts and fueling) travel and/or to choose routes and timing that reduce overlap with SRKW foraging areas.

3.5 Energy and Natural Resources

This section addresses the current and projected consumption of energy (electricity, natural gas, and bulk liquids) and natural resources (nonrenewable construction materials). Water supply and use are discussed in Section 3.3. Mitigation measures to avoid potential impacts are presented where appropriate.

3.5.1 Affected Environment

The study area for energy and natural resources directly related to construction and operation of the Proposed Action focuses on the Project site itself. Regional energy and natural resources are generally discussed to provide context about available supplies and forecast demand.

3.5.1.1 Electricity

Electricity is supplied to the Project site by Tacoma Power. Tacoma Power provides electric service to Tacoma, Fircrest, University Place, and Fife, parts of Steilacoom, Lakewood, Joint Base Lewis-McChord, and portions of unincorporated Pierce County. In 2019, 82% of Tacoma Power's supply was from hydroelectric sources; much of this energy is generated by hydroelectric projects owned by Tacoma Power and located on four rivers in western Washington. Other power sources in 2019 included

biomass (<1%), nuclear (7%), petroleum (<1%), solar (<1%), wind (6%), and unspecified sources (3%). Tacoma Power also purchases energy from other suppliers including Bonneville Power Administration (Tacoma Power 2020, 2021; Commerce 2020).

In 2019, Tacoma Power sold 4.7 million megawatt hours to 182,234 customers (EIA 2019a). Industrial customers accounted for 52% (2.4 million megawatt hours) of the electricity consumption in the Tacoma Power electrical service area in 2019 (EIA 2019b). Under existing conditions, the SeaPort Sound facility used an average of approximately 8.1 million kilowatt hours (kWh) of electricity each year between 2016 and 2020. This represents approximately 0.3% of electricity supplied by Tacoma Power to industrial customers in its service area in 2019.

At a regional level in the Pacific Northwest, the annual winter peak electricity forecast is projected to grow at 0.5%, with a forecast of 0.8% growth in the summer peak. The growth in summer peak load is consistent with past projections, while the winter peak load forecast is lower than previous estimates. Most of the forecasted growth comes from large new and expanding industrial customers. Pacific Northwest utilities are expected to need to obtain new sources of power to meet regional demand within the next few years due to forecasted load growth and the retirement of coal plants (PNUCC 2021).

3.5.1.2 Natural Gas

Natural gas is used for three pieces of equipment at the facility. First, a hot oil heating system is used to heat asphalt tanks. This heating system circulates a thermal fluid through coils or special pipes to keep the contents warm, maintain product viscosity, and reduce the risk of damaging equipment (SeaPort Sound 2021). Second, a marine vapor combustion unit is used to control vapors during marine loading, particularly for loading of ethanol on ships and barges. Third is the existing boiler that would be replaced with a more efficient hot oil heater under the Proposed Action.

Natural gas is supplied to the Project site by Puget Sound Energy (PSE). PSE's service area is primarily in the Puget Sound region, where they serve more than 900,000 natural gas customers. PSE has approximately 165,000 natural gas customers in Pierce County, with 300 industrial customers (PSE 2020).

In 2019, PSE supplied a total of 118 billion cubic feet of natural gas to residential, commercial, and industrial power recipients in Washington State. Of that total, 20 billion cubic feet, or 17%, were consumed by industrial uses (EIA 2019c). Between 2016 and 2020, the SeaPort Sound facility used an average of approximately 135.4 million cubic feet of natural gas annually. This represents approximately 0.7% of the natural gas supplied by PSE to industrial users in 2019.

3.5.1.3 Fuel

In 2019 and 2020, SeaPort Sound maintenance vehicles used an average of 1,150 gallons of gasoline per year. Company boats use approximately 240 gallons of gasoline per year. Diesel is used on site for a mobile compressor (720 gallons per year) and a mobile water pump (144 gallons per year). This represents a small portion of fuels used throughout the region each year.

3.5.1.4 Natural Resources

Nonrenewable natural resources used in the Tacoma area primarily consist of sand and gravel extracted from local sources and steel manufactured either locally or outside of the region. Timber, a renewable resource, is also locally available. These materials are used primarily for construction projects. There are numerous sand, gravel, lumber, and steel suppliers in the Tacoma area for general construction needs.

3.5.2 Potential Impacts from the No Action Alternative

Under the No Action Alternative, demolition and construction at the Project site would not occur as they would under the Proposed Action. There would be no construction-related impacts on energy or natural resources.

Under the No Action Alternative, the existing steam boiler (operating at approximately at 21 million British thermal units [BTUs] or 20,690 cubic feet of natural gas per hour) would not be replaced with a more efficient hot oil heater that would result in an up to 30% energy savings, reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually. Additionally, other infrastructure at the site would not be replaced with more modern, energy-efficient elements under the No Action Alternative. Energy used to operate the facilities under the No Action Alternative would continue to be similar to that discussed in Section 3.5.1 and would be essentially the same for each of the three market fuel mix scenarios discussed in Chapter 2. Maintaining the existing infrastructure may require SeaPort Sound to modify existing tanks to hold different bulk liquids in response to market demand. These modifications, as well as ongoing operation and maintenance of existing facilities, would require a minor commitment of energy and natural resources, resulting in a negligible level of impact.

3.5.3 Construction Impacts and Mitigation Measures from the Proposed Action

3.5.3.1 Electricity, Natural Gas, and Fuel

During demolition and construction at the Project site, electricity would be used to provide temporary construction site lighting, to heat buildings, and for power tools and equipment. Consumption of natural gas specifically for construction work is not anticipated.

A temporary increase in fuel usage would result from transporting construction personnel and materials to the Project site and operating construction equipment. The demand for electricity, diesel, and gasoline needed during construction is anticipated to be met by existing supplies, resulting in negligible energy supply impacts.

3.5.3.2 Natural Resources

Nonrenewable natural resources that would be used to construct the Proposed Action would include approximately 1,620 tons of concrete; 16,605 tons of aggregate; and 1,300 tons of steel (Appendix A). There are numerous suppliers of sand, gravel, concrete, piping, and other standard construction materials in the Tacoma area. The demand for natural resources needed during construction is anticipated to be met by existing supplies, resulting in a negligible level of impact to the supply chain.

Unused equipment on the Project site that is demolished (e.g., refinery and wastewater treatment equipment) would be properly disposed of or recycled at an approved off-site facility.

3.5.3.3 Construction Mitigation Measures and Best Management Practices

Potential impacts on energy and natural resources from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-16:** All electrical and natural gas connections to the decommissioned refinery equipment will be properly disconnected and secured.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-19:** Unused equipment on the Project site that is demolished (e.g., refinery and wastewater treatment equipment) will be properly disposed of or recycled at an approved off-site facility.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.

3.5.4 Long-Term Impacts and Mitigation Measures from the Proposed Action

3.5.4.1 Electricity, Natural Gas, and Fuel

The Proposed Action includes installing two 200-horsepower pumps that would consume an average of 350,000 kWh per year. Equipment upgrades under the Proposed Action include replacing the current on-site wastewater treatment system, which consumes an electrical load of approximately 180,000 kWh per year, with a new system that is estimated to draw 40,000 kWh per year. These changes in electricity use represent a small percentage of the approximately 8.1 million kWh used by the SeaPort Sound facility annually and an even smaller percentage of the electricity provided by Tacoma Power to industrial users (see Section 3.5.1.1). Therefore, impacts on electrical supply during operation of the Proposed Action would be negligible.

The proposed equipment upgrades also include replacing the existing steam boiler with a more energy-efficient hot oil heater that will operate at 9.9 million BTUs or 9,750 cubic feet per hour (compared to 21 million BTUs or 20,690 cubic feet of natural gas per hour for the existing steam boiler). Several of the tanks in SeaPort Sound's tank farms are served by an aging and less efficient steam boiler. The boiler runs on natural gas and operates by converting water into steam, and then using the steam's pressure to push the vaporized water through a series of coils located in the bottoms of the storage tanks. The existing system lacks a condensation return system, meaning that the majority of the water and heat energy used to keep the more viscous oils hot is lost after a single transit through the facility's steam loop. Whenever steam is lost through steam traps or blowdowns, all the energy involved in the process of generating the steam is lost.

The new hot oil heater system would feature a closed loop and heat return system (known as a hot oil heat transfer fluid system). The proposed system operates by replacing the steam component with a heat conductive thermal oil. The thermal fluid is circulated through the system and returned to a reservoir where the remaining heat and energy can be captured and the thermal fluid reheated and recirculated through the system. This system is an efficiency upgrade, which will reduce the amount of natural gas consumed by the heating system and reduce GHG emissions at the site. Replacement of the on-site boiler would result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.

The proposed hot oil heater system offers additional operational benefits when compared to the existing steam boiler. The hot oil system works by using a pump, compared to a steam boiler operating by pressure. The removal of a pressurized vessel reduces risk of malfunction. Additionally, water is corrosive to metal, and steam heating systems can experience issues with corrosion over time. Thermal fluids are not corrosive and last longer.

The amount of gasoline and diesel fuel used on site for operation of pumps, generator, and SeaPort Sound vehicles and boats would be similar to existing conditions, and no impacts on fuel use are anticipated.

3.5.4.2 Natural Resources

Once the new facilities are constructed, no significant use of natural resources such as sand, gravel, timber, and steel would be needed. Minor quantities of these resources would be required for ongoing maintenance and repair of facilities, and these could be met by regional supplies, resulting in a negligible level of impact.

3.5.4.3 Secondary Impacts

Methods used for off-site transportation of bulk liquids would be similar to existing operations described in Chapter 2 and Section 3.9.1, and would use the existing system of roads, rail, and shipping lanes. The Proposed Action would result in an 11% increase in product storage at the Project site. Regional population growth is likely to continue, potentially leading to an increase in market demand for SeaPort Sound bulk liquids and the need to transport them. This population growth could indirectly result in increased demand for gasoline, diesel, renewables, biofuels, and other fuels to power trucks, train locomotives, and marine vessels carrying fuel products throughout the supply chain. The City's *2030 Climate Action Plan* (City of Tacoma 2021a), and initiatives stemming from the City's Climate Emergency Resolution (City of Tacoma 2019a) and the Washington Clean Fuels Program, in addition to other future GHG reduction initiatives, may lead to a higher demand in renewable and biofuels and use of electric vehicles that reduce the use and transport of fossil fuels in the region.

The number of truck, rail, and marine vessel trips carrying product from the Project site under any of the three market fuel mix scenarios could change compared to current conditions but would remain within SeaPort Sound's permitted throughput limits described in Chapter 2. The amount of energy used by trucks, trains, and vessels to transport fuel products in the future cannot be accurately predicted due to the extensive area covered by the supply chain, changes in market demand, fuel efficiency, and other factors.

However, it is known that the fuels needed to transport products are widely available. Also, the minor increase in transport trips from the Project site anticipated under the Proposed Action (Appendix G) would represent only a small percentage of fuels consumed throughout the region for freight and other uses each year. Impacts on the regional fuel supply resulting from increased product transport trips attributable to the Proposed Action would be minor.

The Proposed Action does not include changes to roadways, railways, or other transportation facilities whose construction would consume building materials. Any additional trips from the Project site would

result in minimal wear on these transportation facilities relative to overall regional transportation and would remain within the permitted throughput limits.

SeaPort Sound's products are ultimately combusted for transport energy or heat or used as a component in downstream products. The Proposed Action would allow more flexibility in the types of bulk liquids SeaPort Sound can provide to customers, including a greater volume of low-carbon fuels that would offset fossil fuels such as gasoline.

3.5.4.4 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on energy and natural resources would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-7:** The current on-site wastewater treatment system will be replaced with modern equipment to reduce electricity consumption at the facility.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.

3.6 Archaeological, Historic, and Cultural Resources

Historic, archaeological, and cultural resources are buildings, structures, sites, or traditional cultural properties that are eligible for listing in the Washington Heritage Register or the National Register of Historic Places. Laws and regulations that are applicable to the Project and that were referenced for determining potential impacts on historic and archaeological resources are summarized in Appendix E.

State law prohibits unpermitted excavation in archaeological sites. The City's Land Use Regulatory Code (TMC 13.12.570) requires research to determine if any "historically designated or significant sites" are located within 500 feet of the Project site. If any such sites are present within 500 feet, a cultural resource site assessment is required. The code also requires documentation of structures older than 50 years and consultation with the state Department of Archaeology and Historic Preservation.

3.6.1 *Affected Environment*

The Project vicinity is on the southwest shoreline of Commencement Bay in Puget Sound. After the last glacial maximum about 14,000 years ago, the Project vicinity was a deep embayment. About 5,600 years ago, a large eruption of Mount Rainier created the Osceola mudflow, which introduced massive amounts of sediment into the White and Puyallup river drainage (Dragovich et al. 1994). The sediment influx caused the river deltas to aggrade rapidly, creating the intertidal system present at historic contact (Vallance and Scott 1997). The delta likely reached its present location around 4,200 years ago (Barnhardt et al. 2003); no archaeological sites would be expected prior to that time.

Although the earliest recorded archaeological sites in the Puget Sound area date to the late Pleistocene (Ames and Maschner 1999), sites in the Project vicinity would not pre-date the formation of the Tideflats area around 4,200 years ago. By the mid-Holocene, larger populations began to organize in complex ways to exploit a wide range of resources including salmon; shellfish; land mammals; and plant resources such as berries, roots, and bulbs. Cultures around Puget Sound and northward show “an unequivocal adaptation to coastal resources,” although classic Northwest Coast developments such as sizeable longhouses and large-scale storage are still absent (Matson and Coupland 1995:97). Over time, populations grew and began to reside in large semisedentary cedar plank house villages located at river mouths and confluences and on protected shorelines. The artifact tool kits became increasingly complex and specialized, allowing for large takes of resources, which were processed and stored for year-long consumption (Ames and Maschner 1999).

The Project vicinity is in the traditional territory of the Puyallup Tribe of Indians. The Puyallup, or *S'Puyalupbsh*, are a Coast Salish Tribe who speak a Southern Lushootseed language (Puyallup Tribe of Indians 2018). At the time of Euroamerican contact, the Puyallup had more than a dozen large villages along the Puyallup River, and numerous camps on Commencement Bay (Haeberlin and Gunther 1930). In the early twentieth century, ethnographer T.T. Waterman recorded two Lushootseed place names near the Project vicinity. *LtcELEb* is the location of the Tideflats area “where the shipyards stood during the busy times of 1918,” and *Kalka'laqu* is the Tideflats area between Hylebos Creek and Wapato Creek (Hilbert et al. 2001:248). The former appears to be approximately 1 mile northwest of the Project vicinity, and the latter is about 0.75 mile southeast of the Project vicinity.

Commencement Bay was not mapped in detail until the Wilkes expedition in 1841 (Morgan 1979:52). Shortly thereafter, settlers began to trickle into the Commencement Bay area, encouraged by the Donation Land Act of 1850 (Kirk and Alexander 1990). Nicholas Delin built a sawmill in Commencement Bay in 1852, which attracted a “small settlement” (Wilma 2002:1). Shortly thereafter, land claims were made in the area by Peter and Anna Judson, Job Carr (the City's first mayor), and others (Wilma 2002). As the Euroamerican presence in the area grew, the Puyallup were pressured to negotiate a treaty with the United States Government. The Treaty of Medicine Creek, which assigned

the Puyallup people to the Puyallup Reservation, was signed in 1854 and renegotiated several times until 1873 (Ruby and Brown 1986:166).

Almost immediately, Americans began to settle the reservation. The North Pacific Railroad announced in 1873 that a major rail line between the Great Lakes and Puget Sound would terminate at Commencement Bay (Ruby and Brown 1986:168). The resulting development brought pressure to acquire Puyallup Indian allotments within reservation boundaries, and many Tribal members sold land (Ruby and Brown 1986:168).

Population and industrial activity increased toward the end of the nineteenth century as the logging, milling, and freight industries boomed (Magden 2008). Land was modified in the Tideflats area to increase useable land and shipping channels and for flood control. As elsewhere in Puget Sound, naturally occurring channels were dredged to deepen and straighten them, and sediments were deposited on adjacent tideflats to increase useable land. Voters established the Port of Tacoma in 1918, and the port instituted an ambitious program to dredge and fill 240 acres of Commencement Bay tidelands a year later (Oldham 2008). Dredging, filling, and development significantly disturbed the Tideflats area, and few archaeological sites are recorded in the area despite ethnographic records of heavy use by Native Americans.

The Project site does not appear to have been filled during the initial Port of Tacoma dredging; a 1945 aerial photograph shows it as vacant although possibly at a somewhat higher elevation than on previous maps due to deposition of dredge spoils. On a 1964 aerial photograph, the northwestern portion of the site still appears low-lying and intertidal, while the southeastern portion is filled uplands with five tanks and log stacks visible. Sound Refining used the property as a refinery starting in 1967. The terminal is visible in its current location on a 1968 aerial photograph. By 1968, the entire parcel was filled and supporting a tank farm, as it has been ever since.

No cultural resources have been recorded in the Project site or within 500 feet (one resource, the M.V. *Kalakala*, is listed on the Department of Archaeology and Historic Preservation database as within 500 feet of the Project site; however, the vessel was scrapped in 2015). Cultural resource surveys have been conducted on either side of the parcel. Both included archaeological monitoring of construction. To the southeast, monitoring revealed about 12 feet of fill above beach deposits (Kelly 2012). To the northwest and in a more upland area, monitoring revealed about 5 feet of fill above glacial deposits (Dellert 2013).

These results, together with the parcel history, indicate that at least the upper 10 feet below the ground surface is highly likely to be imported fill. Given that filling occurred in a fairly short period of time in the mid-twentieth century, it is unlikely that significant historic archaeological resources would be present in the fill.

3.6.2 *Potential Impacts from the No Action Alternative*

No impacts are expected from the No Action Alternative, and no mitigation is recommended.

3.6.3 *Construction Impacts and Mitigation Measures from the Proposed Action*

Ground disturbance is not expected to extend beyond 10 feet below the surface and would likely occur in imported fill. This is anticipated to have minor impacts on archaeological, historic, or cultural resources.

3.6.3.1 **Construction Mitigation Measures and Best Management Practices**

Potential impacts on archaeological, historic, and cultural resources from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits.
- **MM-27:** An Inadvertent Discovery Plan will be prepared and would be followed in the event of a discovery of cultural resources during construction.

3.6.4 *Long-Term Impacts and Mitigation Measures from the Proposed Action*

No long-term impacts on historic, archaeological, or cultural resources are expected as a result of the Proposed Action.

3.6.4.1 **Secondary Impacts**

No secondary impacts on archaeological, historic, and cultural resources are expected as a result of the Proposed Action.

3.6.4.2 **Long-Term and Secondary Mitigation Measures and Best Management Practices**

No mitigation measures are proposed because there would be no long-term or secondary impacts on archaeological, historic, or cultural resources as a result of the Proposed Action.

3.7 **Environmental Health and Safety**

Environmental health concerns associated with the Proposed Action include noise and the risk of potential releases to the environment and associated consequences affecting public health, such as risk of fire, explosion, spills, and other means of exposure to toxic or hazardous materials. This section describes impacts on environmental health that could result under the No Action Alternative

or as a result of the construction and operation of the Proposed Action. This section also presents measures identified to mitigate impacts of the Proposed Action. Laws and regulations that are applicable to the Project and that were referenced for determining potential impacts on environmental health and safety are summarized in Appendix E.

3.7.1 *Affected Environment*

The study area for environmental health encompasses the areas that could be directly or indirectly affected by construction or operation of the Proposed Action. This includes the existing refinery area plus a 500-foot buffer from the Project footprint boundaries to include adjacent properties where impacts may occur.

3.7.1.1 Fuel and Hazardous Materials

SeaPort Sound stores a variety of products on site with varying degrees of hazards. Safety Data Sheets for these products contain information such as the properties of the product; the physical, health, and environmental hazards; and safety precautions for handling, storing, and transporting the product. The National Fire Protection Association (NFPA) has developed a rating standard to provide a sense of the hazards of a material and the severity of these hazards as they relate to emergency response. Products receive a health, flammability, and instability rating on a scale from 0 (lowest risk) to 4 (highest risk). Products currently stored on site and their NFPA ratings are included in Table 3-4. None of the products currently stored on site are explosive, even under elevated temperatures or pressures, and all products have a 1 or 2 rating for health hazards. Gasoline, propane, and ethanol have flash points below 100°F and are considered flammable liquids.

**Table 3-4
Products Stored On Site and National Fire Protection Association Rating**

Product	NFPA Health Rating¹	NFPA Flammability²	NFPA Instability Hazard³
Asphalt	1	1	0
Biodiesel	1	1	0
Ethanol	2	3	0
Heavy Fuel Oil	2	2	0
Low Sulfur Fuel Oil	2	2	0
Residual Fuel Oil	1	2	0
Distillates (Petroleum)	1	2	0
Premium Unleaded Gasoline	1	4	0
Regular Unleaded Gasoline	1	4	0
Propane	2	4	0
Renewable Diesel	1	2	0

Product	NFPA Health Rating ¹	NFPA Flammability ²	NFPA Instability Hazard ³
Toluene ⁴	2	3	0
Acetone ⁴	2	3	0

Notes:

1. NFPA Health Ratings: 0 = normal material; 1 = slightly hazardous; 2 = hazardous; 3 = extreme danger; 4 = deadly
2. NFPA Flammability Ratings: 0 = will not burn; 1 = flash point above 200°F; 2 = flash point between 100°F and 200°F; 3 = flash point between 73°F and 100°F; 4 = flash point below 73°F
3. NFPA Instability Hazard Ratings: 0 = stable; 1 = unstable if heated; 2 = violent chemical change; 3 = shock and heat may detonate; 4 = may detonate
4. Product stored in low quantities at on-site laboratory.

3.7.1.2 Incident Prevention, Preparation, and Response

SeaPort Sound Terminal operates under multiple plans that include measures to protect the safety of the public, SeaPort Sound’s employees, and the surrounding environment. These plans include guidance for safe operations and procedures for transferring bulk liquids at the dock (consistent with state and federal regulations), BMPs for protecting stormwater and water quality, an SPCC Plan, safe operation of the pipeline, air quality control plans covering maintenance and operation of equipment consistent with PSCAA regulations, and emergency and spill response planning documents.

One of the plans that SeaPort Sound Terminal operates under is the *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020), which is a combined spill prevention and response plan that meets all applicable requirements for spill response and emergency response. The plan is a living document that is re-evaluated, changed, and improved as needed. SeaPort Sound maintains a plan that is complete and responsive to the requirements of 49 CFR 194, Response Plans for Onshore Transportation-Related Oil Pipelines; WAC 173-182, 2019; Oil Spill Contingency Plan; 33 CFR 154, Subpart F, 1996; 40 CFR 112, Subpart D, 2009; the Oil Pollution Act of 1990; the *Northwest Area Contingency Plan* (EPA et al. 2019); 40 CFR 112, SPCC Plan (SeaPort Sound 2020); the Central Puget Sound Geographic Response Plan (Ecology 2023b); Washington State Labor & Industries; and *SeaPort Sound’s Safety & Health Plan*. The *SeaPort Sound Terminal LLC Facility Contingency Plan* has been submitted to and accepted by USCG, EPA, and the City. Ecology has also reviewed and certified the plan (SeaPort Sound 2020).

SeaPort Sound maintains a variety of emergency response equipment on site in case of an incident. This includes booms, sorbents, response boats, hand tools, and communication equipment. SeaPort Sound is prepared to deploy response equipment and booms to recover and store material to meet regulatory response time and recovery requirements for EPA, Ecology, and USCG Worst-Case Discharge estimates. A Primary Response Contractor (PRC) has been retained, and Ecology has provided a letter stating that Marine Spill Response Corporation has been granted approval as a PRC. SeaPort Sound also maintains contracts with prominent spill management teams, including Witt O'Brien's and Gallagher Marine.

In addition to maintaining boom and response equipment and securing contracts with a PRC, SeaPort Sound conducts inspections of response equipment and performs and participates in drills, to which agency observers are invited, including Ecology, the Tacoma Fire Department (TFD), and USCG. At a minimum, SeaPort Sound conducts two field deployment drills, a tabletop exercise, and four security drills each year. All facility personnel participate in SPCC Plan training, as well as other safety training.

3.7.1.3 Cleanup Sites

EPA lists one National Priorities List (i.e., Superfund) site in the study area: the CB N/T Superfund Site. EPA placed the site on the Superfund National Priorities List in 1983 due to widespread contamination of the water, sediments, and upland areas. Cleanup is underway and is being addressed through state, federal, and potentially responsible party actions.

In 2019, a comprehensive field examination of the SeaPort Sound refinery process area was completed for the purposes of demolition. The resulting survey identified 15 areas where samples were found to contain greater than 1% asbestos. After the field examination was completed, Construction Group International was contracted to remove all areas of asbestos identified by the survey. This work was completed in December 2019. Asbestos-containing gasket materials maintained between flanged connections were left in place for removal during demolition. Boiler deaerator tank testing at the same time found asbestos in the insulation.

The Project site is located within the footprint of the area known as the Asarco Plume. Properties within the plume are known to contain contaminants associated with the operation of the former Asarco Tacoma smelter located approximately 5 miles to the west of the Project site. Soils taken off site would be tested and disposed of appropriately. There are no active underground petroleum pipelines associated with the refinery.

In addition to the Asarco Tacoma smelter site, there are two sites on properties adjacent to the Project site that are identified by Ecology as contaminated sites (Table 3-5). Cleanup occurs for any soil disturbance activities on properties affected by the Asarco Tacoma smelter. The other two sites have achieved No Further Action (NFA) status, which means that the sites have been successfully cleaned up, and no contamination remains above the applicable cleanup levels outlined in the MTCA. The most common affected media types within these sites are soil and surface water.

**Table 3-5
Cleanup Sites on Parcels Adjacent to the Project Site**

Cleanup Site Name	Cleanup Site ID	Address	Cleanup Type	Site Status	Contaminant	Affected Media
Asarco Tacoma Smelter Site	3657	Plume covers a large portion of the Puget Sound region, including Tacoma	Federal	Cleanup Started	Arsenic	Soil, surface water
					Lead	Soil
					Metals priority pollutants	Soil, surface water
Cascade Timber 2	3047	South Taylor Way, approximately 0.2 mile northwest of Project site	No Process	NFA	Conventional contaminants, organic	Soil, groundwater, surface water
					Metals priority pollutants	Soil, groundwater, surface water
					Petroleum products – unspecified	Soil, groundwater, Surface water
					PAHs	Soil, groundwater, Surface water
Edman Co. Side 1 Marine View Dr	2662	2502 Marine View Drive SW	Ecology	NFA	Metals priority pollutants	Soil, surface water

In addition, the Project site is within a quarter mile of three other contaminated sites: 302 McMurray Road, Facility Site Identification (FSID) 17865; Airo Services Inc., FSID 1231; and Pump Station 4103 ROW 2222, FSID 1806706 (Ecology 2023f).

3.7.1.4 Noise

Land uses that are considered sensitive to noise impacts are referred to as sensitive receptors. This can include schools, residences, libraries, hospitals, and other care facilities. The nearest sensitive receptors to the Project site are residences that are more than 0.25 mile away. The existing noise environment is typical of an industrial facility. Existing noise sources at the Project site include routine operations, operations at adjacent industrial facilities, vehicle traffic on Marine View Drive and other nearby roads, and vessels on Hylebos Waterway.

Noise from Project construction and operations would be subject to the City’s noise ordinance (TMC 8.122). Within the City, permitted construction hours are from 7:00 a.m. to 9:00 p.m. on weekdays and 9:00 a.m. to 9:00 p.m. on weekends and holidays; however, after-hours work is allowed provided that the sound does not exceed the limits outlined in the noise ordinance.

3.7.2 Potential Impacts from the No Action Alternative

Under the No Action Alternative, the site would continue to be used for bulk liquids storage and transport. There would be limited changes to the amount of fuel or hazardous materials stored on site to support operations, as volumes of stored products fluctuate within the existing tank capacity over time. SeaPort Sound would continue to follow existing incident prevention, preparation, and response plans and operate the existing facility following the same compliance with local, state, and federal regulations for the handling, storage, and transport of materials as would be followed under the Proposed Action. Contaminated soils or other hazardous material would not be encountered or removed from the site during construction because construction would not occur. There would be no changes to noise levels at the site, and SeaPort Sound would continue to operate under the City's noise ordinance. Overall, there would be no impact to environmental health and safety under the No Action Alternative because potential impacts from ongoing activities at the terminal would continue to be mitigated via response plans and ongoing training.

3.7.3 Construction Impacts and Mitigation Measures from the Proposed Action

The Proposed Action includes installing new bulk liquids storage tanks, which would be used to store petroleum and renewable and biofuel products. No new types of hazardous materials would be stored on site as a result of the Proposed Action. Products that would be stored in the new tanks would not be present during construction; however, the contractor would be responsible for the preparation of a spill plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.

Contaminated sites identified by Ecology that are on parcels adjacent to the Project site have achieved NFA status. However, some soil contamination could be present from historical activities at the facility. During construction, it is possible that contaminated soils could be encountered that may be present from historical activities at the facility. The construction contractor would be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils encountered during excavation. These types of detailed plans are typically developed by the contractor that will be performing the work so that it can identify the most effective methods to comply with permit requirements based on site-specific conditions and its experience with similar projects. Soils would be observed for visual contamination and would be tested and disposed of appropriately at an approved off-site disposal facility. If any contamination is discovered during construction, the release of hazardous substances will be reported to Ecology as required by WAC 173-340-300(2). If contamination of soil or groundwater is readily apparent or is revealed by sampling, Ecology will also be notified. Exposed soils could also contaminate stormwater runoff if not controlled. However, BMPs will be implemented as described in Section 3.3.3.4 to avoid or minimize stormwater impacts.

Demolition of existing structures could disturb asbestos-containing materials where present. Most areas of the site that contained greater than 1% asbestos were removed by Construction Group International in 2019; therefore, significant impacts on human or environmental health are not expected from the removal of the remaining asbestos on the site. Asbestos-containing gasket materials present between flanged connections would be removed during demolition. If the deaerator tank is removed during the Project, the asbestos insulation would also be removed. Appropriate demolition and disposal practices would be implemented during asbestos removal.

Short-term and localized increases in noise may occur from construction activities. The Proposed Action would occur within an active industrial facility, with noise levels that are typical of an industrial setting. The noise of the surrounding environment would not affect the Proposed Action. Construction would occur during times allowed by the City's noise ordinance in TMC Title 8 or an approved extension.

It is anticipated that construction of the Proposed Action would have negligible impacts on environmental health and safety. The Proposed Action is located in an industrial setting where operational noise-generating activities occur and impacted soils are common and can be properly handled and disposed of. Potential increases in construction noise are anticipated to quickly attenuate to background levels due to the industrial setting.

3.7.3.1 Construction Mitigation Measures and Best Management Practices

Potential impacts on environmental health and safety from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-10:** SeaPort Sound will obtain a CSWGP from Ecology for proposed ground-disturbing activities. The CSWGP will cover stormwater, groundwater, water used for dust control, and other construction water discharges. SeaPort Sound will prepare and implement a SWPPP, with all appropriate BMPs implemented and maintained in accordance with the SWPPP and the terms and conditions of the permit.
- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.

- **MM-13:** Additional security patrols will be provided, and all work areas will be fenced to prevent public access during construction. The Project site will continue to comply with its Facility Security Plan requirements.
- **MM-14:** All equipment to be used for construction activities will be cleaned prior to arriving at the site and will be inspected daily to ensure that no leaks are present and the equipment is functioning properly.
- **MM-15:** Water that is used to clean decommissioned refinery equipment prior to removal from the site will be treated and disposed of properly.
- **MM-16:** All electrical and natural gas connections to the decommissioned refinery equipment will be properly disconnected and secured.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-19:** Unused equipment on the Project site that is demolished (e.g., refinery and wastewater treatment equipment) will be properly disposed of or recycled at an approved off-site facility.
- **MM-20:** Construction will occur during times allowed by the City's noise ordinance in TMC Title 8 or an approved extension.
- **MM-21:** Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable.
- **MM-22:** Erosion control measures will be implemented during construction per the Temporary Erosion Control Plan to be prepared for the Project.
- **MM-23:** The contractor will be responsible for the preparation of a spill plan to be used for the duration of the Project to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-25:** The construction contractor will be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils or groundwater potentially encountered during excavation.
- **MM-26:** SeaPort Sound will provide asbestos and lead abatement requirements and procedures to the contractor prior to construction. Asbestos and other hazardous wastes used or encountered during construction will be properly disposed of in accordance with appropriate regulations.

- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

3.7.4 Long-Term Impacts and Mitigation Measures from the Proposed Action

The Proposed Action would include an increase in the storage of bulk liquids that are similar to the mix currently held and transported through the terminal. The Proposed Action includes both design and operational safety measures to avoid and minimize potential environmental impacts from operation and storage of materials. The new tanks would be designed to current safety standards for seismic stability, consistent with City seismic and development code requirements.

Construction of the new storage tanks would include installing a new reinforced concrete circular footing for each tank. A bentonite liner and sand layer would be placed inside the circular footing to seal any exposed soil from potential incidental spills. The tanks would be constructed within an area contained by a 4-foot-high concrete wall meeting secondary containment requirements (per 40 CFR 112 and WAC 173-180-320). The Project design will comply with NFPA requirements to ensure proper spacing, grading, and drainage as required by state law (WAC 173-80). The Project design will also ensure that any spills onto the soil will be sufficiently contained and readily recoverable as required by state regulations (WAC 173-80).

Additionally, the wastewater treatment system would be replaced with new and improved equipment, including the contact water drain line, oil-water separator, and flow and pH meters. The existing surge pond and aeration pump would be repaired as needed to serve the facility. These upgrades would improve the function of the wastewater treatment system that currently operates on site. The new non-SeaPort Sound stormwater line to be relocated as part of the Proposed Action is being replaced in coordination with the City and would be installed consistent with City stormwater standards. A new fire

loop system will be installed at the terminal to expand fire response capabilities on site. The fire system and Project infrastructure will be designed to meet current codes.

Although most areas of the site that contained greater than 1% asbestos were removed by Construction Group International in 2019, the removal of remaining asbestos from the site would be a benefit to environmental health and safety. If contaminated soils are found during construction and are removed, that would also result in long-term benefits to environmental health and safety.

The Proposed Action would not introduce any new products other than those that are already stored on site; therefore, there would be no increased risk of health hazards, fires, or explosions. The new tanks are designed to only handle lower-vapor-pressure products (e.g., the tanks will not require floating roofs). Due to the safety standards and implementation of safety measures, the long-term impacts of the Proposed Action on environmental health and safety are expected to be low.

Continued safe operation of the facility would be ensured through compliance with local, state, and federal regulations for the handling, storage, and transport of materials. SeaPort Sound would continue to maintain and update the *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020) to address potential spills at the site in compliance with WAC 173-182; the Oil Pollution Act of 1990, and 33 CFR 154. Trained personnel operate the facility and would continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation. A vapor detection system is installed at the facility propane transfer to actively monitor and alert operators of potential leaks. The Proposed Action is designed so that any contact water generated during facility operation would be treated and managed in compliance with existing regulations. SeaPort Sound anticipates that any potential public health impacts from the Proposed Action would be addressed through design and operational BMPs. The safety plans in place and safety training among staff would result in a low risk of environmental health and safety impacts due to spills. The Tacoma-Pierce County Health Department's Environmental Health Program also submitted a comment through the SEPA process stating that they have no comments on the current proposal.

Long-term impacts from the operation of the Proposed Action are expected to be comparable to the No Action Alternative because similar bulk liquids and materials will be handled on site under both alternatives. Any impacts from the Proposed Action are expected to be mitigated through response plans and ongoing training and upgraded fire response infrastructure at the terminal. The Proposed Action includes similar operations as the No Action Alternative under all three market fuel mix scenarios and would continue to operate within the permitted throughput limits. Long-term noise levels at the Project site would remain similar to existing levels after Project completion, and there would be no new noise impacts as part of the Proposed Action.

3.7.4.1 Secondary Impacts

Secondary impacts from the Proposed Action would be similar to the No Action Alternative because similar bulk liquids would be handled, and transportation throughput is driven by market demand, not an increase in storage capacity. Section 3.9 describes the minor increase in transport trips anticipated to result under the Proposed Action. There could be a nominal increase in risk of spills during transport of bulk liquid products off site, proportional to the amount of bulk liquids transferred if demand for bulk liquid products in the region increases. Spill response measures, including those described in the Plants and Wildlife section (Section 3.4.4), would be implemented to address potential spills; therefore, impacts are expected to be minor.

3.7.4.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on environmental health and safety would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.
- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-6:** The Project will be designed so that any contact water generated during facility operation will be treated and managed in compliance with existing regulations.
- **MM-7:** The current on-site wastewater treatment system will be replaced with modern equipment to reduce electricity consumption at the facility.
- **MM-8:** The existing steam boiler will be replaced with a more energy-efficient hot oil heater that will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.

- **MM-9:** All work will occur in the footprint of existing development and will not disturb any existing shoreline vegetation or habitat.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.
- **MM-33:** SeaPort Sound's vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.
- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City's Urban Forestry Program. This mitigation measure is consistent with the City's *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.

- Purchase third-party-verified GHG offsets.
- **MM-35:** SeaPort Sound will install tanks within the proposed expansion area with fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require a separate SEPA review and an NOC issued through PSCAA to complete. The NOC applicability for the Proposed Action will be completed after the EIS is complete as part of project permitting.

3.8 Land and Shoreline Use

Land use refers to how land is developed for various human uses, including residential, commercial, and industrial uses. It also refers to the preservation or protection of land for natural uses.

Shorelines—land along a waterbody—can also be developed for human purposes or preserved for natural purposes. Development projects, such as the Proposed Action, must be compatible with surrounding land uses and must comply with all state and local regulations and policies governing land and shoreline use.

This section describes the current land and shoreline use and environmental justice populations of interest in the study area and assesses the potential for impacts on land and shoreline use that could result under the No Action Alternative or as a result of the construction and operation of the Proposed Action. This section also presents measures identified to mitigate impacts of the Proposed Action. Laws and regulations that are applicable to the Project and that were referenced for determining potential impacts on land and shoreline use are summarized in Appendix E.

3.8.1 *Affected Environment*

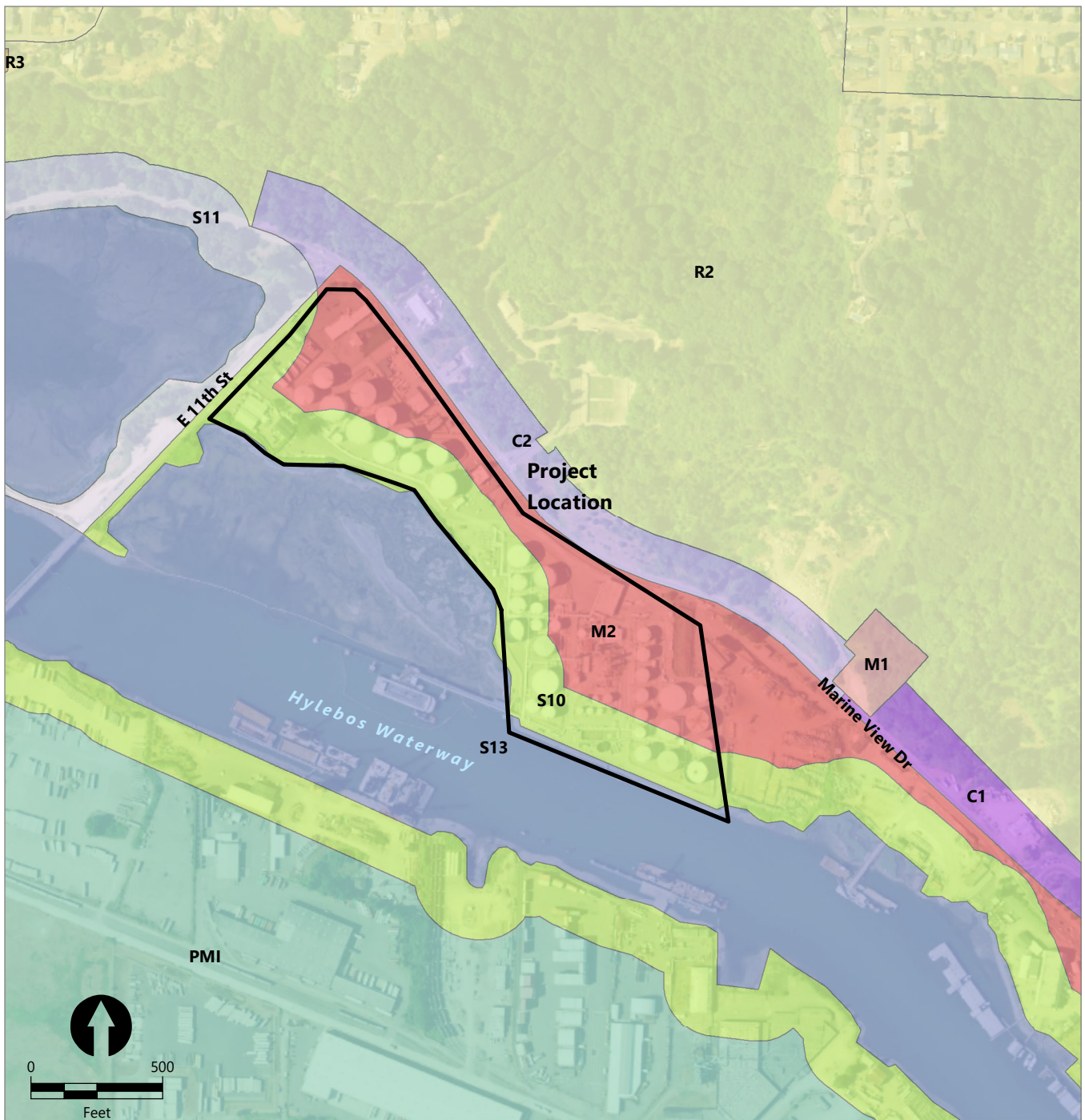
The study area for land and shoreline use consists of areas where land uses may be directly or indirectly affected by construction or operation of the Proposed Action. This includes the existing refinery area plus a 500-foot buffer from the Project footprint boundaries to include adjacent properties where impacts may occur. The environmental justice analysis uses a 0.5-mile buffer from the Project site.

3.8.1.1 Land Use and Zoning

The Project site is located in the City of Tacoma, Washington, along the Hylebos Waterway in an area zoned for industrial use (Figure 3-7). It is also located within the regionally designated Port of Tacoma Manufacturing and Industrial Center, which is made up of 5,160 acres of waterfront land and adjoining waterways on Tacoma's Commencement Bay (PSRC 2015). Adjacent industrial properties include additional SeaPort Sound Terminal storage facilities to the west and Edman Company, a logging business, and a landfill to the east. The Hylebos Waterway is an industrial waterway that

borders the south side of the facility. Marine View Drive is located north of the Project site, with several residential areas located on top of a steep hillside to the north.

The parcel number is 0321264046, which is zoned as M-2, Heavy Industrial District, by the City (City of Tacoma 2021g). The Heavy Industrial District is intended to allow most industrial uses. Parcels located to the west and east of the Project site are also zoned as M-2, while the parcels on the north side of Marine View Drive are zoned C-2: General Community Commercial District. Further to the north, there are areas zoned as R-2: Single-Family Dwelling District that also have a View Sensitive Overlay District where buildings may not exceed a height of 25 feet.



LEGEND:

Zoning Designation

- C1 - Commercial
- C2 - Commercial
- M1 - Light Industrial
- M2 - Heavy Industrial
- PMI - Port Maritime and Industrial
- R2 - One Family Dwelling
- R3 - Two Family Dwelling
- S10 - Port Industrial Area (HI)
- S11 - Marine View Drive (UC)
- S13 - Marine Waters of the State (A)

NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Zoning designations acquired from City of Tacoma.

Publish Date: 2023/10/09, 4:44 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Zoning Map.mxd



**Figure 3-7
Zoning Map**

The City's Comprehensive Plan, known as "One Tacoma," guides the community's long-term development and describes plans for the vision for the future. The current Comprehensive Plan designation of the Project property is Heavy Industrial (Figure 3-8; City of Tacoma 2015a), which is characterized by higher levels of noise and odors, large-scale production, large buildings and sites, extended operating hours, and heavy truck traffic. This designation also requires access to major transportation corridors, often including heavy-haul truck routes and rail facilities. The Comprehensive Plan designation of the surrounding areas is commercial and industrial, which supports ongoing port and other similar uses requiring multimodal transportation of goods and services.

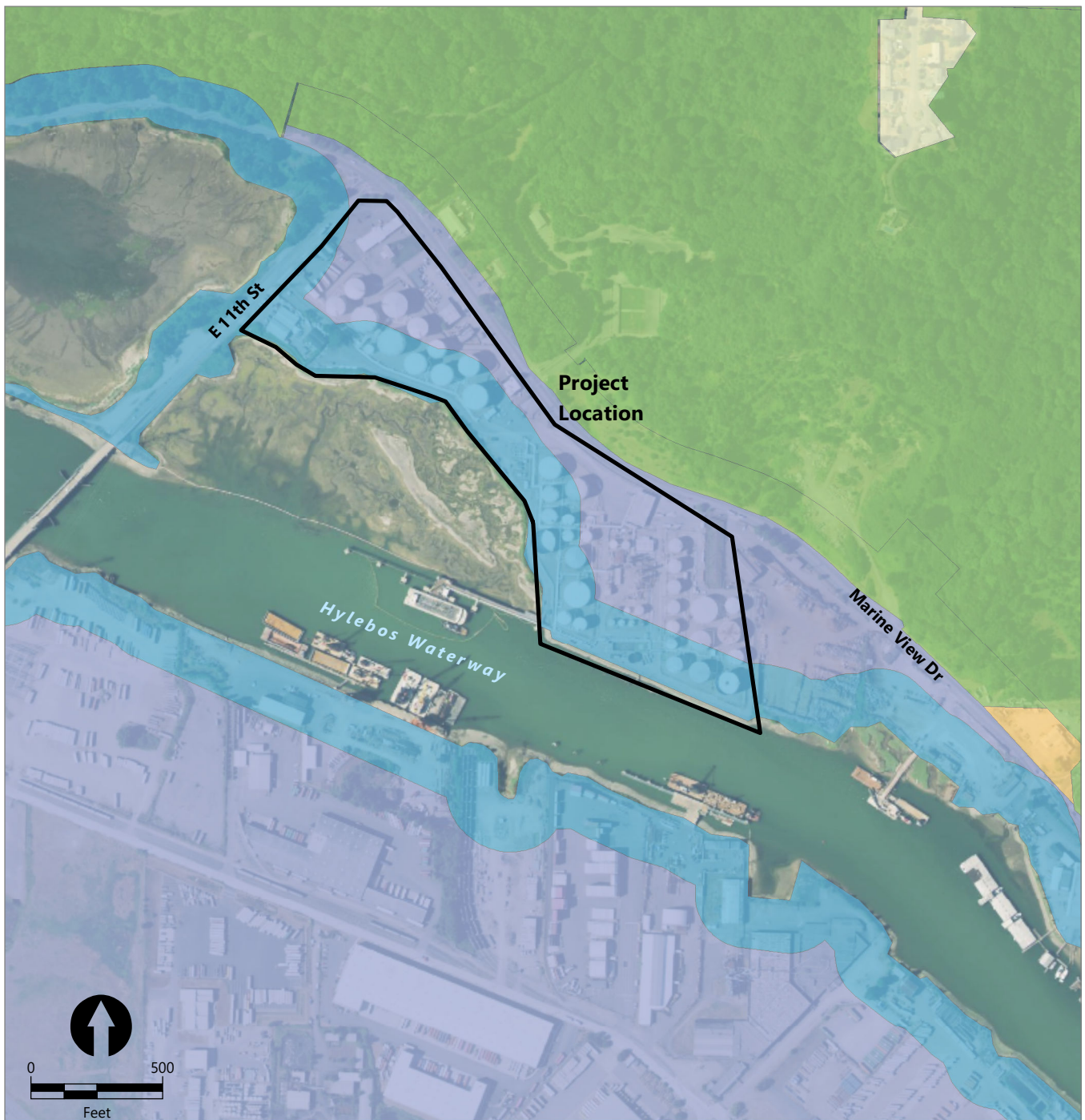
The City is currently developing a Tideflats Subarea Plan, which is intended to create a shared long-term vision and more coordinated approach to development, environmental review, and strategic capital investments in the Tideflats area. As of publication of the EIS, the City is currently developing a Tideflats Subarea Plan EIS to support land use decision-making under these new regulations. The Project is expected to be vested under the previous regulations because the SEPA Determination of Significance for this Project was issued prior to the completion of the Tideflats Subarea Plan.

3.8.1.2 Shoreline Environment

The Shoreline Management Act applies to all counties and cities that have "Shorelines of the State," as defined in RCW 90.58.030. Shoreline Master Programs (SMPs) typically regulate development within 200 feet of jurisdictional waterbodies to be consistent with the Shoreline Management Act goals. The Project site is located within the jurisdiction of the City's SMP with an environmental designation of "S-10 Port Industrial, High-Intensity" (Figure 3-9). This designation allows for "the continued development of the Port Industrial Area, with an increase in the intensity of development and a greater emphasis on terminal facilities within the City," pursuant to TMC 19, Chapter 9.12(A) (City of Tacoma 2019c). A portion of the Proposed Action, primarily wastewater treatment system repairs and upgrades and stormwater line replacement, is located within the SMP-regulated 50-foot marine buffer.

3.8.1.3 Critical Areas

Critical areas regulated by the City pursuant to TMC Title 13 include critical aquifer recharge areas, fish and wildlife habitat conservation areas, flood hazard areas, geologically hazardous areas, stream corridors, and wetlands. Critical areas that are present on the Project site include the 200-foot shoreland area of the Hylebos Waterway, the 50-foot marine buffer, and an area of high liquefaction susceptibility (City of Tacoma 2021g). These critical areas are identified and evaluated in Section 3.1, Earth; Section 3.3, Water; and Section 3.4, Plants and Wildlife.



LEGEND:

Land Use Designation

- Single Family Residential
- Neighborhood Commercial
- Heavy Industrial
- Parks and Open Space
- Shoreline

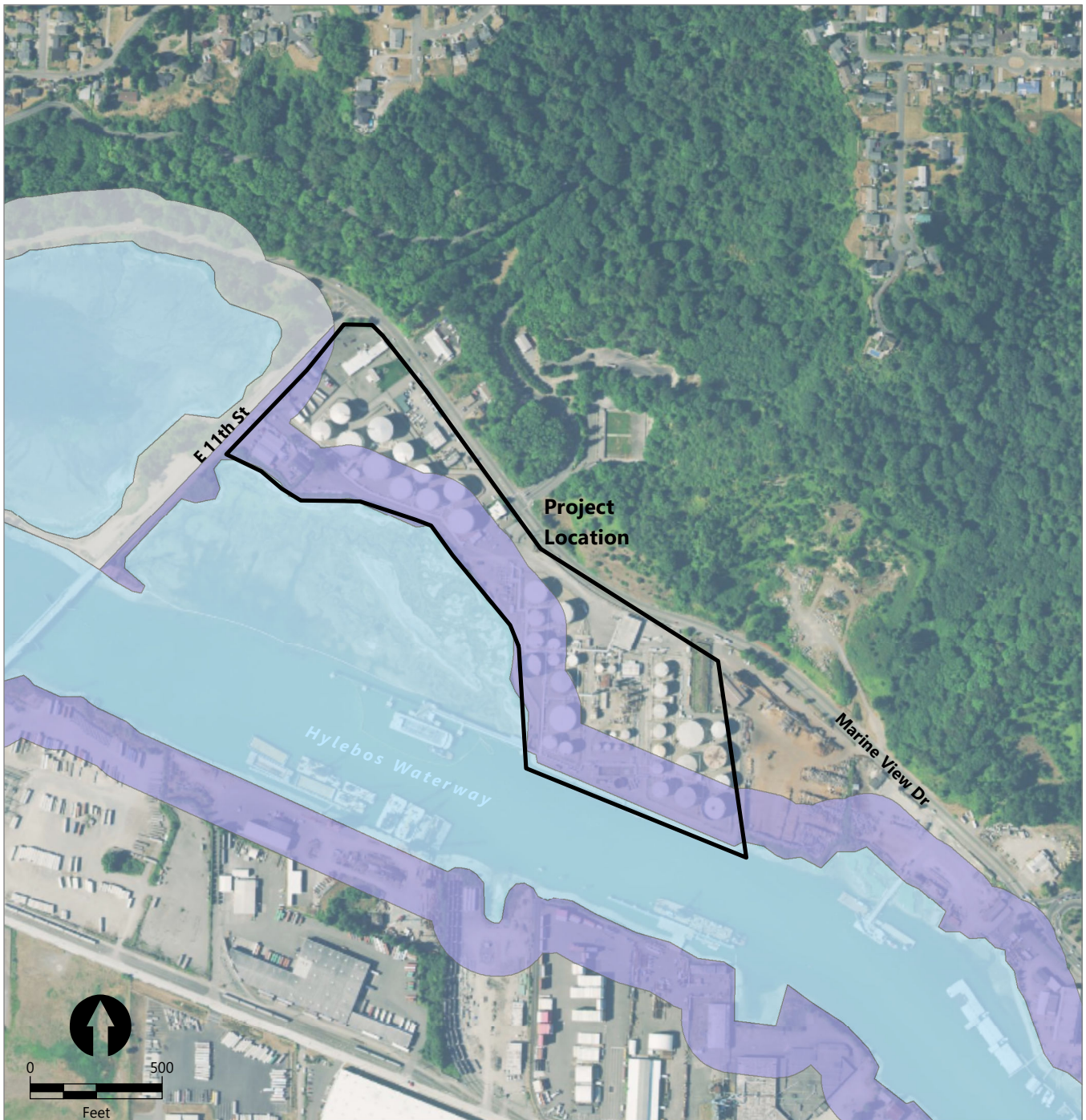
NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Land use designations acquired from City of Tacoma.

Publish Date: 2023/10/09, 4:46 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Comprehensive Plan Land Use.mxd



Figure 3-8
Land Use Designations



LEGEND:

Shoreline Designation

- S10 - Port Industrial Area (HI)
- S11 - Marine View Drive (UC)
- S13 - Marine Waters of the State (A)

NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Shoreline designations data acquired from City of Tacoma.

Publish Date: 2023/10/09, 4:47 PM | User: tweldy
 Filepath: \\orcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Shoreline Designations.mxd



**Figure 3-9
 Shoreline Designations**

3.8.1.4 Environmental Justice

Environmental justice refers to the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

The SeaPort Sound Terminal is located within an area zoned for heavy industry and on an industrial transportation corridor (Marine View Drive) that is intended to accommodate commercial and industrial traffic. The property is currently used for industrial purposes, including the storage and transfer of bulk liquids. There are no residential properties on the Project site; therefore, no minority or low-income groups live on the site. Residential properties are also not present immediately adjacent to the site, and the nearest residential neighborhood is greater than 0.5 mile from the Project site.

Tables 3-6 and 3-7 summarize the 2014 to 2018 American Community Survey census data for the area within a 0.5-mile radius from the Project boundaries (EPA 2021c). Data from the City are also included for comparison. Table 3-6 includes the population by race, which is primarily white alone with smaller percentages of Black alone and Asian alone. The City is also primarily white alone, with similar levels of Black alone and Asian alone as the Project vicinity. People who identify as Hispanic or Latino of any race account for approximately 11% of the people within a 0.5-mile radius and approximately 12% in the City.

If the percentage of minorities or low-income populations within the study area is greater than the City percentage, the study area is considered an environmental justice population. Based on the data presented, the area within 0.5 mile of the Project site does not have greater levels of environmental justice populations compared to the City as a whole.

**Table 3-6
Population by Race**

Race	Within 0.5 Mile of the Project Site		City of Tacoma	
	Number of People	Percentage	Number of People	Percentage
White alone	666	73%	136,467	65%
Black alone	92	10%	20,664	10%
American Indian alone	2	0%	3,322	2%
Asian alone	87	10%	19,246	9%
Pacific Islander	0	0%	2,661	1%
Some other race	16	2%	8,363	4%
Two or more races	56	6%	19,220	9%
Hispanic or Latino (of any race)	105	11%	24,882	12%

Source: EPA 2021c

Table 3-7 includes household income. In 2021, the federal poverty guideline for a four-person household was \$26,500. Approximately 11% of households within 0.5 mile of the Project were at or below the federal poverty guideline, and approximately 21% of households within the City were at or below the federal poverty guideline (ASPE 2021).

**Table 3-7
Household Income**

Income	Within 0.5 Mile of the Project Site		City of Tacoma	
	Number of Households	Percentage	Number of Households	Percentage
<\$15,000	23	7%	9,745	12%
\$15,000 to \$25,000	13	4%	7,246	9%
\$25,000 to \$50,000	37	11%	18,227	22%
\$50,000 to \$75,000	49	15%	15,999	19%
\$75,000+	206	63%	31,282	38%

Source: EPA 2021c

3.8.2 *Potential Impacts from the No Action Alternative*

For the No Action Alternative, no construction would occur; therefore, no temporary construction or long-term operational impacts would occur relative to the Proposed Action, and no mitigation would be required. SeaPort Sound would continue to operate its existing facility as described in Section 2.2, which is a permitted use.

Although the Proposed Action would not occur, it is assumed that growth in the region would continue under the No Action Alternative, which could lead to development of another industrial use at or near the Project site. Such development could result in impacts similar to those described in the subsequent section for the Proposed Action. Overall, it is anticipated that there would be no impacts on land and shoreline use from the No Action Alternative.

3.8.3 *Construction Impacts and Mitigation Measures from the Proposed Action*

During construction, minor, short-term increases in noise and dust could impact adjacent properties. However, the Project site and immediately surrounding land uses are zoned Heavy Industrial, and construction activities are compatible with existing land use and shoreline use designations. BMPs would be in place to minimize these impacts, including using low-noise-emission equipment, limiting high-noise activities to daytime hours, and using dust suppression BMPs. Construction would take place entirely within SeaPort Sound’s existing development footprint, and no people reside within the Project vicinity. The Proposed Action would not require any property relocations and would not

displace any residences or businesses. Because environmental justice populations of interest are not present within the study area, construction impacts would not have disproportionate effects on minorities or low-income populations.

To ensure the Proposed Action complies with all applicable federal, state, and local planning requirements throughout construction, the Applicant would obtain all appropriate permits and approvals prior to construction. The Proposed Action would also comply with applicable City land use and development codes as vested at publication of this document. Therefore, impacts on land and shoreline use from construction of the Proposed Action are not anticipated to occur.

3.8.3.1 Construction Mitigation Measures and Best Management Practices

Potential impacts on land and shoreline use from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-13:** Additional security patrols will be provided, and all work areas will be fenced to prevent public access during construction. The Project site will continue to comply with its Facility Security Plan requirements.
- **MM-17:** To reduce air emissions, the contractor will limit idling of construction equipment when not in use.
- **MM-18:** The contractor will employ dust suppression equipment as needed during grading activities to reduce potential dust emissions.
- **MM-20:** Construction will occur during times allowed by the City's noise ordinance in TMC Title 8 or an approved extension.
- **MM-21:** Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel

- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
- Provisions for removal of trash generated by project construction activity
- A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

3.8.4 Long-Term Impacts and Mitigation Measures from the Proposed Action

The Proposed Action would result in continued use of the Project property as a bulk liquids storage facility, which is compatible with current and projected land uses and plans, including consistency with the City's Comprehensive Plan. The Proposed Action would not change these existing land uses or affect nearby or adjacent properties.

Implementation of the Proposed Action requires the Applicant to apply for land use permits from the City, which requires demonstration of consistency with the applicable policies, zoning, and conditions. Therefore, operation of the Proposed Action at the Project site would be consistent with the applicable policies, including consistency with comprehensive plans, zoning ordinances, critical areas ordinances, and SMPs. With implementation of permit conditions, impacts resulting from the Proposed Action are considered negligible and would not require mitigation.

The area surrounding the Project site has greater levels of people who identify as white alone compared to the City (73% versus 65%) and an overall greater household income, with 63% of households having an income of greater than \$75,000 compared to only 38% in the City. There are no residential properties on the Project site; therefore, no minority or low-income groups live on the site. Residential properties are not present immediately adjacent to the site, and the nearest residential neighborhood is more than 0.25 mile from the Project site. After construction, long-term operations at the site would be similar to industrial activities now taking place on the site and are not expected to adversely affect population groups in the area. No new jobs are expected to be created as part of the Proposed Action; therefore, there would be no impacts or benefits to nearby populations due to job creation.

3.8.4.1 Secondary Impacts

No secondary impacts on land and shoreline use are expected as a result of the Proposed Action.

3.8.4.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on land use would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound LLC Terminal Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.
- **MM-33:** SeaPort Sound's vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.
- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [Appendix A]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound Terminal (Figure 2-7). The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City's Urban Forestry Program. This mitigation measure is consistent with the City's *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets (City of Tacoma 2021a).
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.

- Purchase third-party-verified GHG offsets.

3.9 Transportation

This section describes the existing transportation-related facilities in the Project vicinity, including rail, truck, and marine vessels. This section also evaluates potential impacts from the No Action Alternative, construction impacts from the Proposed Action, and long-term construction and operational impacts from the Proposed Action. Where appropriate, mitigation measures are identified to avoid or minimize these potential impacts.

3.9.1 *Affected Environment*

The study area for the transportation affected environment considered for the proposed Project includes the SeaPort Sound Terminal, the upland properties on either side of the Hylebos Waterway, and the Tidelands area. Analysis of the study area was based on Pierce County publications, previous environmental impact studies within the Tidelands area, and communications with SeaPort Sound. The storage and transport of petroleum products is subject to significant existing regulatory oversight that meets the requirements of RCW 43.21C.240 for environmental analysis, protection, and mitigation measures, which may be met by application of other applicable local, state, or federal laws and rules.

3.9.1.1 Rail

Rail facilities within the Tidelands area consist of industrial rail lines and four intermodal railyards serving a number of businesses. From Tacoma, Burlington Northern Santa Fe Railway Company and the Union Pacific Railroad offer transcontinental service across North America, while Tacoma Rail provides short line, terminal, and switching services. Goods are transported throughout the region through three highway interchanges along I-5 from the Port of Tacoma's railyards.

The SeaPort Sound Terminal rail-offload facility is located across the Hylebos Waterway and consists of a three-track, 36-car rail spur located at 1601 Taylor Way. The Taylor Way facility consists of 36 offload spots that are manifolded to offload pumps. The products are then pumped under the Hylebos Waterway in buried pipelines. The piping is buried below the bed of the waterway, connecting to the terminal within the fenced area of the main terminal. The piping is contained within steel casings and equipped with cathodic protection and leak detection. Shoreside valves are located on each end of the pipeline. Valves on the waterway crossing are connected to the emergency shutdown system and will block the pipes on both sides of the waterway. The railyard also contains equipment to facilitate the offloading of propane railcars into three pressure vessels at the railyard. Propane can then be loaded into transport trucks through a single-lane truck rack. The rail-offload facility only receives products and does not load railcars for delivery.

In 2019, SeaPort Sound was issued local land use permits for the installation of four new rail spurs with transfer equipment through the central and eastern sides of the site to reduce the number of railcar switches onto and off of the site from Taylor Way. Enhancements include rail safety and site-wide fire suppression safety, as well as relocation of liquified petroleum gas truck transfer east of the new rail spurs. The new rail spurs will be connected to SeaPort Sound's existing product transfer systems.

The City of Tacoma 2019 shoreline permit for the rail spurs continues previous City permit limitations for SeaPort Sound's railcar capacity at 540 railcars per week (City of Tacoma 2019b). Table 2-1 shows rail trip data from the last 5 years.

3.9.1.2 Truck and Freight

A number of roadways connect the Project vicinity to the greater Port of Tacoma area. The City defines the specific standards for streets in the Project vicinity. Street and highway standards are defined using a functional classification hierarchy from most intensive use to least intensive uses, which are then grouped into classes according to their roles in the City-wide street network. The City defines three main classes of streets:

- Principal Arterials are streets that have a high percentage of long-distance vehicle trips.
- Minor Arterials are streets that have a near balanced percentage of long-distance vehicle trips with local access usage.
- Collector Arterials are streets that have a low percentage of long-distance vehicle trips.

Access to the general area is by arterial and collector roads surrounding the Port of Tacoma; direct access to the Project site is via Marine View Drive/Highway 509 and East 11th Street. Within the Project vicinity, the City has designated sections of public roads as "heavy-haul corridors" (TMC 11.55). These corridors are meant to facilitate the movement of vehicles that are in excess of the legal weight limit, where the load is a sealed oceangoing container. Heavy-haul corridors connect truck traffic traveling to and from the Port of Tacoma and connect truck traffic between marine terminals and other industrial areas and facilities within the Port of Tacoma.

SeaPort Sound currently operates a truck loading rack located along Marine View Drive on the northeast side of the Project site. It has two top-loading lanes that load tanker trucks with asphalt and fuel oil. The rack also has three loading lanes capable of loading with a total of eight load arms at a time. Loading limitation is set through engineered designs. Loading at the truck rack is usually completed in approximately 30 to 40 minutes. The Project would not require new or improved roads or transportation-related infrastructure outside of the property. The completed Project would not increase truck traffic to or from the area.

SeaPort Sound's facility permits have established throughput limitations on gasoline and propane over the truck rack as specified in Section 2.2. Truck loading is limited to up to 300 trucks per day (City of Tacoma 2011), and truck loading for propane at the Taylor Way facility is limited to up to 50 trucks per day (City of Tacoma 2006c). Table 2-1 shows truck trip data from the last 5 years.

3.9.1.3 Marine Vessels

Hylebos Waterway is used extensively for commercial maritime vessel traffic, with a variety of vessels making use of the waterway, such as the harbor fleet of tugs and barges, various pleasure craft, commercial boat traffic, and periodically USCG vessels. Barge and tugboat traffic occurs almost daily in Hylebos Waterway and surrounding areas; these vessels support many operations and facilities within the Tideflats area, with multiple companies operating in the waterway. Escort tugboats ensure a safe passage through the approach channel and apply steering and braking forces if needed. Rescue tugboats, also known as Emergency Response Towing Vehicles, respond to disabled ships and barges, preventing them from grounding and helping to prevent oil spills and other significant maritime incidents.

Hylebos Waterway is generally divided between channels managed by the U.S. Army Corps of Engineers and berthing areas managed by private parties or the Port of Tacoma. The parcel adjacent to the SeaPort Sound property to the north is owned by the Port of Tacoma and serves as an intertidal habitat restoration area. The property to the south serves as the federal navigation channel, which is located within Port of Tacoma property. The area surrounding the Hylebos Waterway is a heavily populated urban area with commercial, residential, and industrial activities.

The SeaPort Sound Terminal is used to transfer petroleum, petroleum products, renewables, and biofuels. It operates as a berthing area for standard barges, articulated tug barges, tugboats, and vessels. The marine terminal is capable of handling vessels 700 feet in length with a maximum beam of 106 feet, and with a berth depth of 30 feet MLLW. The maximum displaced tonnage at the dock is 35,000 tons. SeaPort Sound does not own or operate the marine vessels. SeaPort Sound operates at approximately 68 vessel calls per month as confirmed in the City of Tacoma's 2019 shoreline permit issued for the site (City of Tacoma 2019b). Table 2-1 shows vessel trip data from the last 5 years.

Third-party vessels that access the Project vicinity are required to adhere to a variety of Washington State regulations that comprehensively regulate shipping lanes, vessel speeds, and setback zones for safe operation and the protection of killer whales (Sussman and Huff 2019). These regulations are intended to reduce noise levels that are harmful to killer whales and to maintain safe distances between vessels and wildlife.

3.9.2 Potential Impacts from the No Action Alternative

Under the No Action Alternative, the Project site would continue to be used for bulk liquids storage and transport. SeaPort Sound would continue to operate the existing facility in compliance with current local, state, and federal regulations. During operations and storage of materials, the Project site would continue to operate within the facility permits for throughput volume and emissions.

During operation, increases in rail, truck, or vessel traffic may occur within the terminal's permitted throughput limits in response to increases in market demand for either the No Action or Proposed Action alternative. Changes in market conditions and demand for a specific fuel type are likely to be the primary drivers of increased transportation to and from the site. Although a different mix of fuels is possible in the future, the fuel mix under the Static scenario may encourage some customers to source a particular fuel type, low-carbon versus conventional, from a different location and vendor. Any potential change in transportation due to an increase in renewable and biofuels at the site under the Central and State Goal scenarios would likely be nominal because the different fuel mix would not equate to an increase in demand. Overall, the No Action Alternative would have no adverse impacts on transportation at the site under any of the three scenarios because the terminal will continue to operate within permitted throughput limits.

3.9.3 Construction Impacts and Mitigation Measures from the Proposed Action

The Proposed Action would likely create a limited increase in traffic to the Project vicinity due to construction. This includes additional truck traffic required for delivering construction materials or large machinery to and from the Project vicinity. A contractor has not been selected for the Project, so the specific construction equipment and number of construction vehicle trips needed to construct the Project are not available. However, an estimated inventory of construction equipment includes excavators, front-end loaders, forklifts, and heavy trucks. Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable. The construction activity will not create the need to impede public access to perimeter transportation infrastructure, including sidewalks and vehicular travel lanes on Marine View Drive and East 11th Street, bus stops, bike lanes, and crosswalks. Construction, staging, and materials can all be accommodated on site. The contractor would be required to implement BMPs and mitigation measures as described in this EIS, including those BMPs described in the transportation assessment in Appendix G, to avoid or minimize potential transportation impacts from construction.

The Project vicinity is located in an industrial zone with existing truck traffic and infrastructure, including Marine View Drive, an industrial transportation corridor that is likely to accommodate the short-term increase of traffic associated with construction. Therefore, no adverse impacts on transportation are anticipated from construction of the Proposed Action.

3.9.3.1 Construction Mitigation Measures and Best Management Practices

Potential impacts on transportation from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-21:** Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable.
- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

3.9.4 *Long-Term Impacts and Mitigation Measures from the Proposed Action*

Although the Proposed Action would increase storage capacity, SeaPort Sound is not seeking permit modifications to change the currently permitted use at the Project site or increase its permitted throughput volume limits. The proposed increase in storage capacity would allow SeaPort Sound to store a greater variety of products, such as renewable and biofuels, to serve its customers more efficiently by maintaining the ability to respond to fluctuations in market demand. This includes local customers such as the Northwest Seaport Alliance, local fishing fleets, the cruise ship industry, and regional truck stops.

Section 2.2 describes SeaPort Sound’s facility permit limits on product volumes and emissions. The number of vessels, trucks, and railcars that access SeaPort Sound facilities varies per month based on customer needs. Table 2-1 provides the number of vessel calls, railcars unloaded, and trucks loaded per year over a 5-year period from 2016 to 2020. The monthly average over this 5-year period for each of the three modes of transportation can be summarized as 42 vessel calls, 487 railcars unloaded, and 5,303 trucks loaded.

The transportation assessment (Appendix G) concluded that vessel calls could increase by up to three vessels on average per month (6% increase), up to 78 railcars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. As demonstrated in the transportation assessment, a minor increase from existing transportation trends could occur as a result of the increase in storage capacity; however, that is dependent on market conditions, which are subject to fluctuations from year to year.

As stated in Section 3.9.2, a different mix of bulk liquids within the constraints of the new tanks (i.e., low-vapor-pressure fuels) is possible in the future. However, changes in market conditions and demand for a specific fuel type are likely to be the primary drivers of increased transportation; an increase in storage alone is not expected to increase transportation. Any potential increase in transportation due to an increase in renewable and biofuels, which would occur under the Central and State Goal scenarios, would likely be nominal. An increase in demand for renewable and biofuels would represent a greater percentage of the overall permitted throughput volume, and conversely, a decrease in the overall percentage of conventional fuel throughput volume, not necessarily an increase in the overall throughput volume as a whole.

The *SeaPort Sound Terminal LLC Facility Contingency Plan* (SeaPort Sound 2020) adopts and uses applicable documentation from the National Incident Management System-Incident Command System, the Central Puget Sound Geographic Response Plan, and the NWACP. Safe handling of materials and spill response procedures would continue to be followed during operation according to SeaPort Sound’s policies. Operators are trained in proper material handling and emergency response procedures, including implementation of an SPCC Plan. This would include implementation of facility-wide spill prevention, preparedness, and response plans, including the use of outside spill response resources, in cooperation with emergency first responders. Ecology reviewed the Project and spill prevention plans and confirmed that the proposed tank upgrades would not change the facility’s worst-case spill volume (Ecology 2020c). The *SeaPort Sound Terminal LLC Facility Contingency Plan* would be updated upon completion of the Proposed Action to reflect the new tanks and storage capacity, consistent with WAC 173-182. The Proposed Action would not affect SeaPort Sound’s response capabilities or tactics because the completed Proposed Action would remain within the facility’s emergency planning under a potential worst-case scenario.

Overall, it is anticipated that there would be no adverse impact on transportation as a result of the Proposed Action. Any changes in transportation to and from the site would be largely driven by changes in market demand. Although the storage capacity would increase by 11% under the Proposed Action, with the potential for a minor increase in marine, rail, and truck transport as described in Appendix G, SeaPort Sound would continue to operate within its permitted throughput limits in response to changes in market demand. Continued implementation of response plans and compliance with local, state, and federal regulations for transport of bulk liquids will continue under all three market fuel mix scenarios.

3.9.4.1 Secondary Impacts

Overall, the proposed Project is expected to create only a small increase in rail, truck, and vessel traffic within the Tideflats area (Appendix G). An increase in demand for renewable and biofuels would represent a greater percentage of the overall permitted throughput volume and a decrease in the overall percentage of conventional fuel throughput volume, not necessarily an increase in the overall throughput volume as a whole. As stated previously, an increase in storage alone is not expected to increase transportation; changes in market conditions and demand for a specific fuel type are likely to be the primary drivers of increased transportation.

Other transportation-related secondary impacts could include impacts on water (see Section 3.3.4.5), plants and wildlife (see Section 3.4.4.2), air (see Section 3.2.5.1), or environmental health and safety (see Section 3.7.4.1). It is expected that there would be no adverse secondary impacts from the Proposed Action under any of the three market fuel mix scenarios as conditions would be similar to the No Action Alternative. Compared to the No Action Alternative, the Proposed Action may reduce some transportation impacts if the Project is providing more efficient pathways between manufacturers and consumers, depending on future changes in transportation methods.

3.9.4.2 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on transportation would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.

- **MM-33:** SeaPort Sound’s vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.
- **MM-35:** SeaPort Sound will install tanks within the proposed expansion area with fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require a separate SEPA review and an NOC issued through PSCAA to complete. The NOC applicability for the Proposed Action will be completed after the EIS is complete as part of project permitting.
- **MM-38:** To support and promote methods for reducing marine vessel risks to SRKWs, SeaPort Sound will include language in its *Terminal Information Manual*, which is distributed to marine operators calling at the terminal. The language will encourage vessel operators to hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional Whale Report Alert System and emerging resources, such as the upcoming Cetacean Desk of the Vessel Traffic Service in USCG’s Puget Sound sector, to slow down near SRKWs in near real time. It will also encourage vessel operators to minimize the distances that secondary and service vessels (e.g., escorts and fueling) travel and/or to choose routes and timing that reduce overlap with SRKW foraging areas.

3.10 Public Services and Utilities

This section describes the existing public services and utilities in the area of the Project site and assesses potential impacts that could result from the No Action Alternative or construction and operation of the Proposed Action. The following public services and utilities are evaluated: fire protection, law enforcement, emergency medical services (EMS), public transit, electricity, natural gas, sewer services, and solid waste services. Water supply is discussed in Section 3.3. Mitigation measures to avoid potential impacts are presented where appropriate. Laws and regulations that are applicable to the Project and that were referenced to determine potential impacts on public services and utilities are summarized in Appendix E.

3.10.1 Affected Environment

The study area for public services and utilities encompasses the areas that could be directly or indirectly affected by the No Action Alternative or construction or operation of the Proposed Action. This includes the Project site for direct impacts. For indirect impacts, the analysis addresses the service areas for City and Pierce County emergency services and utilities (fire protection, law enforcement, EMS, public transit, electricity, sewer, and solid waste; Figure 3-10). Natural gas is provided to the site by a regional utility and is addressed at a regional level.

3.10.1.1 Fire Protection

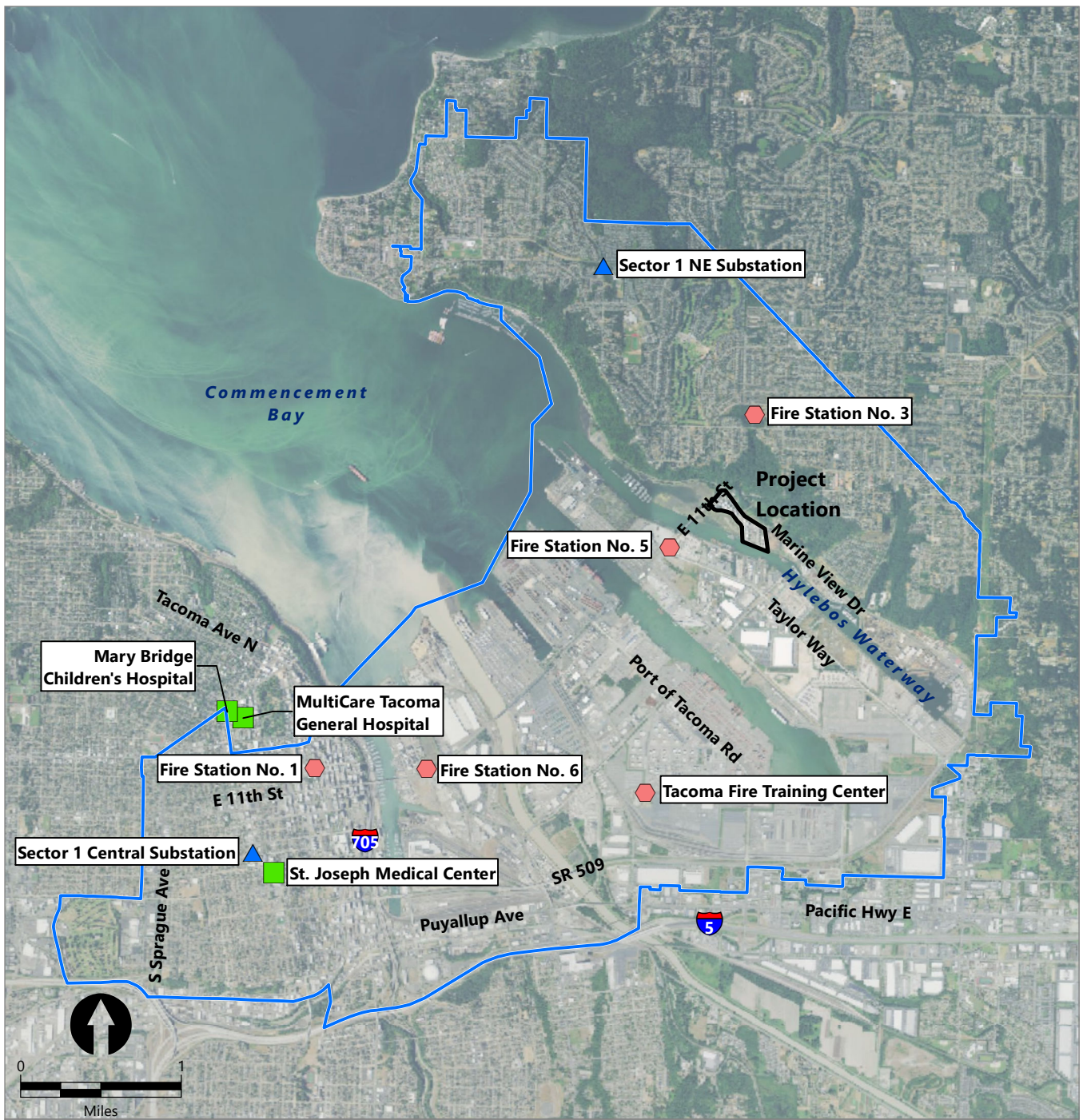
TFD covers 72 square miles including Tacoma, Fircrest, and Fife. As of January 2021, TFD's resources included approximately 430 commissioned personnel at 16 fire stations (Figure 3-10; City of Tacoma 2021h). The Project site is located between Station 3 in northeast Tacoma (2.7 miles from the Project site) and Station 5 in the Tideflats area (0.8 mile from the Project site). Other stations located on the Tideflats area include the Tacoma Fire Training Center (4.9 miles from the Project site) and Station 6 (7.2 miles from the Project site). Station 1 is located west of the Tideflats area (7.1 miles from the Project site) (City of Tacoma 2021i).

In 2020, the total response time (including 911 dispatch, response crew turnout, and travel time) met TFD's goals for 62% of fire calls, 48% of EMS calls, and 67% of specialty calls. (These times were affected by modified protocols for dispatching and responding to EMS incidents due to COVID-19.) TFD predicts that the demand for services will continue to grow with population growth and that response times will remain constant but will not meet overall performance goals with the current level of resources (TFD 2020).

The TFD Marine Division has three fire boats that serve 32 miles of saltwater shoreline on the Tacoma Narrows, Commencement Bay, Tideflats area, and Port of Tacoma. In 2020 they responded to 155 incidents (City of Tacoma 2021j; TFD 2020).

All City firefighters are trained to the Hazmat Operations Level, with more than 20 firefighters certified to the Technician Level. The TFD Technical Rescue Team includes 24 Technician Level personnel supported by 50 personnel trained to the Technical Rescue Operations Level. In 2020 the full Hazmat Team responded to 25 incidents, and the full Technical Rescue Team responded to 18 incidents (City of Tacoma 2021j; TFD 2020).

The City is party to an interlocal agreement with Pierce County and other local emergency service providers to provide mutual aid across jurisdictional boundaries in the event of a major fire, disaster, or other emergency. This includes providing supplemental fire suppression and EMS equipment and personnel (City of Tacoma 2015b).



LEGEND:

- Project Location
- Tacoma Police Sector 1
- ◆ Fire Station
- ▲ Police Station
- Hospital

NOTES:

1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).
3. Zoning designations acquired from City of Tacoma.

Publish Date: 2023/10/09, 4:49 PM | User: twelody
 Filepath: \\corcas\GIS\Jobs\SeaPort_Sound_Terminal_1960\SeaPort_Sound_Plant_Modernization\Maps\Public Services and Utilities.mxd



Figure 3-10
Public Services and Utilities Study Area
 Final Environmental Impact Statement - October 2023
 SeaPort Sound Plant Modernization Project

3.10.1.2 Law Enforcement

The City of Tacoma Police Department, Pierce County Sheriff, Washington State Patrol (WSP) District 1, USCG, and U.S. Customs and Border Protection provide law enforcement services within the Project vicinity. Port of Tacoma Port Patrol officers provide law enforcement at port-owned facilities in the Tideflats area.

Tacoma Police Department. The Project site is located in the Tacoma Police Department Sector 1 policing area, which serves the Tideflats area. The sector covers Upper Tacoma/Hilltop, Downtown Tacoma, the Port of Tacoma/Tideflats area, and Northeast Tacoma/Browns Point (Figure 3-10). Police substations located within Sector 1 include the Central Substation and the Northeast Substation (City of Tacoma 2021h, 2021j).

The Tacoma Police Marine Services and Dive Unit has a harbor patrol vessel that assists in port security, boating safety, and safeguarding of life and property throughout 46 miles of Tacoma shoreline, including Commencement Bay, Thea Foss waterway, Wapato Lake, and portions of the Puyallup River and Hylebos Creek. The unit also patrols the Washington State Vashon ferry lane near Point Defiance. They work with USCG, U.S. Customs, WDFW, and Seattle and Tacoma Port Authorities to secure port waterways and shipping lanes within Commencement Bay. (Tacoma Police Department 2021).

Pierce County Sheriff. The Pierce County Sheriff's Department provides law enforcement, court, security, and civil processing services to unincorporated Pierce County and the contract cities of Edgewood and University Place. The Pierce County Sheriff also operates the county jail facilities located in Tacoma. The department employs 300 commissioned officers who serve unincorporated areas (Pierce County 2021a).

The Pierce County Metro Dive Team includes nine members of the Pierce County Sheriff's Department, two members of the Tacoma Police Department, and one member of the Lakewood Police Department. They respond to 60 to 70 calls annually, including rescues, recoveries, and evidence searches (Pierce County 2021b).

Washington State Patrol. WSP serves state highways and responds to emergencies in Pierce and Thurston counties. The WSP District 1 Headquarters is located in Tacoma. District 1 has a staff of approximately 200 employees assigned to law enforcement, traffic investigations, auto theft, vehicle inspections, communications, administrative support services, forensic laboratory services, deputy fire marshals, and electronic services (WSP 2019).

U.S. Coast Guard and U.S. Customs and Border Protection. The USCG Sector Puget Sound covers 10 ports and 12 counties with commercial marine interests. This includes the three major shipping ports of Seattle, Everett, and Tacoma. Sector Puget Sound's Vessel Traffic Center (VTC), the largest in

the nation, is located in Seattle; it monitors 3,500 square miles of waterways from the Strait of Juan de Fuca to Puget Sound as far south as Olympia. They coordinate operations with other federal, state, and local government agencies, including WSP and local law enforcement and fire departments. The Puget Sound VTC also communicates with two Canadian VTCs in Prince Rupert and Victoria, B.C., to advise each other of vessels passing between their zones (USCG 2021a, 2021b).

The SeaPort Sound facility implements a Facility Security Plan in compliance with federal regulations. Foreign vessels docking at the Project site are subject to inspection by U.S. Customs and Border Protection. USCG and other federal marine safety programs are described in Section 3.7.

3.10.1.3 Emergency Medical Services

Several hospitals and medical centers in Pierce County provide routine services and EMS to the area. The closest Level I trauma center is Harborview Medical Center in Seattle. Level II trauma centers near the Project site include Mary Bridge Children’s Hospital and the Tacoma Trauma Center. The Tacoma Trauma Center is a partnership between MultiCare Tacoma General Hospital, St. Joseph Medical Center, and Madigan Army Medical Center at Joint Base Lewis-McChord (DOH 2021b; MultiCare 2021). Level II trauma centers within Tacoma are shown in Figure 3-10.

TFD provides EMS and paramedic services throughout the Project vicinity, as discussed in Section 3.10.1.1. Public and private ambulance services must comply with Ambulance and Aid Service Rules and Regulations provided by the Tacoma-Pierce County Board of Health and the Pierce County EMS department.

3.10.1.4 Public Transit

The Project vicinity is not currently served by regular public transit routes. The nearest Pierce County Transit route (63 NE Tacoma Express) bus stop is approximately 3 miles away by foot and is located at 29th Street Northeast and 59th Avenue Northeast in Tacoma (Pierce Transit 2021a).

The Pierce Transit Tideflats Runner (Tideflats Runner) is an on-demand public transportation service that uses smaller vehicles to connect employees working in the Tideflats area to and from transit centers and bus stops located outside of the Tideflats area (e.g., Commerce Street Station, Tacoma Dome Station, and bus stops along Pacific Highway) (Pierce Transit 2021b).

3.10.1.5 Electricity

Electricity is supplied to the Project site and surrounding areas by Tacoma Power, as described in Section 3.5.1.

3.10.1.6 Natural Gas

Natural gas is supplied to the Project site and the region by PSE as described in Section 3.5.1.

3.10.1.7 Sewer Services

Sanitary sewer services in the Project vicinity are provided by the City, which operates 50 sewage pump stations and two wastewater treatment plants. Sanitary sewage in the Tideflats area, including the Project site, is treated at the City's Central Treatment Plant, located along the Puyallup River, before it is discharged to Commencement Bay. The Central Treatment Plant serves Tacoma and 20,000 customers in Fife, Fircrest, and unincorporated Pierce County (City of Tacoma 2021k). Treatment of industrial wastewater at the Project site prior to discharge to the sanitary sewer is described in Section 3.3.

3.10.1.8 Solid Waste Services

The City's solid waste utility provides curbside services to more than 58,500 residential and commercial customers in Tacoma. Garbage is transported to the Tacoma Transfer Station. The Tacoma Transfer Station does not recycle construction or demolition waste; there are several private companies in the Tacoma area that provide this service (City of Tacoma 2021l, 2021m). Disposal of solid hazardous waste is discussed in Section 3.7.

3.10.2 Potential Impacts from the No Action Alternative

3.10.2.1 Fire Protection, Law Enforcement, and Emergency Medical Services

Under the No Action Alternative, activities on the Project site would remain similar to existing conditions, with potential increases in throughput occurring only within permitted throughput limits, and would not increase the need for emergency fire, law enforcement, or medical response services. This would be the case for all three of the market fuel mix scenarios. The facility's emergency response plans, described in Section 3.7, are in place to quickly respond to on-site fires, spills, or other emergencies if they occur. However, TFD emergency response times may continue to operate above the current TFD goals under both the No Action and Proposed Action alternatives, as discussed in Section 3.10.1.

3.10.2.2 Public Transit

The number of employees commuting to and from the Project site would not immediately change under the No Action Alternative; therefore, this alternative would not result in increased demand for public transit (e.g., Tideflats Runner) in the area. This would be the case for all three of the market fuel mix scenarios.

3.10.2.3 Electricity and Natural Gas

Under the No Action Alternative, impacts on electricity use related to demolition and construction at the Project site would not occur. SeaPort Sound would continue to operate its existing facility as described in Chapter 2. On-site electricity and natural gas use would continue to be similar to that discussed in Sections 3.10.1.5 and 3.10.1.6, but slightly higher than the Proposed Action, and would

not affect the regional availability of these resources for other users. This would be the case for all three of the market fuel mix scenarios.

3.10.2.4 Sewer Services

The amount and type of sanitary sewage discharged to the City's sewer system would not substantially change with the No Action Alternative. SeaPort Sound would continue to route liquid industrial waste from its operations through the on-site wastewater treatment system prior to discharge to the municipal sewer, in accordance with City permit requirements as discussed in Section 3.3. Therefore, no impacts on the City sewer system or City's Central Treatment Plant are anticipated. This would be the case for all three of the market fuel mix scenarios.

3.10.2.5 Solid Waste

Under the No Action Alternative, work at the Project site to remove the decommissioned refinery equipment, install the new storage tanks, and construct the new stormwater line would not occur. Disposal of construction debris would not be required. SeaPort Sound would continue to use City services for disposal of nonhazardous solid waste generated during daily operations, and the amount and type of these waste materials would not substantially change. Any hazardous wastes generated during operations at the on-site laboratory would be properly disposed of as discussed in Section 3.7. This would be the case for all three of the market fuel mix scenarios.

3.10.3 Construction Impacts and Mitigation Measures from the Proposed Action

3.10.3.1 Fire Protection, Law Enforcement, and Emergency Medical Services

The increased activity on the Project site during demolition and construction could temporarily result in a minor increase in the risk of a fire, hazardous material incident, or worker injury during the construction period described in Chapter 2. Construction contractors would receive an orientation including emergency response protocols before beginning work on the site.

Unused refinery equipment at the Project site would be thoroughly cleaned and then disposed of off site, removing it as a potential source of flammable materials. Construction materials would include aggregates and steel tanks, which are not flammable. Products that would be stored in the new storage tanks would not be present during construction; however, the contractor would be responsible for the preparation of a spill plan to be used for the duration of construction to safeguard against unintentional spills of fuel, lubricants, or hydraulic fluid from construction equipment.

Emergency services are available from the City, Pierce County, WSP, and USCG as described in Sections 3.10.1.1 through 3.10.1.3. Level II trauma centers are available in Tacoma, and patients could

be transported to the Level I trauma center in Seattle if needed. During construction, additional security measures could be needed to address theft, vandalism, or trespassing into work areas. Additional security patrols would be provided, and all work areas would be fenced to prevent public access during construction. The Project site would continue to comply with its Facility Security Plan requirements.

Construction traffic is expected to arrive at the Project site via major roadways as discussed in Section 3.9. The most direct route for emergency vehicles to travel from the nearest fire stations to the Project site would be on State Route (SR) 705, SR 509, Marine View Drive, East 11th Street, and Norpoint Way Northeast. As discussed in Section 3.9, temporary increases in traffic due to construction would not significantly impact the existing ability of emergency service providers to access the Project site. However, as discussed earlier, TFD response times are currently above standards. The need for a large emergency response at the Project site during construction, or a response requiring specialized teams such as hazardous materials or technical rescue, while unlikely, could require resources from other fire stations that would then be unavailable to respond to incidents in other parts of the City.

Overall, construction of the Proposed Action could temporarily increase calls for emergency response and could require law enforcement, emergency medical, and fire protection services during the 26-month construction period. SeaPort Sound's emergency response plans would be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound would provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction. Therefore, it is anticipated that there would be no adverse impact on fire protection, law enforcement, or EMS during construction of the Proposed Action.

3.10.3.2 Public Transit

Construction and demolition would require 25 to 50 construction workers over a period of 26 months. It is likely that construction workers would either drive to the Project site or use the Tideflats Runner on-demand public transit service. No impacts on public transit would occur.

3.10.3.3 Electricity and Natural Gas

Construction would require additional use of electricity for the 26-week construction period. Most construction equipment would be powered by gasoline or diesel. The anticipated peak electrical load during construction would be small relative to Tacoma Power's system capacity. Natural gas would not be required for Project construction. All electrical and natural gas connections to the decommissioned refinery equipment would be properly disconnected and secured.

3.10.3.4 Sewer and Solid Waste

Construction and demolition at the Project site could result in a minor increase in the volume of sanitary sewage due to the presence of on-site construction workers unless portable toilets are used. However, this increase would be small relative to the City's wastewater system capacity. Water that is used to clean decommissioned refinery equipment prior to removal from the site would be treated and/or disposed of properly. No impacts on the City's wastewater treatment system are anticipated.

Construction would generate typical solid wastes such as scrap metal, concrete, asphalt, cabling, wires, piping, wood pallets, and packing materials. The Tacoma Transfer Station can accept construction debris but does not have recycling capability for these materials. The construction contractor would be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.

Demolition of existing structures could disturb asbestos-containing materials where present. Asbestos and other hazardous wastes used or encountered during construction would be properly disposed of in accordance with the regulations discussed in Section 3.7. The construction contractor would be required to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils encountered during excavation.

3.10.3.5 Construction Mitigation Measures and Best Management Practices

Potential impacts on public services and utilities from construction of the Proposed Action would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-11:** Construction contractors will receive an orientation, including emergency response protocols, before beginning work on site.
- **MM-12:** SeaPort Sound's emergency response plans will be in place to provide an immediate on-site response to an incident if one occurs. SeaPort Sound will provide emergency response providers with regularly updated maps of the Project site, access points, contact information, and response procedures during construction.
- **MM-13:** Additional security patrols will be provided, and all work areas will be fenced to prevent public access during construction. The Project site will continue to comply with its Facility Security Plan requirements.
- **MM-16:** All electrical and natural gas connections to the decommissioned refinery equipment will be properly disconnected and secured.

- **MM-24:** The construction contractor will be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.
- **MM-39:** Prior to construction, the contractor will prepare a construction management plan to avoid or minimize potential traffic impacts. The construction management plan may include the following details:
 - Location of construction staging areas for materials, equipment, and vehicles
 - Notification procedures for adjacent property owners and public safety personnel
 - Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant
 - Provisions for removal of trash generated by project construction activity
 - A process for responding to, and tracking, complaints or inquiries pertaining to construction activity, including identification of an on-site communications manager

3.10.4 Long-Term Impacts and Mitigation Measures from the Proposed Action

3.10.4.1 Fire Protection and Emergency Medical Services

The Proposed Action would include the installation of new bulk liquid storage tanks. The volume of product that could be stored on the site would increase slightly (up to 11%), but this is unlikely to result in a significant increase in fire response calls because of the fire suppression, spill prevention and control, and response measures in place at the Project site that meet current codes for fire systems. None of the products stored on site are rated as explosive, as described in Section 3.7. In addition, the Proposed Action includes a new fire water loop system that will expand fire response capabilities site wide. At a minimum, SeaPort Sound conducts two field deployment drills, a tabletop exercise, and four security drills each year. Emergency shutdown is typically a topic covered during one of the drills. Training is also provided to operators and maintainers on the use of emergency shutoff devices.

The Proposed Action would not introduce any new products other than those that are already stored on site; therefore, no new types of flammable materials would be stored on site. As discussed in Section 3.7, NFPA assigns flammability ratings to materials ranging from 0 to 4. A rating of 0 means the substance will not burn, while a rating of 4 means the flash point is below 73°F (highly flammable). The products currently stored on the Project site have NFPA flammability ratings of 1 to 4. While the three market fuel mix scenarios described in Chapter 2 may result in a different mix

of products being stored on site at any given time, the flammability ratings of the stored materials would remain within the current range.

With the existing fire protection services available from multiple agencies in the immediate area, and the spill prevention and response plans in place at the facility, the need for emergency fire response at the site during operation of the Proposed Action is likely to remain generally the same as under existing conditions. However, as discussed earlier, TFD response times are currently above standards. The need for a large emergency response at the Project site, or a response requiring specialized teams such as hazardous materials or technical rescue, while unlikely, could require resources from other fire stations that would then be unavailable to respond to incidents in other parts of the City. SeaPort Sound would update its emergency response plans and provide this information to TFD and other agencies to ensure they have the latest information about the new facilities. Impacts on fire protection response services would be negligible due to on-site response capabilities.

3.10.4.2 Law Enforcement

Calls for law enforcement response to the Project site under the Proposed Action would remain essentially the same as under existing conditions. SeaPort Sound would update its security practices and response plans as needed to incorporate the new tanks and other equipment and to remain compliant with its Facility Security Plan.

3.10.4.3 Public Transit

The Proposed Action would not affect the demand for public transit in the vicinity. The number of workers needed to operate the facility would remain the same as existing conditions. These workers would continue to have the option to drive, carpool, or use on-demand service (Tideflats Runner) for their commute.

3.10.4.4 Electricity and Natural Gas

Changes in electricity and natural gas use at the Project site during operation of the Proposed Action are not anticipated to result in any adverse impacts as discussed in Section 3.5.4.

3.10.4.5 Sewer and Solid Waste

The need for sewer and solid waste services at the Project site would not substantially change during operation of the Proposed Action. SeaPort Sound would update its industrial waste permit to incorporate changes to the on-site pretreatment system for contaminated water (see Section 3.3). Replacing the steam boiler would eliminate blowdown water, thus reducing the volume of water routed to the on-site treatment system and sanitary sewer. The Project site would continue to use the City's garbage disposal services for nonhazardous materials and would continue to properly dispose of hazardous wastes off site. No adverse impacts are anticipated from the Proposed Action.

3.10.4.6 Secondary Impacts

The Proposed Action would result in an 11% increase in product storage at the Project site. Regional population growth is likely to continue, potentially leading to an increase in market demand for SeaPort Sound bulk liquid products and the need to transport them. Public services and utilities could be affected by the number of truck, rail, and marine vessel trips carrying product from the Project site under any of the three market fuel mix scenarios, which could change compared to current conditions but would remain within SeaPort Sound's permitted throughput limits described in Chapter 2. The Proposed Action is anticipated to result in a minor increase in transport trips, as described in Section 3.9.

An increase in demand could increase trips needed to transport fuel products under any of the three market fuel mix scenarios. If an increase in trips needed occurs due to market demand, it could indirectly result in increased potential for incidents requiring emergency response (fire, police, and medical). However, the number of fuel transport trips from the Project site would remain within SeaPort Sound's permitted limits described in Chapter 2. In addition, transport-related incidents could occur anywhere the fuel products are transported along the supply chain. Incidents related specifically to transporting products from the Project site would be unlikely and if they do occur, would represent only a small percentage of incidents that occur throughout the region each year. With the regulations and emergency response plans in place at local, state, and federal levels, and the mitigation measures proposed earlier, secondary impacts on emergency response services due to transporting fuel products off site under the Proposed Action would be negligible.

3.10.4.7 Long-Term and Secondary Mitigation Measures and Best Management Practices

Potential impacts on public services and utilities would be avoided, minimized, or mitigated by implementing the following measures:

- **MM-1:** All applicable permits for the Project will be obtained prior to construction. Construction and operation will be performed according to the requirements and conditions of these permits, including compliance with permitted facility throughput and emissions limits that apply to operations.
- **MM-2:** The new tanks and infrastructure will be designed to modern building codes and standards for safety and seismic stability, consistent with City development and seismic code requirements and state AST secondary containment and fire protection requirements per WAC 173-180-320 and 173-180-330.
- **MM-3:** The tanks will be installed with a bentonite liner and sand layer inside the circular footing of each tank to seal any exposed soil from potential incidental spills.

- **MM-4:** A 4-foot-tall concrete containment berm will be installed around the tanks, meeting state and federal secondary containment requirements (per 40 CFR 112 and WAC 173-180-320).
- **MM-5:** Components for the replacement wastewater treatment system will be elevated to protect against potential geological hazards in the area and the potential for future sea level rise.
- **MM-28:** All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's ISIP, IWDP, SPCC Plan, *SeaPort Sound Terminal LLC Facility Contingency Plan*, Facility Security Plan, Emergency Response Plans, and others as needed.
- **MM-29:** Trained personnel will operate the facility and will continue to inspect all facilities daily for potential leaks or signs of material corrosion or degradation.
- **MM-30:** Operators will be trained in proper material handling and emergency response procedures.
- **MM-31:** All facility personnel will continue to participate in SPCC Plan training as well as other safety training.
- **MM-32:** Emergency shutdown system training and drills will be updated to cover the Project vicinity infrastructure upgrades after construction and will continue to occur on a routine basis. The emergency shutdown system is designed to turn off pumps in the event of an unforeseen emergency. The emergency shutdown system is employed under a coordinated command and control facility that has established protocols in place to prevent product release. At a minimum, SeaPort Sound currently conducts two field deployment drills, a tabletop exercise, and four security drills annually. Emergency shutdown protocols are typically covered during at least one of these drills. Training is provided to operators and maintenance staff on the use of emergency shutdown systems.
- **MM-33:** SeaPort Sound's vendors are required to adhere to local, state, and federal regulations and emergency response plans to reduce potential impacts on emergency response services during off-site fuel transport activities.

4 Cumulative Effects

This chapter describes how the effects of the Proposed Action may contribute to the environmental effects of other past, present, and reasonably foreseeable future actions. Cumulative effects are those that could result in the combination of effects from individual Project actions occurring over time. If left unmitigated, the cumulative or incremental effects of these actions have the potential to result in significant environmental impacts. This analysis is also helpful for decision-makers evaluating the sustainability of a Proposed Action and how it may interact with other projects that are reasonably foreseeable but have not yet been built.

4.1 Methodology

To address the potential for cumulative effects, the direct and indirect impacts of the EIS alternatives, as described in Chapter 3, were further evaluated in the context of other past, present, or reasonably foreseeable future projects. The study area used to address direct and indirect effects for each element of the environment in Chapter 3 was also used in the cumulative effects analysis because it represents the area where the Proposed Action, in combination with other past, present, or reasonably foreseeable future development, could potentially result in cumulative impacts.

Past, present, and reasonably foreseeable future projects were identified using a variety of resources, including reviewing previous on-site projects and mitigation measures, researching proposed infrastructure projects in the area, and performing web searches through resources such as the City's permit mapper. The following includes an analysis of the cumulative effects of these projects and actions together with the direct and indirect impacts of the Proposed Action.

4.2 Past, Present, and Reasonably Foreseeable Future Projects

As described in Section 3.8, the Proposed Action is located within the City's industrial Tideflats Subarea and the Port of Tacoma Manufacturing and Industrial Center. The area experiences high demand for industrial land, but there is adequate capacity in most areas to accommodate future growth given proper management strategies (PSRC 2015). Present and reasonably foreseeable future projects that were identified as occurring within the area of the Proposed Action are included in Table 4-1. Present and reasonably foreseeable future projects are categorized in Table 4-1 as cleanup projects (where a remedial investigation/feasibility study [RI/FS] and cleanup action plan [CAP] are being prepared), dredging projects, transportation projects, and other development projects.

A summary of previous on-site projects and mitigation measures can be found in Section 2.2.2. All past projects at the site underwent local, state, and federal environmental review and permitting where applicable, and some also required mitigation or ongoing monitoring and adaptive management to offset unavoidable environmental impacts.

**Table 4-1
Present and Reasonably Foreseeable Future Projects**

Project	Location	Description	Timing
Cleanup Projects			
Alexander Avenue Former Tank Facilities	Along Alexander Avenue East, northwest of East 11th Street	Development of an RI/FS and CAP.	Underway
Arkema 2901 and 2920 Taylor Way	2901 Taylor Way, 2920 Taylor Way, and 3009 Taylor Way	Development of an RI/FS and CAP.	Underway
Former USG Rock Wool Plant	2031 Taylor Way	Development of an RI/FS and CAP.	Underway
Parcel 1B (Earley Business Center) Cleanup	401 Alexander Avenue	Development of an RI/FS and CAP.	Underway
Parcel 15 (Portac) Cleanup Investigation	4215 East Frontage Road	Development of an RI/FS and CAP.	Underway
Parcel 91 Cleanup Investigation and Cost Recovery	Parcel 91 (near southeast end of Sitcum Waterway)	Development of an RI/FS and CAP.	Underway
Parcel 103 Steam Plant Property Cleanup	West of East 11th Street and north of Taylor Way	Development of an RI/FS and CAP.	Underway
PQ Corporation	1201 Taylor Way	Development of an RI/FS and CAP.	Underway
Taylor Way and Alexander Avenue Fill Area	1500 block of Taylor Way	Development of an RI/FS and CAP.	Currently working through legal agreements
Dredging Projects			
Blair Waterway Berth Maintenance Dredge Project	Within Blair Waterway at Washington United Terminals and Husky Terminal	Complete dredging of underwater sediment to accommodate larger cargo ships.	Undergoing environmental review
Blair Waterway Deepening Project (Federal Channel)	Within Blair Waterway	Deepen the federal channel in the Blair Waterway to -57 feet MLLW to accommodate larger container ships.	Undergoing environmental review
Transportation Projects			
Puget Sound Gateway/SR 167 Project	Between SR 167, I-5, and SR 509	Construction of the remaining 4 miles of SR 167 between Meridian Ave and I-5 as well as construction of a 2-mile connection from I-5 to the Port of Tacoma.	In design phase
Tacoma Dome Link Extension	Between Federal Way and Tacoma	Construction of new light rail line, extending nearly 10 miles.	Construction scheduled for 2025 to 2030

Project	Location	Description	Timing
Marine View Drive Road Improvements	Marine View Drive	Transportation improvements to Marine View Drive.	In design phase
Other Development Projects			
PSE LNG Facility	Along Alexander Avenue East, northwest of East 11th Street on opposite side of Hylebos Waterway from Project site	Construction and operation of an LNG facility to fuel marine vessels and provide bunkering barges and tanker trucks.	Recently completed
T3, T4 (Husky) Shore Power	Terminals 3 and 4 along Blair Waterway	Construction of two shore power systems at Terminals 3 and 4.	Unknown
Tacoma Renewable Power Generating Station	1171 Taylor Way	Construction of new renewable power generating station.	Preliminary permitting process initiated; awaiting application
SeaPort Sound Taylor Way Project	Along Taylor Way, across Hylebos Waterway from the Project site	Installation of four new rail spurs with transfer equipment to reduce the number of railcar switches on to and off of the site from Taylor Way, along with enhancements to rail safety and site-wide fire suppression safety.	Recently completed
Thorne Road Property Development	1451 Thorne Road, 1721 Thorne Road, and 1702 Port of Tacoma Road	Redevelopment of property for use as empty container and chassis storage, single high reefer (refrigerated container) pretrip wash facility, and crude-by-rail discharge station.	Preliminary permitting process initiated; awaiting application
Wapato Creek Bridge and Culvert Removal	4215 SR 509 North Frontage Road	Replacement of a failing undersized culvert with a bridge to provide continued access to the Pierce County Terminal truck queuing area.	Under construction
Washington United Terminals Fender System Replacement	1815 Port of Tacoma Road along Blair Waterway	Repair and replace the fender system to accommodate modern large vessels.	Under construction
Washington United Terminals Utility Vault Upgrades	1815 Port of Tacoma Road along Blair Waterway	Repair and upgrade vaults that have been damaged because of uneven ground settling.	Under construction

4.3 Potential Cumulative Effects

4.3.1 Earth

Under the No Action Alternative, some short-term increases in risk of erosion could occur from other past, present, and reasonably foreseeable future projects, mainly from construction activities. This

contribution is not expected to result in a cumulatively significant impact because BMPs would be implemented during construction in accordance with required permits and approvals.

In addition, construction of the projects listed in Table 4-1 could cause increases in risk of exposure to geological hazards. Industrial facilities located along the Puget Sound shoreline will continue to be at risk from seismic events as a result of ground shaking, ground subsidence, soil liquefaction, a tsunami or seiche, or a combination of these hazards, as described in Section 3.1.

Construction of the Proposed Action and other ongoing construction projects in the area would result in a negligible increase in risk of exposure to geologic hazards because all facilities are designed to current seismic standards. Detailed geotechnical investigations, studies, and analyses will be conducted as part of future design to support the selection of the best suited techniques to minimize risks resulting from an earthquake and related hazards.

4.3.1.1 Mitigation Measures

Potential cumulative impacts on earth resources would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.1.

4.3.2 Air

Under the No Action Alternative, there could be short- and long-term increases in emissions as a result of construction and operation of the projects listed in Table 4-1. However, no construction would occur under the No Action Alternative and the aging refinery infrastructure and wastewater treatment system would remain in place. Under the No Action Alternative, the SeaPort Sound Terminal will continue to operate similar to existing conditions with fluctuations of on-site emissions within permitted throughput limits.

Construction of the Proposed Action may contribute to local short-term increases in emissions if multiple projects listed in Table 4-1 are undergoing construction simultaneously. However, the Proposed Action would occur within an active industrial facility, with impacts that are typical of the surrounding industrial setting, and BMPs would avoid or minimize potential impacts during construction of the Proposed Action.

The Proposed Action will result in a minor increase of on-site emissions to support operations. Minor cumulative adverse impacts on long-term air quality could also occur with the implementation of present and reasonably foreseeable future projects. However, under the Clean Air Act, EPA sets limits on certain air pollutants, including setting limits on how many pollutants can be in the air anywhere in the United States. Regionally, these limits are set and regulated on a project-by-project basis by PSCAA. The Proposed Action would adhere to PSCAA permit limits during both construction and operation, which are established considering many factors, including regional air quality. Any new or

modified permits or NOCs issued by PSCAA for other reasonably foreseeable future projects would consider regional air quality.

The Proposed Action, under the Central and State Goal scenarios, is anticipated to carry a greater quantity of renewable and biofuels through the site to the local and regional markets, which is consistent with Washington Clean Fuels Program goals toward reducing statewide GHG emissions through low-carbon alternatives. Mitigation measures consistent with the City's *2030 Climate Action Plan* goals (City of Tacoma 2021a) are also proposed to offset potential air quality impacts from construction and operation. Therefore, the Proposed Action could contribute to minor cumulative effects on air quality.

The Proposed Action would result in minor benefits to air quality under the Central and State Goal scenarios, each of which shows a decrease in emissions over time relative to the 2016 to 2020 baseline period (resulting from higher fractions of renewable and biofuels displacing fossil fuels). Air quality would also improve compared to the historical use of the Project site as a refining operation. Demolition of the refinery would remove the on-site potential for producing approximately 2 million barrels (84,000,000 gallons) of product per year and the potential for 89,000 tCO₂e per year of direct emissions from refinery operations. The future Tacoma Dome Link Extension Project could also contribute to beneficial cumulative impacts on air because the Project is expected to decrease vehicle miles traveled locally, which would reduce GHG emissions.

4.3.2.1 Mitigation Measures

Potential cumulative impacts on air would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.2.

4.3.3 Water

Under the No Action Alternative, demolition and construction would not occur at the site, including replacement of the damaged City stormwater line. The wastewater treatment system would not be upgraded under the No Action Alternative, possibly resulting in minor cumulative impacts on the sanitary sewer system where water is discharged from other operations in the Tideflats area. New development in the Tideflats area may include the installation of new pollution-generating impervious surfaces; however, the new surfaces would meet the current standards for flow control and water quality treatment for stormwater runoff, which could have a cumulative benefit to water quality.

The Proposed Action would result in a net decrease of 400 square feet of impervious surface on the Project site compared to existing conditions, and BMPs would be implemented during construction and operation to minimize risks to water quality, including installation of secondary containment measures to contain and direct any potential on-site spills to the wastewater treatment system.

Cleanup projects listed in Table 4-1 include sites with contaminated surface water and groundwater. Cleanup of these sites would also result in a cumulative benefit to water quality. For these reasons, the Proposed Action is not expected to contribute to cumulative adverse impacts on water quality.

Present and reasonably foreseeable future projects could result in a need for additional water. The Proposed Action would not require substantial amounts of additional water during construction and would reduce facility water use during operations through replacement of the existing steam boiler with a more efficient hot oil heater (reducing on-site water consumption by approximately 5 million gallons annually). Therefore, the Proposed Action is not expected to contribute to cumulative adverse effects on water supply.

The SeaPort Sound Terminal is located on the Hylebos Waterway, a waterbody connected to Commencement Bay that is maintained for use by commercial vessels. Development and uses at and adjacent to the Project site have occurred consistent with local permits and mitigation requirements, which also consider consistency with the City's Comprehensive Plan (City of Tacoma 2015a). The Comprehensive Plan identifies this as a key area for commercial and industrial development and uses and the multimodal movement of goods to the region. The Proposed Action would continue existing uses of the site and waterway. It is anticipated that SeaPort Sound and other users of the waterway would continue to conduct activities consistent with state and federal regulations that enforce the protection of water quality and aquatic species. The Proposed Action is anticipated to have no cumulative impacts on nearby surface waters from construction or operation.

In combination with the Proposed Action, the implementation of other reasonably foreseeable future actions—such as the PSE Liquefied Natural Gas (LNG) Facility—may increase the amounts of fuel products being transported through the Tideflats area and could lead to an increase in the potential for spills. A transportation assessment was completed (Appendix G) and found that vessel calls could increase by up to three vessels on average per month (6% increase), up to 78 railcars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. This would be consistent with projected uses accounted for in the permitted throughput limits established at the site. See Section 4.3.4 for discussion of regulations and programs in place to minimize and respond to spills and Section 4.3.9 for discussion of cumulative transportation impacts relative to the PSE LNG Facility. Overall, operation of the Proposed Action may lead to minor cumulative impacts on water; however, these impacts are not expected to be significant.

4.3.3.1 Mitigation Measures

Potential cumulative impacts on water would be avoided, minimized, or mitigated by implementing the mitigation measures described in Sections 3.3 and 3.4.

4.3.4 Plants and Wildlife

Past, present, and reasonably foreseeable future actions would occur within industrial areas that are generally paved or graveled and where little habitat exists to support significant plant or wildlife populations. Permits obtained for these actions will include local, state, and federal permits and approvals that require avoidance, minimization, or mitigation measures. Projects that occur in water, such as dredging and shoreline terminal improvements, could have impacts on plants and wildlife.

No construction would occur under the No Action Alternative, and no adverse impacts on plants and wildlife are anticipated. Because the Proposed Action is located within an industrial area with little habitat, and includes no in-water work, it would not contribute to cumulative adverse impacts on plants or wildlife.

The SeaPort Sound Terminal is located on the Hylebos Waterway, a waterbody connected to Commencement Bay that is maintained for use by commercial vessels. The Hylebos Waterway and Commencement Bay contain sensitive shoreline environments and protected aquatic species. Development and uses at and adjacent to the Project site have occurred consistent with local permits and mitigation requirements, which also consider consistency with the City's Comprehensive Plan (City of Tacoma 2015a). The Comprehensive Plan identifies this as a key area for commercial and industrial development and uses and the multimodal movement of goods to the region. The Proposed Action would continue existing uses of the site and waterway.

The implementation of other reasonably foreseeable future actions, such as the PSE LNG Facility, may increase the amounts of fuel products being transported through the Tideflats area and could lead to an increase in the potential for spills, as well as other impacts to marine mammals, including SRKWs. However, the transport and transfer of bulk liquid products are heavily regulated in Washington, as discussed in Section 3.7 and Appendix E. The state also has a robust program for responding to a spill should one occur. Additional regulatory and voluntary programs addressing spill risk reduction and response and protection of marine mammals, including SRKWs, are described in Sections 3.4.4 and 3.7 and Appendix E.

It is anticipated that SeaPort Sound and other users of the waterway would continue to conduct activities consistent with state and federal regulations that enforce the protection of water quality and aquatic species. Implementation of planned measures to continue to reduce potential vessel traffic impacts on SRKWs, including House Bill 1578 for reducing transportation impacts on SRKWs, will facilitate safer and less impactful transit between terminals and reduce cumulative impacts to SRKWs from transportation of bulk liquids. Overall, the Proposed Action could contribute to minor cumulative effects on plants and animals.

4.3.4.1 Mitigation Measures

Potential cumulative impacts on plants and wildlife would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.4.

4.3.5 Energy and Natural Resources

Under the No Action Alternative, present and reasonably foreseeable future projects could increase the demand for electricity, diesel, gasoline, and other nonrenewable natural resources. No construction would occur under the No Action Alternative, and the aging refinery infrastructure and wastewater treatment system would remain in place. Energy use at the Project site would continue to fluctuate based on operational needs. No adverse impacts are anticipated from the No Action Alternative.

As noted in Section 3.5, the demand for electricity, diesel, gasoline, and other nonrenewable natural resources needed during construction of the Proposed Action is anticipated to be met by existing local and regional supplies. During operation of the Proposed Action, electricity use at the Project site would be reduced compared to current conditions. Replacement of the on-site boiler, in particular, would result in a substantial energy savings at the facility (up to 30% energy savings). Additionally, no significant use of natural resources, such as sand, gravel, timber, and steel, would be needed during facility operation. When combined with past, present, and reasonably foreseeable future actions, the demand for these resources is still expected to be met by existing supplies. Therefore, no cumulative adverse impacts on energy and natural resources are expected from the Proposed Action.

4.3.5.1 Mitigation Measures

Potential cumulative impacts on energy and natural resources would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.5.

4.3.6 Archaeological, Historic, and Cultural Resources

Under the No Action Alternative, construction impacts on archaeological, historic, or cultural resources could occur from projects listed in Table 4-1, particularly if the present or reasonably foreseeable future actions include ground disturbance of greater than 10 feet below the surface. Past projects at the site have undergone environmental review and permitting and have been determined to have no impacts on archaeological, historic, and cultural resources. No construction or operation impacts on archaeological, historical, or cultural resources are expected from the Proposed Action; therefore, the Proposed Action is not expected to contribute to cumulative adverse impacts on archaeological, historical, or cultural resources.

4.3.6.1 Mitigation Measures

Potential cumulative impacts on archaeological, historical, and cultural resources would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.6.

4.3.7 Environmental Health and Safety

Under the No Action Alternative, short-term cumulative impacts on environmental health and safety could occur due to increases in dust and noise, particularly if multiple projects are undergoing construction simultaneously. The Proposed Action could also lead to short-term increases in noise and dust; however, the Proposed Action would occur within an active industrial facility, with impacts that are typical of an industrial setting, and BMPs would be implemented to avoid or minimize potential construction impacts.

Implementation of cleanup actions for the numerous RI/FSs and CAPs being developed near the Proposed Action could lead to beneficial cumulative impacts on environmental health and safety due to the removal of contaminants from soils, sediments, groundwater, and surface water.

The implementation of other reasonably foreseeable future actions, such as the PSE LNG Facility, may increase the amounts of fuel products being transported through the Tidelands area and could lead to an increase in the potential for spills. It is anticipated that SeaPort Sound and these other, similar facilities in the area would continue to operate in compliance with local, state, and federal regulatory guidelines for spill prevention and other environmental health and safety measures. The Proposed Action would not introduce any new products other than those that are already stored on site and would continue to operate under the permitted throughput limits. The Proposed Action would also include design and operational safety measures to avoid and minimize potential environmental impacts from operation and storage of materials. Overall, the Proposed Action could contribute to minor cumulative effects on environmental health and safety.

4.3.7.1 Mitigation Measures

Potential cumulative impacts on environmental health and safety would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.7 and the regulations and programs discussed in Section 4.3.4.

4.3.8 Land and Shoreline Use

Under the No Action Alternative, none of the reasonably foreseeable future projects or actions have been identified as having significant adverse impacts on land use due to extensive planning efforts that have happened and are currently underway to enforce compatible uses within the Tidelands area. Similar to the No Action Alternative, the Proposed Action is consistent with land use goals and policies and planned future development, including the City's Comprehensive Plan and SMP (City of

Tacoma 2015a, 2019b). Therefore, the Proposed Action is not expected to contribute to significant adverse impacts on land and shoreline use.

Although cumulative impacts are not anticipated from the Proposed Action, the Tideflats Subarea Plan, currently under development by the City, could help mitigate potential land use impacts from the numerous projects that are being planned in the Tideflats area. The Tideflats Subarea Plan is intended to create a shared long-term vision and more coordinated approach to development, environmental review, and strategic capital investments in the Tideflats area and would be consistent with the City's planning policies and goals.

4.3.8.1 Mitigation Measures

Potential cumulative impacts on land and shoreline use would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.8.

4.3.9 Transportation

Under the No Action Alternative, simultaneous construction of reasonably foreseeable future projects may cause cumulative impacts on road traffic and roadway surface damage due to a temporary increase in construction vehicles. The Proposed Action could have minor cumulative effects on transportation during construction. However, most of the reasonably foreseeable future projects occur on other areas of the Tideflats, such as the Blair-Hylebos Peninsula, so construction vehicles would likely use different roadways. In addition, improvements being made to Marine View Drive would provide improved roadway surfaces to accommodate existing and proposed traffic.

Changes in throughput at the SeaPort Sound Terminal may occur due to market conditions and customer demand under both the No Action Alternative and the Proposed Action, but throughput and associated transportation would not exceed permitted levels that were determined through past projects requiring review of current and projected uses in the area. Construction of the Taylor Way Project at the SeaPort Sound railyard will improve rail and vehicle transportation conditions in the Tideflats area by increasing rail capacity under both the No Action and Proposed Action alternatives. Other transportation projects would also reduce transportation impacts locally and relieve congestion. Projects such as the Blair Waterway Deepening Project could result in larger vessels accessing the Blair Waterway, which may result in reduced vessel trips to the Tacoma area (USACE and Port of Tacoma 2021).

A transportation assessment was completed (Appendix G) and found that vessel calls could increase by up to three vessels on average per month (6% increase), up to 78 railcars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. The addition of up to three vessels on average per month on the waterway from the Project is minor and would have negligible cumulative impacts relative to the PSE LNG Facility. The PSE LNG Facility is expected to

have 8 to 10 vessels per month accessing the Blair and Hylebos waterways (Ecology and Environment 2015), which is also a minor increase that would not result in significant cumulative impacts. The PSE LNG Facility includes significant vehicle and rail transportation mitigation measures to offset the anticipated impact on vehicle and rail transportation from a new terminal located in the Tideflats area.

Overall, operation of the Proposed Action may lead to minor cumulative impacts on roadway, rail, and vessel traffic; however, these impacts are not expected to be significant and would be consistent with projected uses accounted for in the permitted throughput limits.

4.3.9.1 Mitigation Measures

Potential cumulative impacts on transportation would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.9.

4.3.10 Public Services and Utilities

Under the No Action Alternative, minor cumulative effects to public services and utilities could occur due to an increased need for fire protection and EMS, as well as an increased need for utilities such as electricity, natural gas, sewer, and solid waste within the Tideflats area. The SeaPort Sound Terminal uses various modes of transportation to transport products to and from the site, including truck, rail, and vessel transport. Transportation of products to and from the site would not exceed permitted levels that were determined through past projects requiring review of current and projected uses in the area.

Combined with present and reasonably foreseeable future projects, the Proposed Action could similarly contribute to minor cumulative impacts on public services and utilities. The Proposed Action is unlikely to result in a significant increase in fire response calls because of the fire suppression, spill prevention and control, and response measures in place at the Project site. The Proposed Action includes energy and water use reduction measures (e.g., replacement of the existing steam boiler with a more efficient hot oil heater) and would not substantially change the existing need for electricity, natural gas, sewer, or solid waste utilities. For these reasons, the Proposed Action is not expected to contribute to significant adverse impacts on public services and utilities.

4.3.10.1 Mitigation Measures

Potential cumulative impacts on public services and utilities would be avoided, minimized, or mitigated by implementing the mitigation measures described in Section 3.10.

5 References

- Ames, K.M., and H.D.G. Maschner, 1999. *Peoples of the Northwest Coast: Their Archaeology and Prehistory*. Thames and Hudson Ltd. London.
- Anchor QEA (Anchor QEA, LLC), 2015. *Biological Assessment*. Targa Sound Terminal, Piling, Dolphin, and Fender Maintenance Project. Prepared for Targa Sound Terminal, LLC. September 2015.
- Anchor QEA, 2019. *Sediment Quality Impact Report*. Prepared for SeaPort Sound Terminal. December 2019.
- ASCE (American Society of Civil Engineers), 2023. ASCE Tsunami Hazard Tool. ASCE Tsunami Design Geodatabase Version 2022-1.0. Accessed August 2023. Available at: <https://asce7tsunami.online/>
- ASPE (Office of the Assistant Secretary for Planning and Evaluation), 2021. *U.S. Department of Health and Human Services 2021 Poverty Guidelines*. Accessed August 17, 2021. Available at: <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>.
- Atwater, B.F., S. Musumi-Rokkaku, K. Satake, T. Yoshinobu, U. Kazue, and D.K. Yamaguchi. 2005. *The Orphan Tsunami of 1700—Japanese Clues to a Parent Earthquake in North America*. U.S. Geological Survey Professional Paper 1707. United States Geological Survey—University of Washington Press. p. 98. ISBN 978-0295985350.
- Barnhardt, W.A., R.E. Kayen, J.D. Dragovich, S.P. Palmer, P.T. Pringle, B.L. Sherrod, and S.V. Dadisman, 2003. *The Effects of Volcanic Debris Flows (Lahars), Earthquakes and Landslides on Holocene Deltas at Puget Sound, Washington*. Electronic document accessed June 2018. Available at: <http://walrus.wr.usgs.gov/geotech/pugetposter/>.
- Bates White Economic Consulting, 2022. *Low Carbon Fuels Standards, Market Impacts and Evidence for Retail Fuel Price Effects*. Available at: https://www.bateswhite.com/media/publication/226_BW%20LCF%20Report%20-%20April%202022.pdf.
- BP, 2022. "Doubling Renewable Diesel Output at Our Cherry Point Refinery Means Truck Drivers Can Lower Their Emissions Without Changing a Thing." November 22, 2022. Available at: <https://www.bp.com/en/global/corporate/news-and-insights/reimagining-energy/scaling-up-lower-carbon-solutions-at-cherry-point.html>.

- BPC (Washington State Board of Pilotage Commissioners), 2020. "Interpretative Statement. Regarding: ESHB 1578 Terms." Revised September 17, 2020. Accessed August 1, 2023. Available at:
<https://nebula.wsimg.com/2e0c94a21d0285c4ed21a3d5eb31280a?AccessKeyId=F86D0A1E7A0091C2061F&disposition=0&alloworigin=1>.
- BPC, 2023. "Oil Transportation Safety – 2019 Legislation." Available at: <https://pilotage.wa.gov/oil-transportation-safety.html>.
- City of Tacoma, 2004. *Seismic (Earthquake) Hazard Areas. Tacoma Shoreline Inventory and Characterization*. October 2004.
- City of Tacoma, 2006a. *Sound Refining, Inc., Determination of Nonsignificance (File No. 40000062528)*. May 3, 2006.
- City of Tacoma, 2006b. Sound Refining, Inc., Shoreline Substantial Development Permit (SHR 40000062527). May 3, 2006.
- City of Tacoma, 2006c. Sound Refining, Inc., Wetlands Development Permit (WET 40000062526). May 3, 2006.
- City of Tacoma, 2008. Tacoma Shoreline Inventory and Characterization Map 10 – Aquifer Recharge and Wellhead Protection Areas. January 2008. Accessed August 2021. Available at:
https://cms.cityoftacoma.org/Planning/Shoreline/Maps/10_Aquifer.pdf.
- City of Tacoma, 2011. Targa Sound Terminal Shoreline Substantial Development Permit (SHR 2011-40000162962), FWHCA Development Permit (WET2011-40000162963), and Mitigated Determination of Nonsignificance (SEP2011-40000162964). April 4, 2012.
- City of Tacoma, 2013a. Targa Sound Terminal Shoreline Substantial Development Permit (File No. SHR2013-40000203722). December 5, 2013.
- City of Tacoma, 2013b. *Targa Sound Terminal Determination of Environmental Nonsignificance (SEPA File No. SEP2013-40000203723)*. December 5, 2013.
- City of Tacoma, 2015a. *One Tacoma: Comprehensive Plan*. Prepared by the City of Tacoma. Accessed August 30, 2021. Available at:
<http://www.cityoftacoma.org/cms/one.aspx?portalId=169&pageId=15801>.
- City of Tacoma, 2015b. *Pierce County Mutual Aid Agreement*. Accessed September 2021. Available at:
https://cms.cityoftacoma.org/cityclerk/Files/CityCouncil/Agreements/IntAgr-PierceCounty_20151006.pdf.

- City of Tacoma, 2017. *Targa Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU 16-0211)*. January 6, 2017.
- City of Tacoma, 2019a. Resolution No. 40509 (Climate Emergency Resolution). Request No. 19-1391.
- City of Tacoma, 2019b. *SeaPort Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU 19-0066)*. November 15, 2019.
- City of Tacoma, 2019c. *Shoreline Master Program and Land Use Regulatory Code*. Prepared by the City of Tacoma Planning and Development Services Department. September 24, 2019.
- City of Tacoma, 2021a. *2030 Climate Action Plan*. Available at: <https://www.cityoftacoma.org/cms/one.aspx?pageld=193914#:~:text=The%20Tacoma%20City%20Council%20passed,we%20can%20no%20longer%20avoid>. November 30, 2021.
- City of Tacoma, 2021b. *Determination of Significance, Request for Comments on Scope of EIS, and Notice of Public Scoping Meeting. LU20-0107 SeaPort Sound Terminal Modernization*. February 4, 2021.
- City of Tacoma, 2021c. SeaPort Sound Industrial Wastewater Discharge Permit No. TAC-035-2021.
- City of Tacoma, 2021d. *Wastewater Pretreatment Program Annual Report: January 2, 2020 – December 31, 2020*. City of Tacoma Environmental Services Business Operations Division. March 2021.
- City of Tacoma, 2021e. Flood Hazard Map. Accessed August 2021. Available at: <https://geohub.cityoftacoma.org/maps/tacoma::flooding-layers-fema-pierce-county-tacoma/explore?location=47.275997%2C-122.397653%2C14.08>.
- City of Tacoma, 2021f. Critical Areas Map. Accessed August 2021. Available at: <https://geohub.cityoftacoma.org/>.
- City of Tacoma, 2021g. Development Assistance & Review Team Map. Accessed July 14, 2021. Available at: <https://www.tacomapermits.org/dart-map>.
- City of Tacoma, 2021h. Tacoma Fire Department – About. Accessed September 2021. Available at: https://www.cityoftacoma.org/government/city_departments/fire/About.
- City of Tacoma, 2021i. Fire Stations. Accessed September 2021. Available at: https://www.cityoftacoma.org/government/city_departments/fire/About/fire_stations.
- City of Tacoma, 2021j. Special Operations. Accessed September 2021. Available at: https://www.cityoftacoma.org/government/city_departments/fire/divisions/special_operations.

- City of Tacoma, 2021k. Wastewater System. Accessed September 2021. Available at: <https://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=13781>.
- City of Tacoma, 2021l. Solid Waste. Accessed September 2021. Available at: <https://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=53543>.
- City of Tacoma, 2021m. Construction & Demolition Waste. Accessed September 2021. Available at: <https://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=185769>.
- Commerce (Washington State Department of Commerce), 2020. *Washington State Electric Utility Fuel Mix Disclosure Reports for Calendar Year 2019. Report to the Legislature*. Accessed September 2021. Available at: <https://www.commerce.wa.gov/wp-content/uploads/2021/03/FMD-Report-2019-FINAL.pdf>.
- Commerce, 2021. *2021 State Energy Strategy*. Accessed August 3, 2021. Available at: <https://www.commerce.wa.gov/growing-the-economy/energy/2021-state-energy-strategy/>.
- Conestoga-Rovers & Associates, 2006. *Final Draft Report – Site Characterization Report, Groundwater and Sediment Remediation, Occidental Chemical Corporation, Tacoma, Washington*. September 2015.
- Dellert, J., 2013. *Archaeological Monitoring Report for the Targa Sound Terminal Renewable Fuels Project, City of Tacoma, Pierce County, Washington*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- DNR (Washington Department of Natural Resources), 2021a. *Washington Marine Vegetation Atlas*. Accessed August 2021. Available at: <https://www.dnr.wa.gov/programs-and-services/aquatics/aquatic-science/washington-marine-vegetation-atlas>.
- DNR, 2021b. Washington Natural Heritage Program Products and Data. Accessed August 2021. Available at: <https://www.dnr.wa.gov/NHPdata>.
- DNR, 2023. Washington Geologic Information Portal. Accessed August 2023. Available at: https://geologyportal.dnr.wa.gov/2d-view#natural_hazards?-13747583,-13490755,5941979,6080636?Surface_Geology,500k_Surface_Geology,Map_Units,Earthquakes,Seismogenic_Features,Seismogenic_Folds,Known_or_Suspected,Active_Faults,Known_or_Suspected.
- DOH (Washington State Department of Health), 2021a. Shellfish Safety Information. Accessed August 2021. Available at: <https://fortress.wa.gov/doh/biotoxin/biotoxin.html>.

- DOH, 2021b. Trauma System. Accessed September 2021. Available at:
<https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/EmergencyMedicalServices/EMSSystems/TraumaSystem/TraumaDesignation>.
- Dolcimascolo, A., D.W. Eungard, C. Allen, R.J. LeVeque, L.M. Adams, D. Arcas, V.V. Titov, F.I. González, and C. Moore, 2022. Tsunami Inundation, Current Speeds, and Arrival Times Simulated from a Large Seattle Fault Earthquake Scenario for Puget Sound and Other Parts of the Salish Sea: Washington Geological Survey Map Series 2022–03. July 2022.
- Dragovich, J.D., P.T. Pringle, and T.W. Walsh, 1994. "Extent and Geometry of the Holocene Osceola Mudflow in the Puget Lowland: Implications for Holocene Sedimentation and Paleogeography." *Washington Geology* 22:3–26.
- eBird, 2021. Species Observed at Hylebos Waterway, Pierce County. Accessed September 2021. Available at:
https://ebird.org/hotspot/L269904?yr=all&m=&rank=mrec&hs_sortBy=date&hs_o=desc.
- Ecology (Washington State Department of Ecology), 2018. SeaPort Sound National Pollutant Discharge Elimination System Industrial Stormwater Individual Permit (No. WA0003204).
- Ecology, 2020a. Memorandum from: Erica C. Fot, Toxics Cleanup Program, Aquatic Lands Cleanup Unit. Memorandum to: Greg Gould, Surface Water Management, Industrial Section. Regarding: Targa SeaPort Sound Terminal, NPDES Sediment Monitoring Requirements – Revised (NPDES Permit WA0003204; FSID 1612929; EIM Studies OCCSED16 and 2019HylebosOMMP). November 6, 2020.
- Ecology, 2020b. *2019 Legislation: Reducing Threats to Southern Resident Killer Whales & Improving the Safety of Oil Transportation*. Publication No. 19-08-012. Spill Prevention, Preparedness, and Response Program.
- Ecology, 2020c. Letter to: Shirley Schultz, Principal Planner, City of Tacoma. Regarding: SeaPort Sound Plant Modernization Project (LU20-0107). August 17, 2020.
- Ecology, 2021a. Water Quality Atlas. Accessed August 2021. Available at:
<https://apps.ecology.wa.gov/waterqualityatlas/wqa/map>.
- Ecology, 2021b. Groundwater. Accessed August 2021. Available at: <https://ecology.wa.gov/Water-Shorelines/Water-quality/Groundwater>.
- Ecology, 2021c. Construction Stormwater General Permit. Accessed September 2021. Available at:
<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>.

Ecology, 2023a. "Regulatory Guidance for the Oil Industry." Accessed August 1, 2023. Available at: <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Guidance-for-oil-industry>.

Ecology, 2023b. "Central Puget Sound GRP." Accessed August 2023. Available at: <https://www.oilspills101.wa.gov/northwest-area-contingency-plan/geographic-response-plans-grps/central-puget-sound-grp/>

Ecology, 2023c. "State-Approved Contingency Plan Holders." Accessed August 1, 2023. Available at: <https://ecology.wa.gov/Regulations-Permits/Plans-policies/Contingency-planning-for-oil-industry/Approved-contingency-plan-holders>

Ecology, 2023d. "Emergency Response Towing Vessel." Accessed August 1, 2023. Available at: <https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Emergency-response-towing-vessel>

Ecology, 2023e. "Risk Modeling." Accessed August 1, 2023. Available at: <https://ecology.wa.gov/spills-cleanup/spills/oil-spill-prevention/safety-of-oil-transportation-act/risk-modeling>.

Ecology, 2023f. Facility/Site Map. Accessed August 2023. Available at: <https://apps.ecology.wa.gov/facilitysite/Map/MapSearch>.

Ecology and Environment, 2015. *Puget Sound Energy Proposed Tacoma Liquefied Natural Gas Project Final Environmental Impact Statement*. Prepared for the City of Tacoma. November 9, 2015.

EIA (U.S. Energy Information Administration), 2019a. 2019 Utility Bundled Retail Sales – Total. Accessed September 2021. Available at: https://www.eia.gov/electricity/sales_revenue_price/pdf/table10.pdf.

EIA, 2019b. 2019 Utility Bundled Retail Sales – Industrial. Accessed September 2021. Available at: https://www.eia.gov/electricity/sales_revenue_price/pdf/table8.pdf.

EIA, 2019c. Natural Gas Annual Respondent Query System (EIA-176 Data Through 2019). Accessed September 2021. Available at: <https://www.eia.gov/naturalgas/ngqs/#?year1=2016&year2=2019&sortby=CAI&company=N>
[ame](#).

EPA (U.S. Environmental Protection Agency), 2020. *Fifth Five-Year Review Report for Commencement Bay Nearshore/Tideflats Superfund Site, Pierce County, Washington*. Region 10, Seattle, Washington.

- EPA, 2021a. *Tacoma-Pierce County Fine Particulate Matter (PM_{2.5}) Standard Attainment Planning*. Accessed September 22, 2021. Available at: <https://www.epa.gov/sips-wa/tacoma-pierce-county-fine-particulate-matter-pm25-standard-attainment-planning>.
- EPA, 2021b. *Overview of the Drinking Water Sole Source Aquifer Program*. Accessed August 2021. Available at: https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#What_Is_SSA.
- EPA, 2021c. *Environmental Justice Screening and Mapping Tool*. Accessed August 17, 2021. Available at: <https://ejscreen.epa.gov/mapper>.
- EPA (U.S. Environmental Protection Agency), U.S. Coast Guard 13th District, U.S. Coast Guard Puget Sound Sector, U.S. Coast Guard Columbia River Sector, Washington State Department of Ecology, Oregon Department of Environmental Quality, and Idaho Office of Emergency Management, 2019. *Northwest Area Contingency Plan*. January 1, 2019. Accessed September 8, 2021. Available at: <https://www.rtt10nwac.com/Files/NWACP/2019/Northwest%20Area%20Contingency%20Plan%202019.pdf>.
- Haeberlin, H., and E. Gunther, 1930. *The Indians of Puget Sound*. University of Washington Publications in Anthropology 4(1). Seattle, Washington.
- Hilbert, V., J. Miller, and Z. Zahir, 2001. *Puget Sound Geography*. Original Manuscript from T.T. Waterman, Edited with Additional Material from V. Hilbert, J. Miller, and Z. Zahir. Seattle, Washington: Lushootseed Press.
- Hudson, L., and W. White, 2006. *City of Tacoma Standard Operations Procedures for Cultural/Archaeological Investigations Technical Memorandum, Simpson Tacoma Kraft Company Cogeneration Building*. Report on file at the Department of Archaeology and Historic Preservation.
- Kelly, K., 2012. *Results of Archaeological Monitoring of the Side Sewer Pipeline Project, Tacoma, Washington*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Kirk, R., and C. Alexander, 1990. *Exploring Washington's Past*. Seattle, Washington: University of Washington Press.
- Lavin, P., H.A. Roop, P.D. Neff, H. Morgan, D. Cory, M. Correll, R. Kosara, and R. Norheim, 2019. *Interactive Washington State Sea Level Rise Data Visualizations*. Prepared by the Climate Impacts Group, University of Washington, Seattle. Updated July 2020. Accessed August 2023. Available at: <https://cig.uw.edu/projects/interactive-sea-level-rise-data-visualizations/>.

- Magden, R., 2008. Port of Tacoma – Thumbnail History, Part 1. Accessed June 2018. Available at: <http://www.historylink.org/File/8592>.
- Marathon (Marathon Petroleum Corporation), 2023. Renewable Fuels. Available at: <https://www.marathonpetroleum.com/Operations/Renewable-Fuels/>.
- Matson, R.G., and G. Coupland, 1995. *The Prehistory of the Northwest Coast*. London: Academic Press.
- Miller, I., H. Morgan, G. Mauger, T. Newton, R. Weldon, D. Schmidt, M. Welch, and E. Grossman. *Projected Sea Level Rise for Washington State – A 2018 Assessment*. Washington Coastal Resilience Project. A collaboration of Washington Sea Grant, University of Washington Climate Impacts Group, University of Oregon, University of Washington, and US Geological Survey. Updated July 2019. Accessed August 2023. Available at: https://cig.uw.edu/wp-content/uploads/sites/2/2019/07/SLR-Report-Miller-et-al-2018-updated-07_2019.pdf.
- Montana Renewables, 2023. About Us. Available at: <https://montanarenewables.com/about/>.
- Morgan, M., 1979. *Puget's Sound: A Narrative of Early Tacoma and the Southern Sound*. Seattle, Washington: University of Washington Press.
- MultiCare, 2021. Trauma Care. Accessed September 2021. Available at: <https://www.multicare.org/find-a-location/emergency-care/trauma-care/>.
- NOAA (National Oceanic and Atmospheric Administration), 2023. "What Is a Seiche?" Accessed August 2023. Available at: <https://oceanservice.noaa.gov/facts/seiche.html>
- NOAA Fisheries (National Oceanic and Atmospheric Administration, National Marine Fisheries Service), 2021a. ESA Section 7 Consultations on the West Coast. Accessed August 2021. Available at: [https://www.fisheries.noaa.gov/west-coast/consultations/esa-section-7-consultations-west-coast#puget-sound-\(central-and-south\)](https://www.fisheries.noaa.gov/west-coast/consultations/esa-section-7-consultations-west-coast#puget-sound-(central-and-south)).
- NOAA Fisheries, 2021b. *Southern Resident Killer Whales (Orcinus orca): 5-Year Review: Summary and Evaluation*. National Marine Fisheries Service West Coast Region, Seattle, Washington. December 2021. Accessed August 1, 2023. Available at: <https://media.fisheries.noaa.gov/2022-01/srkw-5-year-review-2021.pdf>
- NOAA Fisheries, 2021c. *Species in the Spotlight: Priority Actions 2021–2025*. March 2021. Accessed August 1, 2023. Available at: <https://media.fisheries.noaa.gov/2021-04/SIS-Action-Plan-2021-SRKW-FINAL%20508.pdf>.
- NOAA Fisheries, 2022. Protected Resources Map (Critical Habitat Mapping). Accessed August 2023. Available at: <https://www.fisheries.noaa.gov/resource/map/protected-resources-app>.

- OceanWise Canada, 2023. "The WhaleReport Alert System." Accessed August 1, 2023. Available at: <https://wildwhales.org/wras/>.
- ODEQ (Oregon Department of Environmental Quality), 2022. Oregon Clean Fuels Program – Program Review. Submitted to 2022 Oregon Legislature. February 1, 2022. Available at: <https://www.oregon.gov/deq/ghgp/Documents/CFPPProgramReview.pdf>.
- OFM (Washington State Office of Financial Management), 2021. Total Population and Percent Change (1990–2021). Accessed: April 18, 2022. Available at: <https://ofm.wa.gov/washington-data-research/statewide-data/washington-trends/population-changes/total-population-and-percent-change>.
- Oldham, K., 2008. *The First Ship Calls at the Port of Tacoma on March 25, 1921*. Accessed November 2009. Available at: http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=8462.
- Orca Network, 2023. Marine Mammal Sighting Records. Available at: http://www.orcanetwork.org/Main/index.php?categories_file=Sightings.
- Patterson, K., 2015. "History and Ecology of Commencement Bay." Available at: <http://courses.washington.edu/commbay/salmon/commencementbay.html>.
- Phillips 66, 2023. San Francisco Refinery. Available at: <https://www.phillips66.com/refining/san-francisco-refinery/>.
- Pierce County, 2018. Landslide Hazard Areas. Pierce County, Washington, Open GeoSpatial Data Portal. March 2018. Accessed August 29, 2021. Available at: https://gisdata-piercecowa.opendata.arcgis.com/datasets/9f118eb3b9154ccda91df5d2af076326_0/explore.
- Pierce County, 2020. *Region 4 All Hazard Mitigation Plan, 2020–2025 Edition Base Plan*. Section 4, Risk Assessment. Accessed August 2023. Available at: <https://www.piercecountywa.gov/DocumentCenter/View/118149/2020---2025-Region-5-All-Hazard-Mitigation-Plan---Section-4-Risk>.
- Pierce County, 2021a. Department Overview – Staffing, Jurisdiction. Accessed September 2021. Available at: <https://www.piercecountywa.gov/133/Department-Overview---Staffing-Jurisdict>.
- Pierce County, 2021b. Dive Team. Accessed September 2021. Available at: <https://www.piercecountywa.gov/2159/Dive-Team>.
- Pierce Transit, 2021a. Tideflats Runner. Accessed September 2021. Accessed at: <https://www.piercetransit.org/tideflatsrunner/>.

Pierce Transit, 2021b. Route 63 NE Tacoma Express. Accessed September 2021. Accessed at: <https://www.piercetransit.org/rt-63-ne-tacoma-express/>.

PNUCC (Pacific Northwest Utilities Conference Committee), 2021. *Northwest Regional Forecast of Power Loads and Resources, 2021 through 2031*. Accessed September 2021. Available at: <https://www.pnucc.org/wp-content/uploads/PNUCC-2021-Northwest-Regional-Forecast-Final.pdf>.

Port of Tacoma, 2021a. Habitat Restoration. Accessed August 2021. Available at: <https://www.portoftacoma.com/environment/habitat-restoration>.

Port of Tacoma, 2021b. "Whale You Be My Valentine." February 11, 2021. Available at: <https://www.portoftacoma.com/news/whale-you-be-my-valentine>.

PSCAA (Puget Sound Clean Air Agency), 2021a. Air Graphing Tool. Available at: <https://secure.pscleanair.org/airgraphing>.

PSCAA, 2021b. Data Summary. Air Quality Data Summary 2020. Available at: <https://www.pscleanair.gov/615/Data-Summary>.

PSE (Puget Sound Energy), 2020. 2020 Puget Sound Energy's Community Profile – Pierce County. Accessed September 2021. Available at: <https://www.pse.com/about-us>.

PSRC (Puget Sound Regional Council), 2015. *Industrial Lands Analysis for the Central Puget Sound Region*. March 2015. Accessed August 25, 2021. Available at: <https://www.psrc.org/sites/default/files/industrialandsanalysisreport.pdf>.

Puyallup Tribe of Indians, 2018. Our Tribe. Accessed March 2020. Available at: <http://www.puyallup-tribe.com/ourtribe/>.

RRT/NWAC (Region 10 Regional Response Team and the Northwest Area Committee), 2020. *Northwest Area Contingency Plan: 2020*. January 1, 2020. Accessed August 1, 2023. Available at: <http://www.rtt10nwac.com/Files/NWACP/2020/Northwest%20Area%20Contingency%20Plan2020.pdf>.

Ruby, R.H., and J.A. Brown, 1986. *A Guide to the Indian Tribes of the Pacific Northwest*. Norman, Oklahoma: University of Oklahoma Press.

Schuster, J.E., A. A. Cabibbo, J.H. Schilter, and I. J. Hubert, 2015. Geologic Map of the Tacoma 1:100,000-Scale Quadrangle, Washington. Washington Department of Geology and Earth Resources. Map series 2015-03.

SeaPort Sound (SeaPort Sound Terminal, LLC), 2020. *SeaPort Sound Terminal LLC Facility Contingency Plan*. Prepared for the Washington State Department of Ecology Spill Prevention, Preparedness, and Response Program. January 2020.

SeaPort Sound, 2021. *Industry Fact Sheet (TAC-035-2021), SeaPort Sound Terminal, LLC. June 1, 2021 – May 31, 2026*.

Smultea, M.A., K. Loma-MacNair, G. Campbell, S.S. Courbis, and T.A. Jefferson, 2017. *Final Report – Aerial Surveys of Marine Mammals Conducted in the Inland Puget Sound Waters of Washington, Summer 2013-Winter 2016*. Prepared for Commander, U.S. Pacific Fleet and Naval Sea Systems Command.

Sussman, B. and J. Huff, 2019. *Green Apple Renewable Fuels Project Transportation Study*. Prepared for Whatcom County Planning and Development Services. December 19, 2019.

Tacoma Police Department, 2021. Marine Services and Dive Unit. Accessed September 2021.

Available at:

https://www.cityoftacoma.org/government/city_departments/police/operations_bureau/marine_services_and_dive_unit.

Tacoma Power, 2020. 2020 Integrated Resource Plan. Accessed August 2021. Available at:

<https://www.mytpu.org/about-tpu/services/power/integrated-resource-plan/>.

Tacoma Power, 2021. About Tacoma Power. Accessed August 2021. Available at:

<https://www.mytpu.org/about-tpu/services/power/about-tacoma-power/>.

Tacoma Water, 2019. *Water System Plan 2018*. Updated February 2019.

Tacoma Water, 2021. About Tacoma Water. Accessed August 2021. Available at:

<https://www.mytpu.org/about-tpu/services/water/about-tacoma-water/>.

Targa (Targa Sound Terminal, LLC), 2013. Letter to: Washington State Department of Ecology Industrial Section. Regarding: Site Number 1612929 Groundwater Quality Summary Request for Closure. June 12, 2013.

TFD (Tacoma Fire Department), 2020. *2020 Tacoma Fire Department Annual Report*. Accessed September 2021. Available at:

https://www.cityoftacoma.org/UserFiles/Servers/Server_6/File/Fire%20Department/Tacoma%20Fire%20Department%202020%20Annual%20Report.pdf.FD.

- USACE (U.S. Army Corps of Engineers) and Port of Tacoma, 2021. *Tacoma Harbor, WA Feasibility Study Pierce County, Washington. Final Integrated Feasibility Report and Environmental Assessment*. July 2021. Accessed September 20, 2021. Available at: <https://www.nws.usace.army.mil/Portals/27/docs/civilworks/projects/2021%20Tacoma%20Harbor/JULY-2021-TacomaHarbor-IFR-EA-main%20report-DRAFT-FINAL.pdf>.
- USCG (U.S. Coast Guard), 2021a. *United States Coast Guard Sector Puget Sound Fact Sheet*. Accessed September 2021. Available at: https://www.pacificarea.uscg.mil/Portals/8/District_13/lib/doc/factsheet/SectorBriefingBook.pdf?ver=wfKRZtNvIK95NBOOYVxkQg%3d%3d×tamp=1626888077248.
- USCG, 2021b. Puget Sound VTS. Accessed September 2021. Available at: <https://www.pacificarea.uscg.mil/VTSPugetSound/>.
- USFWS (U.S. Fish and Wildlife Service), 2008. *Arenaria paludicola (Marsh Sandwort) 5-Year Review: Summary and Evaluation*. Accessed August 2021. Available at: https://www.fws.gov/carlsbad/SpeciesStatusList/5YR/20080710_5YR_ARPA.pdf.
- USFWS, 2021a. National Wetlands Inventory Wetlands Mapper. Accessed August 2021. Available at: <https://www.fws.gov/wetlands/data/Mapper.html>.
- USFWS, 2021b. IPaC – Information for Planning and Consultation. Accessed August 2021. Available at: <https://ecos.fws.gov/ipac/>.
- USGS (U.S. Geological Survey), 1998. *Volcano Hazards from Mount Rainier, Washington, Revised 1998*. R.P. Hoblitt, J.S. Walder, C.L. Driedger, K.M. Scott, P.T. Pringle, and J.W. Vallance. Available at: <https://pubs.usgs.gov/of/1998/0428/>.
- USGS, 2010. *A Magnitude 7.1 Earthquake in the Tacoma Fault Zone—A Plausible Scenario for the Southern Puget Sound Region, Washington*. Fact Sheet 2010–3023. April 2010.
- USGS, 2023. U.S. Quaternary Faults. USGS Geological Hazards Science Center, Golden, Colorado. Accessed August 2023. Available at: <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>.
- Vaccaro, J.J., A.J. Hansen, Jr., and M.A. Jones, 1998. *Hydrogeologic Framework of the Puget Sound Aquifer System, Washington and British Columbia*. U.S. Geological Survey Professional Paper 1424-D.
- Vallance, J. W., and K.M. Scott, 1997. "The Osceola Mudflow from Mount Rainier: Sedimentology and Hazard Implications of a Huge Clay-Rich Debris Flow." *GSA Bulletin* 109(2):143–163.

- Walsh, T.J., D. Arcas, A. Venturato, V. Titov, H. Mofjeld, C. Chamberlin, and F. González. 2009. *Tsunami Hazard Map of Tacoma Washington: Model Results for Seattle Fault and Tacoma Fault Earthquake Tsunamis*. Washington Department of Geology and Earth Resources, Open File Report 2009-9. July.
- WDFW (Washington Department of Fish and Wildlife), 2020. *Atlas of Seal and Sea Lion Haulout Sites in Washington*. February 2000.
- WDFW, 2021a. PHS on the Web. Accessed August 2021. Available at: <https://geodataservices.wdfw.wa.gov/hp/phs/>.
- WDFW, 2021b. Priority Habitats and Species List. Accessed August 2021. Available at: <https://wdfw.wa.gov/sites/default/files/publications/00165/wdfw00165.pdf>.
- WDFW, 2021c. SalmonScape Map. Accessed August 2021. Available at: <https://apps.wdfw.wa.gov/salmonscape/>.
- Wilma, D., 2002. "Nicholas Delin Begins Construction of a Sawmill at the Head of Commencement Bay on April 1, 1852." Accessed September 2021. Available at: <http://www.historylink.org/File/5017>.
- WSP (Washington State Patrol), 2019. *2019 Annual Report: District 1*. Accessed September 2021. Available at: <https://www.wsp.wa.gov/2019-district-1-ar/>.

6 List of Preparers

Name and Title	Degree and Relevant Licenses	Relevant Years of Experience
SeaPort Sound Terminal, LLC		
Matthew Kolata, Applicant	<ul style="list-style-type: none"> • BS, Management of Information Services 	16
Anchor QEA, LLC		
Josh Jensen, Project Manager and EIS Reviewer	<ul style="list-style-type: none"> • MEM, Environmental Management • BA, Economics and Environmental Studies • Certificate, Environmental Law and Regulation 	15
Dan Berlin, PWS, EIS Manager	<ul style="list-style-type: none"> • MEM, Environmental Management • BA, Biology 	22
Ann Costanza, EIS Reviewer	<ul style="list-style-type: none"> • MS, Forest Resources • BS, Forest Management 	33
Kim Marcotte, EIS Reviewer	<ul style="list-style-type: none"> • MS, Environmental Horticulture • MS International Agricultural Development • BA, Economics and Spanish 	17
Chris Moelter, EIS Reviewer	<ul style="list-style-type: none"> • MEM, Environmental Tourism • BS, Zoology 	16
Jacquie Ptacek, Assistant Project Manager and EIS Author	<ul style="list-style-type: none"> • MS, Environmental Conservation • BS, Environmental Conservation and Zoology 	6
Barbara Bundy, PhD, RPA, EIS Author	<ul style="list-style-type: none"> • PhD, Anthropology • MA, Anthropology • BA, Anthropology 	24
Gabriel Allen, EIS Author	<ul style="list-style-type: none"> • BS, Agricultural Sciences 	13
Sara Noland, EIS Author	<ul style="list-style-type: none"> • BA, Zoology • BA, Journalism • Certificate, Wetland Science and Management 	29
Hammerschlag, LLC		
Roel Hammerschlag, Inventory of GHG Emissions	<ul style="list-style-type: none"> • MPA, Public Affairs • BS, Physics 	22

Appendix A

Study Report: Inventory of Greenhouse Gases – SeaPort Sound Plant Modernization Project

Study Report:

Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project

analysis period January 1, 2022 – December 31, 2063

Prepared for: Anchor QEA

Submitted on: 29 April 2022

Hammerschlag LLC document no.: SP-003(h)

For technical assistance please contact:

Roel Hammerschlag

Hammerschlag LLC

tel. 360-339-6038

roel@hammerschlag.llc

<http://hammerschlag.llc>

Table of Contents

Goal	3
Intended Application	3
Standards	3
Reasons for Carrying Out the Study.....	4
Intended Audience.....	4
Comparative Assertions.....	4
Scope	5
Product System	5
Functions of the Product System.....	5
Functional Unit.....	5
System Boundary	5
Cut-Off Criteria and Cut-Offs	8
Allocation Procedures.....	8
LCI Methodology.....	8
Data Requirements.....	15
Assumptions.....	15
Value Choices and Optional Elements.....	15
Limitations	15
Data Quality Requirements	16
Critical Review.....	21
Report Format.....	21
Inventory Analysis	22
Impact Categories	22
Emissions of Construction	22
Emissions of Operations	23
Offsite Emissions Associated with Product Throughput	24
Interpretation of Results	26
Summary of Inventory	26
Causality.....	27
Sensitivity Analysis and Uncertainty.....	28
Annex A – Data Request Memo	29

Goal

Structure of this report includes four main sections Goal, Scope, Inventory Analysis, and Interpretation of Results to comport with ISO 14044:2006 Section 4.1 “LCI studies shall include definition of the goal and scope, inventory analysis and interpretation of results.”

Subsections within this Section Goal comport with topics enumerated in ISO 14044:2006 Subsection 4.2.2 “Goal of the study.”

Intended Application

The intended application of the Study is estimating future greenhouse gas emissions (GHGs) associated with the SeaPort Sound Terminal located in Tacoma, WA, under multiple conditions.

Standards

This life-cycle inventory (LCI) report, and the analysis underlying it, are compliant with the following standards and guidelines in order of precedence from highest to lowest:

1. City of Tacoma Environmental Impact Statement scoping document LU20-0107;¹
2. International standard ISO 14040:2006, *Environmental management — Life cycle assessment — Principles and framework*;²
3. International standard ISO 14044:2006, *Environmental management — Life cycle assessment — Requirements and guidelines*;³ and
4. Values and practices represented by GREET 2020, the Greenhouse gases, Regulated Emissions, and Energy use in Technologies model.⁴
5. Values and practices represented by MOVES 3.0.1, the MOrtor Vehicle Emission Simulator.⁵

¹ Shirley Schultz and Planning and Development Services, City of Tacoma to Troy Goodman and SeaPort Sound Terminal LLC, “LU20-0107 Seaport Plant Modernization EIS Scoping Document,” March 9, 2021.

² ISO, “ISO 14040:2006 Environmental Management - Life Cycle Assessment - Principles and Framework” (ISO, July 1, 2006).

³ ISO, “ISO 14044:2006 Environmental Management - Life Cycle Assessment - Requirements and Guidelines” (ISO, July 1, 2006).

⁴ Michael Q Wang, *GREET 2020 (Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies Model)*, version 2020, Microsoft Excel (Lemont, IL: Argonne National Laboratory, 2020), <https://greet.es.anl.gov/>.

⁵ OAR US EPA, “Latest Version of MOrtor Vehicle Emission Simulator (MOVES),” Data and Tools, September 13, 2021, <https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves>.

Reasons for Carrying Out the Study

A proposed terminal Plant Modernization Project (the Project) has elicited public and governmental concern regarding related increases to GHG emissions. City of Tacoma issued a Determination of Significance and scope of work for an Environmental Impact Statement. This Study Report is intended as an annex to the Environmental Impact Statement, partially satisfying requirements of the Environmental Impact Statement scope of work.

Intended Audience

This Study Report is authored for the operators of SeaPort Sound Terminal.

Comparative Assertions

The Study results are expected to be used in comparative assertions disclosed to the public. This report is not an ISO 14044:2006 Section 5.2 “third-party report” qualified for public disclosure.

Scope

Subsections within this Section Scope comport with topics enumerated in ISO 14044:2006 Subsection 4.2.3.1 “General” under 4.2.3 “Scope of the study.”

Product System

The product system includes fixed and mobile equipment managed at the SeaPort Sound Terminal facility; throughput products handled at SeaPort Sound Terminal; and equipment utilized to refine and transport the throughput products.

Functions of the Product System

General

SeaPort Sound Terminal is a coastline tank farm receiving and dispensing gasoline, ethanol, diesel fuel, biodiesel, fuel oil, asphalt, and LPG (liquefied petroleum gas, colloquially “propane”).⁶ These products are ultimately transported elsewhere by customers and combusted for transport energy or heat, or utilized as a component in downstream products.

Project and No Action Alternatives

No Action represents the product system as it currently exists. The Project alternative represents the product system after a proposed facility modernization that replaces existing tanks and unused refinery equipment with new, fixed-roof storage tanks.

Functional Unit

The functional unit shall be site construction activity occurring from January 1, 2022 through December 31, 2023, plus operation of the entire SeaPort Sound Terminal facility from January 1, 2024 through December 31, 2063.

System Boundary

The physical boundary underlying the system boundary is the contiguous SeaPort Sound Terminal facility located at 4130 E 11th St., Tacoma, Washington consisting of Pierce County parcel numbers 0321263048, 0321262062, 0321262136, and 0321262137 (Figure 1).

⁶ The facility also has the capacity to receive and dispense crude oil, but there was no such activity during the baseline period January 1 2016 – December 31 2020. The facility also receives and dispenses a few hundred barrels of “transmix” each year, nonconforming fossil fuel mixes received via pipeline between batches of neat fuels.

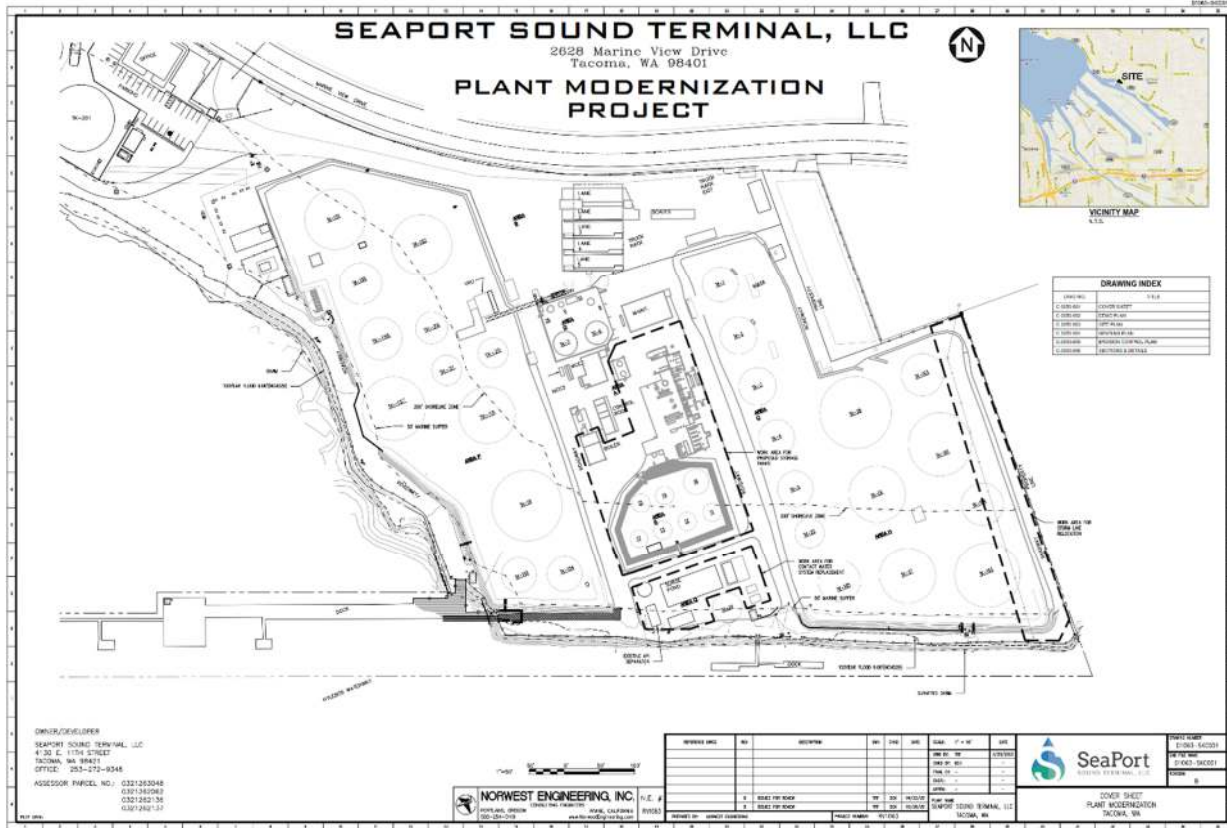


Figure 1 - Physical boundary associated with the GHG inventory, consisting of Pierce County parcel numbers 0321263048, 0321262062, 0321262136, and 0321262137. The proposed Plant Modernization Project will be confined inside the thick, dashed-line boundaries shown but the GHG inventory does not recognize these and instead addresses the entire facility.

Figure 1 includes boundaries circumscribing the portion of the facility subject to the Project, but in order to allow for spillover effects the GHG inventory physical boundary is expanded to circumscribe the entire facility.

The system boundary defining inventoried unit processes appears in Figure 2.

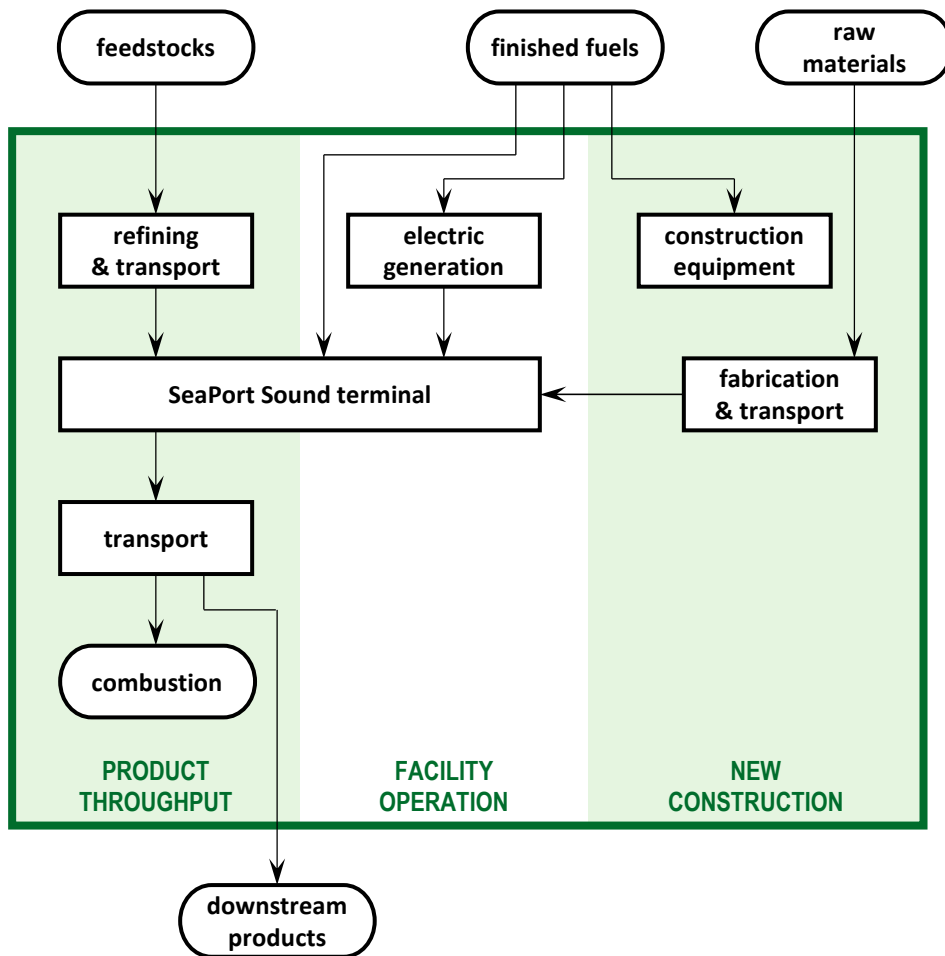


Figure 2 – System boundary diagram. Arrows show material or energy flows. Emissions are accounted for all unit processes appearing inside the green boundary. Division into Product Throughput, Facility Operation and New Construction is for clarity only, and has no bearing on the GHG system boundary definition.

Unit processes in the system boundary are as follows:

refining & transport – Upstream processes related to manufacturing and delivery of products received by SeaPort Sound Terminal. This can include drilling and pumping equipment, over-the-road trucking, and pipeline operations.

SeaPort Sound Terminal – Equipment inside the physical boundary. This includes tanks, pumps, emissions control equipment, and vehicles housed at SeaPort Sound Terminal to support local operation.

transport – Ships, trains, and trucks transporting products from SeaPort Sound Terminal to their next consumer.

combustion – The terminal process for those products that are combustible fuels. Only those products known to be combusted contribute terminal emissions inside the system boundary.

Products that are destined for non-combustion uses, or may be destined for non-combustion uses, are outside the system boundary once transported to their consumer.

electric generation – Utility electric generators that supply any electricity consumed inside the physical boundary.

construction equipment – Equipment utilized within the physical boundary between January 1, 2022 to December 31, 2023 for the purpose of modernizing the facility.

fabrication & transport – Manufacturing facilities and transport vehicles utilized to fabricate and deliver materials consumed during facility modernization between January 1, 2022 and December 31, 2023.

Cut-Off Criteria and Cut-Offs

Any single source of GHGs judged by the study authors to represent less than 1% of total GHGs associated within the system boundary *and* not required for inclusion by the Scoping Document, was excluded from the analysis. Excluded sources are:

- Demolition waste

Allocation Procedures

The inventory includes all GHG emissions associated with the product system; allocation is unnecessary.

LCI Methodology

The LCI is computed for six cases: three each for the two alternatives No Action and Project. In each of the six cases, the inventory is computed by combining anticipated emissions from construction from January 1, 2022 through December 31, 2023, with anticipated emissions of facility operation and product throughput from January 1, 2024 through December 31, 2063. In the three No Action cases, emissions from construction are assumed to be zero.

The three cases associated with each alternative are forecast according to three market fuel mix scenarios that reflect potential changes in the mix of road fuels produced and consumed in the western U.S. Each fuel mix scenario describes one possible market mix of fuels that SeaPort Sound Terminal might face throughout the 40 years following facility modernization. Each scenario impacts only the mix of road fuels, because those are the fuels affected by the regulatory forecasts that drive our scenario definitions. Other fuels handled by SeaPort Sound Terminal are modeled to maintain their current, collective proportions.

Market Fuel Mix Scenarios

The starting point for constructing all three scenarios is the actual mix of road fuels produced during calendar years 2016 through 2020, inclusive (the “baseline period”). Regional fuel production mix is reported by the U.S. Energy Information Administration (EIA) to the geographic scale of Petroleum Administration for Defense Districts (PADDs). SeaPort Sound Terminal is located in PADD 5, which includes the states Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington. As of 2020, PADD 5 fuel mix was as follows, on a volume basis:⁷

PADD 5 2016-2020 fuel mix	
gasoline	73.4%
diesel	25.4%
ethanol	0.8%
other renewable fuels	0.4%

Table 1 – Road fuels production mix in PADD 5 during the baseline period. EIA does not break down contributors to the category “other renewable fuels,” so this analysis makes the simplifying assumption that all other renewable fuels are diesel substitutes (renewable diesel or biodiesel).

The **Central** scenario assumes the measured mix of fuels, but changing over time according to legislation that has been signed into law. This is the same approach utilized by the EIA for its annual energy forecasts.⁸ In Washington State, the mix of road fuels will change in response to HB 1091 (2021), the recently passed low carbon fuels standard (LCFS). The LCFS requires that the average carbon intensity of road fuels delivered in Washington State lower by up to 10% as of 2033, and by 20% as of 2038. Work already done by the California Air Resources Board utilizing GREET assigns conventional gasoline a carbon intensity of 101 grams carbon dioxide equivalent per megajoule MJ (gCO₂e/MJ), conventional diesel 100 gCO₂e/MJ, ethanol 52 gCO₂e/MJ and renewable diesel 20 gCO₂e/MJ.⁹ Using these values one can project year-by-year changes in the fuel mix through 2038 as shown in Figure 3. After 2038, the fuel mix is presumed to undergo no further changes since none are currently legislated.

⁷ Based on direct reports of production within PADD 5. EIA also issues “product supplied” estimates that relate more tightly to consumption, but the methodology EIA uses for estimating these is too coarse to produce meaningful values for the renewable fuels. The EIA State Energy Data System (SEDS) derives consumption values by fuel for state-level geographies, but these lag the PADD reports (which represent primary rather than secondary data) by more than a year.

⁸ [citation to Annual Energy Outlook]

⁹ Conventional fossil fuel carbon intensities are from California LCFS rules. Ethanol and renewable diesel carbon intensities are computed from GREET.

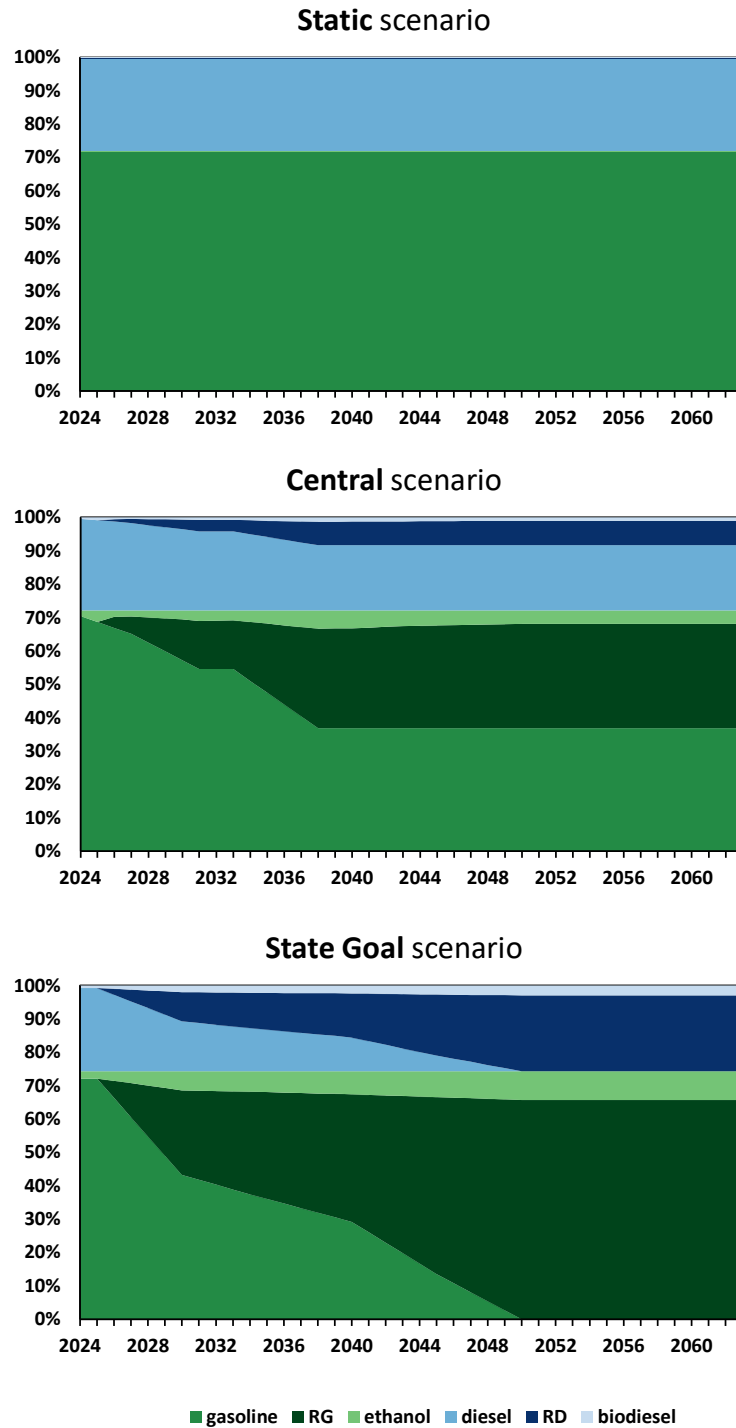


Figure 3 – Regional market road fuel mixes expected under three scenarios. “RG” means renewable gasoline; “RD” means renewable diesel.

The **State Goal** scenario is derived from the “Transport Fuels” scenario constructed for the Washington State Department of Commerce’s *2021 Washington State Energy Strategy*. This scenario posits less electrification of transportation than other State Energy Strategy scenarios, instead achieving GHG reduction targets by substituting biofuels and synthetic fuels for

petroleum products. Commerce’s analysis provides absolute, forecast quantities of biofuels and synthetic fuels in five-year increments from 2025 through 2050, but without distinction between gasoline substitutes and diesel substitutes. The State Goal scenario allocates Commerce’s synthetic fuels and biofuels forecasts to substitute for gasoline or diesel, proportionately to the share of gasoline vs. diesel fossil fuels in the PADD 5 baseline mix.¹⁰

The **Static** scenario simply presumes continuation of status quo fuels mix. This is equivalent to a scenario in which the new LCFS is struck down in the courts.

Applied Fuel Mix Scenarios

The applied throughput forecasts for SeaPort Sound Terminal work with a six-fuel framework that recognizes three types each of spark-ignition and compression-ignition fuels (Table 2). This approach recognizes that spark-ignition and compression-ignition vehicle technologies are non-interchangeable while, given an engine of one type or the other, there is at least some capacity for displacement among similar fuel types.

	spark-ignition	compression-ignition
fossil	“gasoline”	“diesel”
drop-in fuel	“renewable gasoline”	“renewable diesel”
biofuel	“ethanol”	“biodiesel”

Table 2 – Road fuels terminology used in this report.

The conventional compression ignition fuel is ultra-low sulfur diesel (ULSD), and the substitute fuels fall into two groups: biodiesel and renewable diesel. Biodiesel differs chemically from ULSD and requires engine and handling modifications to work well in ULSD-oriented infrastructure. Renewable diesel refers to drop-in ULSD substitutes sufficiently chemically similar to ULSD that they are indistinguishable from the point of view of engine performance. Currently, SeaPort Sound Terminal handles renewable diesel separately from ULSD. Over time, the two may be normally handled as a blend, or SeaPort Sound Terminal may need to continue to handle them separately for business or regulatory reasons.

The LCFS requires the average carbon intensity of all compression-ignition fuels to follow a prescribed, downward pathway. Biodiesel is manufactured almost entirely from food and industrial waste feedstocks that are limited in supply; furthermore, the market will favor drop-in fuels since they require less capital investment by end consumers (new or modified motor vehicles paid for by their users). Hence, most of the new, renewable fuels for compression ignition will be renewable diesel, the drop-in fuel.

¹⁰ This implies an underlying assumption that the mix of compression ignition vs. spark ignition engines in the vehicle fleet remains unchanged throughout the forecast period.

A similar situation occurs with spark ignition fuels. The conventional spark ignition fuel is gasoline, and the substitute fuels fall into two groups: ethanol and renewable gasoline.¹¹ Though also a spark-ignition fuel, ethanol differs from gasoline chemically and requires engine and handling modifications to work well in gasoline-oriented infrastructure. Renewable gasoline is a drop-in fuel that chemically resembles gasoline sufficiently, that such modifications are unnecessary.

Drop-in gasoline substitutes are still relatively rare; common nomenclature has not yet developed and “renewable gasoline” is still a tentative term. As with ULSD, drop-in fuels can, by definition, be stored in a blend with conventional gasoline.

In contrast to biodiesel, ethanol can be manufactured from a much larger array of waste, starch crops, and eventually woody crops. Hence, one can expect ethanol to increase its market share more strongly relative to biodiesel, and indeed it is already handled in much greater volumes at SeaPort Sound Terminal.

The LCFS, which governs the Central scenario, is designed such that a manufacturer of a drop-in gasoline substitute will recover the financial value of their product whether it is sold separately or blended with conventional gasoline. So it is unlikely (though possible) that SeaPort Sound Terminal will be asked to store drop-in fuels separately from conventional gasoline. Nevertheless, they are modeled as if handled separately. This allows for applied fuel mix scenarios that mirror the market fuel mix scenarios in an intuitive fashion.

The applied fuel mix scenarios allow combined biodiesel and renewable diesel deliveries to increase and displace ULSD deliveries. On the spark-ignition side, a new category for “renewable gasoline” is constrained to be handled like a spark-ignition fuel -- that is, constrained to be stored in IFR tanks. The applied fuel mix scenarios allow combined ethanol and renewable gasoline deliveries to increase and displace conventional gasoline deliveries.

The shares of drop-in and biofuels among fossil substitutes are duplicated from the shares of synthetic and biofuels reported from Washington’s State Energy Strategy report. SeaPort Sound Terminal’s existing volumes of each fossil substitute ethanol, renewable diesel, or biodiesel are held constant (as a fraction of total deliveries) until the market mix “catches up” with the existing volumes.

Applying this methodology results in the road fuel throughput forecasts for the existing SeaPort Sound Terminal as shown in Figure 4a. If tank capacities are modified by the Project, the throughput forecasts change to those shown in Figure 4b.

¹¹ This is a simplification. There are other spark-ignition substitutes like methanol, compressed natural gas, and LPG. Our approach rests on the assumption that ethanol and renewable gasoline will make up the vast majority of liquid fuels that displace gasoline.

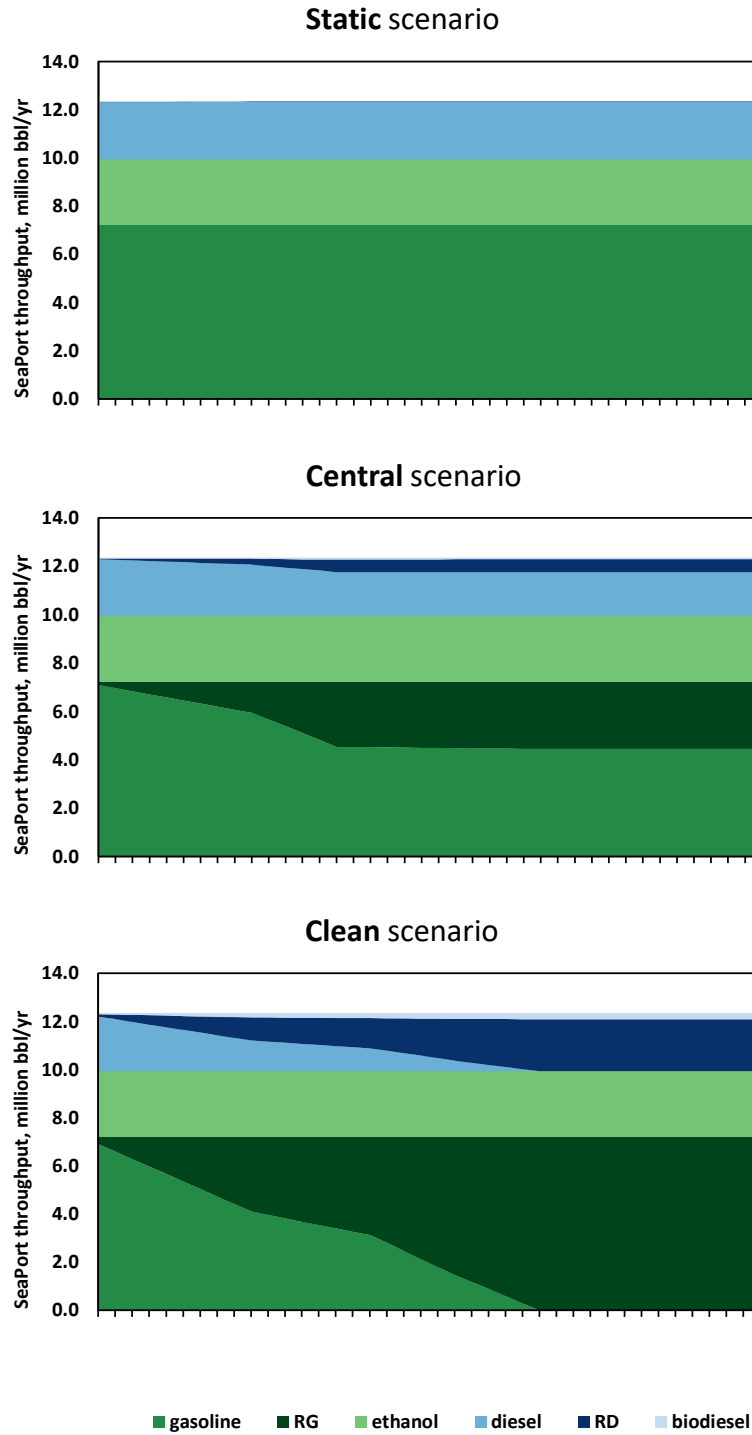


Figure 4a – Road fuel mixes modeled to be handled at SeaPort Sound Terminal, under the No Action alternative. “RG” means renewable gasoline; “RD” means renewable diesel.

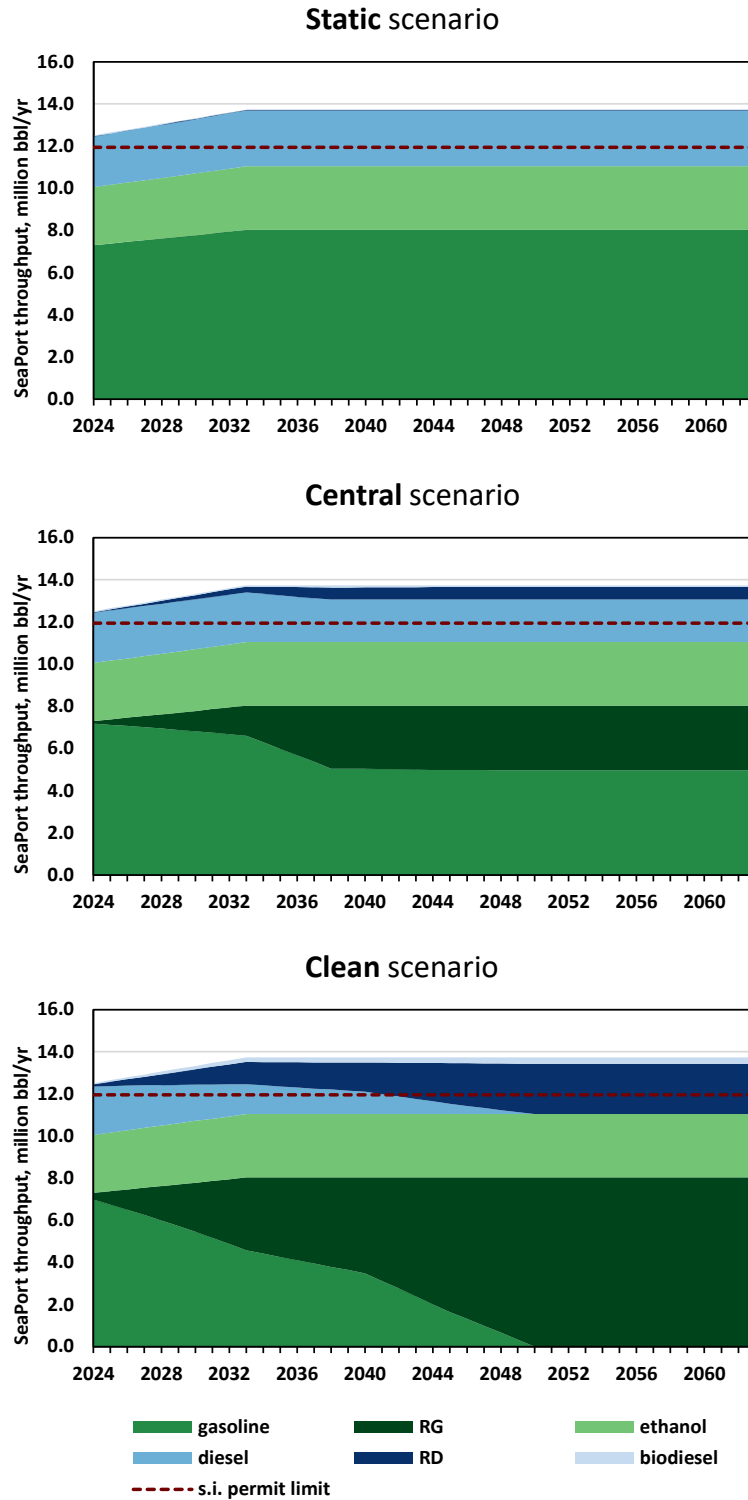


Figure 4b – Road fuel mixes modeled to be handled at SeaPort Sound Terminal, under the Project alternative. The red dashed line represents SeaPort Sound Terminal’s maximum permitted throughput of spark-ignition fuels (the green-shaded categories). “RG” means renewable gasoline; “RD” means renewable diesel; “s.i.” means spark ignition fuels.

Data Requirements

Activity data needed is summarized in a data request memo transmitted to SeaPort Sound Terminal LLC, and available as Annex A to this Study Report. Physical properties of liquids and their emission factors are drawn from the U.S. government-stewarded tools cited in Section *Standards* above.

Assumptions

The following assumptions underlie the GHG emissions forecasts in all six cases (two action alternatives under three scenarios):

1. SeaPort Sound Terminal will remain an ethanol specialist.
2. SeaPort Sound Terminal's mix of non-road fuel products will remain constant indefinitely.
3. SeaPort Sound Terminal will not exceed or lift any product throughput ceiling dictated by existing Puget Sound Clean Air Agency permits.
4. Tacoma Public Utilities' fuel mix for generating electric power will remain constant indefinitely.

Value Choices and Optional Elements

Scenario Approach

Since these inventories are prospective, it is imperative to express uncertainty in a meaningful fashion. Modeling the outcome of each action alternative under three different scenarios ties uncertainty analysis to real-world policy choices.

System Expansion

Changes to throughput product storage capacities effected by the Project can induce changes to use of product storage capacities available elsewhere at the facility, as received products flow more or less to the new tanks. To provide complete data for comparative analysis, the physical boundary is expanded beyond the Project area to include the entire facility regardless of its relationship to the Project.

Limitations

Uncertainty in emissions due to market forces outside the project boundary, may be higher than differences in emissions among evaluated cases.

Offsite emissions associated with product throughput are profoundly larger than onsite emissions¹² associated with construction and facility operation. LCI grand totals, and differences between them, will be driven by throughput effects that swamp construction and operation effects.

Data Quality Requirements

“Data quality requirements” is the 12th item under Subsection 4.2.3.1 “General” in ISO 14044:2006. Subheadings below reflect Subsection 4.2.3.6.2 enumerated items, per the Subsection 4.2.3.6.2 directive, “Where a study is intended to be used in comparative assertions intended to be disclosed to the public, the data quality requirements stated in a) to j) ... shall be addressed.”

(a) Time-Related Coverage

Baseline data shall cover a five-year period beginning January 1, 2016 and ending December 31, 2020. Prospective construction activity shall be modeled beginning January 1, 2022 and ending December 31, 2023. Plant operation shall be modeled beginning January 1, 2024 and ending December 31, 2063.

(b) Geographical Coverage

See discussion at *System Boundary* above.

(c) Technology Coverage

Construction

Construction equipment emissions are modeled at rates relevant for January 2023. Construction equipment emissions will conform to the cross-section of equipment expected to exist at that time in Pierce County, following assumptions and data encoded in the U.S. EPA MOVES 3 model used for the analysis.

Upstream emissions of materials fabrication and transport are drawn from Argonne National Laboratory’s GREET 2020 model, which relies on previously published research for the bulk of its parameters. Upstream emissions of materials fabrication represent the states of technologies at various times prior to the forecast period of construction. But since the vast majority of construction materials are conventional (steel, concrete, and aggregate), there is no reason to believe that the associated materials fabrication or transportation technologies would differ significantly between GREET data collection and our analysis period.

¹² Including offsite emissions associated with electricity consumed onsite.

Operations

Each modeled case is an extrapolation from baseline data that represent equipment in service at SeaPort Sound Terminal during calendar years 2016 - 2020. Each modeled case assumes that facility operations will continue with identical technology throughout the analysis period, with two exceptions:

1. The Project includes a wastewater treatment system upgrade that reduces wastewater treatment electricity consumption approximately 78%; and
2. The Project includes replacement of a boiler with a hot oil heater that reduces associated natural gas consumption approximately 22%.

Throughput

The three scenarios postulate three different progressions of motor vehicle fuel mix during 2024-2063. These imply, in turn, differing pathways for change in both fuel manufacturing technologies and motor vehicle technologies. The Static scenario represents technological stasis – no change in the nature of motor vehicle fuels nor in the mix of spark-ignition vs. compression-ignition demand. Both the Central and State Goal scenarios imply greater change in fuel manufacturing technologies than in motor vehicle technologies: relatively constant motor vehicle technologies demand relatively constant volumes of gasoline-like and diesel-like fuels, and fuel manufacturers alter their practices to make these meet carbon intensity goals.

Alternative technology scenarios could feature more radical changes in motor vehicle technologies such as full electrification (phasing out liquid fuels demand entirely) or mainstreaming of novel, liquid fuels such as ammonia or hydrazine.

(d) Precision

Computed deviations of gross GHG emissions from the Central scenario are +19% and -28% for the Static and State Goal scenarios, respectively (see section *Sensitivity Analysis and Uncertainty* below). Since the ultimate use of these LCI results will be comparative between action alternatives, the baseline activity values need only be nominally more precise than deviations due to the modeled scenarios. Baseline energy consumption and throughput product volumes data received are all accurate to $\pm 5\%$ or better.

(e) Completeness

The following discussion of data completeness conforms to the taxonomy utilized in the Data Request Memo¹³ transmitted to the project proponent.

¹³ Hammerschlag LLC document number SP-004(b).

Construction

1. **Project schedule.** The proposed project schedule is reported by the project proponent to the best of their ability. As a proposed project, the provided schedule is as complete as can be reasonably expected.
2. **Inventory of construction equipment.** Completeness is unknown. See discussion under *Representativeness*.
3. **Demolition waste.** Not received. See discussion under *Cut-Off Criteria and Cut-Offs*.
4. **Landfill data.** Complete.
5. **Bill of materials.** Materials estimates were provided only for steel, concrete, and aggregate,¹⁴ and appear to be back-of-the-envelope estimates. Construction materials data is incomplete.

Operations

6. **Piping & Instrumentation Diagram (PID) or equivalent for the entire, existing facility.** Not received.
7. **Liquid fuel consumption by fixed equipment.** The operator has reported no liquid fuel consumption by fixed equipment.
8. **Liquid fuel consumption by mobile equipment.** The operator has provided a full list of mobile equipment and distances driven. Complete.
9. **Facility electric consumption.** Totals reported from utility billing. Complete.
10. **Facility pipeline gas consumption.** Totals reported from utility billing. Complete.
11. **Inventory of all other emitting equipment.** Complete.

Operations - New Equipment

12. **Inventory of liquid-fueled equipment to be commissioned.** None (complete).
13. **Inventory of electric-fueled equipment to be commissioned.** Complete.
14. **Inventory of pipeline gas-fueled equipment to be commissioned.** Complete.

Throughput

15. **All currently enforceable permits or other documents implying limits to the throughput of petroleum products of any type, or renewable fuel products of any type.** Complete.
16. **Tank inventory.** Complete.

¹⁴ Aggregate as a fill material. Aggregate incorporated within concrete was included in the estimate of concrete quantity.

17. **Inbound products registry.** Receipts of products by volume are known and reported to high precision. However, the distances traveled by each delivery are only reported approximately according to product type. Sufficiently complete.
18. **Outbound products registry.** Distributions of products by volume are known and reported to high precision. However, the distances traveled by each distribution to the next consumer are only reported approximately according to product type. Sufficiently complete.

(f) Representativeness

Construction

Demolition, Construction & Commissioning data were reported by the project proponent to the best of their ability, and were based on a project design documented by the project proponent's engineering consultant. Hence these data are maximally representative of the modeled project.

The project is in a proposal stage, so there is no general contractor available to offer accurate assessments of estimated construction activity. The **inventory of construction equipment** is a best-guess by the project proponent, which is only partially representative of what an eventual general contractor will estimate, but is the most reasonable proxy available.

Operations

Historical operations data were all supplied by the project proponent and facility operator, and hence are maximally representative of actual operations at the facility.

New equipment to be installed as a part of the project was described by the project proponent and facility operator, and hence is maximally representative of planned changes at the facility.

Throughput

Historical throughput data were all supplied by the project proponent and facility operator, and hence are maximally representative of actual throughput at the facility.

Sources and fates of throughput products were reported by the project proponent to the best of their ability. Products are owned and handled by other parties before they arrive and after they depart from SeaPort Sound Terminal. Hence, the project proponent can only estimate based on experience, as to the most likely sources and destinations of products. Data regarding sources and fates of throughput product are partially representative of actual sources and fates (and their associated transport distances).

Scenario Parameters

Baseline market fuel mixes are generated from PADD 5 production data. PADD 5 includes six western U.S. states that correlate relatively well with the domain from and to which SeaPort Sound Terminal receives and ships products. It is ambiguous whether production or consumption data most appropriately represent product flows at SeaPort Sound Terminal, so production was favored because it is more precisely measured by the U.S. EIA than consumption.

The Central scenario is based on legislation that has been signed into law, following the convention of U.S. federal energy forecasting. This is the most representative (most likely) forecast of the future available. Only Washington State legislation is considered, which means that Washington legislation is functioning as a proxy for the collective, weighted impacts of all PADD 5 states' legislation at SeaPort Sound Terminal. Among the PADD 5 states, Washington tends to be less environmentally progressive than the most populous state California but more environmentally progressive than the balance of states, so Washington alternative fuels legislation can be representative of alternative fuels policy in PADD 5 as a whole.

The State Goal scenario is based on Washington's State Energy Strategy. It is aspirational, and represents only SeaPort Sound Terminal's home state rather than PADD 5. Among the PADD 5 states California tends to lead alternative fuels policy by example, so aspirational goals developed for California could be argued to be more representative than those developed for Washington. Nevertheless, SeaPort Sound Terminal's location inside Washington State combined with a fairly heavy weighting toward Western Washington sources and destinations for products, gave the edge to Washington's State Energy Strategy.

The Static scenario is based on no change in market fuel mixes, which grounds the scenario in measured, real, baseline period data. The static scenario is maximally representative of regressive energy policy, that is repeal or legal stays of the legislation underlying the Central scenario.

(g) Consistency

Historical data relating to all five years of the baseline period were gathered simultaneously, under a shared methodology. Hence there are no concerns related to consistency.

(h) Reproducibility

The analysis is fully reproducible. All tables and figures in this report match identical tables found in a single, underlying, Microsoft Excel electronic workbook.¹⁵ Each datum contributing to a figure or table is connected via a formulaic path to historical operating or market data,

¹⁵ Hammerschlag LLC, *SP-002f GHG Life Cycle Inventory.xlsb*, October 2021.

emission factors, assumptions, or other constants. Each constant is associated with its respective source, and sources are supplied in a bibliography.

(i) Sources of the Data

The project proponent provided all facility operating data, including baseline period product throughputs. The project proponent is also the facility operator, so operating data was compiled from its primary source. Audit-quality checks of data (comparisons against third-party records or instrument readings) were considered outside the scope of this study.

Emission factors and scenario parameters were obtained from the highest-quality available, federal resources whenever possible. If federal data were unavailable, values from peer-reviewed literature were utilized instead.

(j) Uncertainty

See discussion at *Sensitivity Analysis and Uncertainty* below.

Critical Review

Critical review was supplied by the supervising consultant, Anchor QEA.

Report Format

The report format is consistent, to the maximum extent possible, with requirements of ISO 14044:2006, and specifically those requirements applicable to life-cycle inventories.

Inventory Analysis

Impact Categories

The inventory includes the single impact category: greenhouse gases (GHGs).

GHGs included are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Individual gas emissions are converted to metric tons of carbon dioxide equivalent (tCO₂e) according to the 100-year global warming potentials (GWP) reported in the IPCC Fifth Assessment.¹⁶ One metric ton of CO₂ emissions equals one tCO₂e. One metric ton of CH₄ emissions equals 28 tCO₂e. One metric ton of N₂O emissions equals 265 tCO₂e.

Emissions of Construction

Emissions of construction were derived from the inventory of equipment provided by the project proponent. For each piece of equipment, energy demand in horsepower-hours (hp-h) was computed as:¹⁷

$$\text{energy demand (hp-h)} = \text{power (hp)} \times \text{service (wk)} \times \text{utilization (h/wk)} \times \text{load factor}$$

Service was set at 26 weeks (wk) for all machinery, and *utilization* at 40 hours per week (h/wk). *Power* in horsepower (hp) is an engine specification unique to each piece of equipment. *Load factors* are unitless and were provided by the project proponent as reported in Table 3.

Emissions of each greenhouse gas due to each piece of equipment was related to energy demand as follows:

$$\text{emissions (tCO}_2\text{e)} = \text{energy demand (hp-h)} \times \text{emission factor (g/hp-h)} \times \text{GWP (gCO}_2\text{e/g)} \times 10^{-6} \text{ t/g},$$

with each *emission factor* in grams per horsepower-hour (g/hp-h) drawn from a Pierce County-specific run of the U.S. EPA MOVES model in the cases of CO₂ and CH₄, and from a U.S. EPA table of national-average emission factors¹⁸ in the case of N₂O.

¹⁶ Greenhouse Gas Protocol, "Global Warming Potentials" (World Resources Institute, 2016).

¹⁷ Units used in equations throughout the section *Inventory Analysis* are illustrative – calculations in the underlying workbook may utilize different units, or incorporate conversion factors to match units. The illustrative units reported here are chosen to be those occurring most frequently in the workbook.

¹⁸ U.S. EPA Center for Corporate Climate Leadership, "Emission Factors for Greenhouse Gas Inventories" (U.S. Environmental Protection Agency, April 1, 2021), https://www.epa.gov/sites/production/files/2015-12/documents/emission-factors_nov_2015.pdf.

construction equipment	power	load		emissions			
		hp	factor	CO ₂	CH ₄	N ₂ O	GHGs
				kg	kg	kg	tCO ₂ e
John Deere 345G Excavator	249	40%		56,143	0.21	2.61	56.8
John Deere 644K Front End Loader	249	40%		55,935	0.43	2.61	56.6
Ingersol Rand VR-530G Forklift	100	65%		38,464	0.39	1.70	38.9
John Deere 50G Excavator	36	25%		5,073	0.02	0.24	5.1
Volvo EC140 Excavator	121	30%		20,462	0.08	0.95	20.7
Sky Jack VR1044E Forklift	110	65%		42,311	0.42	1.87	42.8
TOTALS				218,388	1.55	9.97	221

Table 3 – On-site emissions of construction.

Emissions for fabrication & transport of materials consumed in construction were derived from the bill of materials utilizing emission factors drawn from the Argonne National Laboratory GREET model:

$$\text{emissions (tCO}_2\text{e)} = \text{material demand (ton)} \times \text{emission factor (g/ton)} \times \text{GWP (gCO}_2\text{e/g)} \times 10^{-6} \text{ t/g,}$$

with results shown in Table 4.

material	quantity		GHGs
		ton	tCO ₂ e
steel		1,300	3,495
concrete		1,620	141
aggregate		16,605	98
TOTAL			3,734

Table 4 – Upstream emissions of materials consumed during construction.

Emissions of Operations

Emissions of operations are different under the Project alternative versus No Action because the project replaces some of the facility equipment, and because the project expands the facility's capacity. However, operations emissions are largely unaffected by the quantity of renewable versus fossil fuels in the throughput product mix, so the operations emissions are considered to be responsive only to action not to scenario.

Project emissions are computed by assigning emission factors to measured natural gas, electricity, and liquid fuels consumption at the SeaPort Sound Terminal facility (Table 5).

energy source	No Action		Project	
	annual	cum.	annual	cum.
	2063	2024-2063	2063	2024-2063
	tCO _{2e}	MtCO _{2e}	tCO _{2e}	MtCO _{2e}
natural gas	7,107	0.28	7,596	0.30
electricity	170	0.01	186	0.01
gasoline	12	0.00	13	0.00
diesel	9	0.00	10	0.00
TOTALS	7,298	0.29	7,805	0.31

Table 5 – Emissions of Operation under the two modeled actions.
“cum.” means cumulative; “MtCO_{2e}” means million tCO_{2e}.

Average annual emissions during the baseline period are computed from utility bill data and equipment records. Under the No Action alternative, the average annual emissions continue unchanged throughout the analysis period. Under the Project alternative, average annual emissions of electricity and natural gas are initially decremented according to energy savings of the wastewater treatment equipment and boiler change-outs, respectively. From that point forward, facility consumption of all fuels is modeled to increase proportionally to volume-basis, gross throughput.

Offsite Emissions Associated with Product Throughput

Offsite emissions associated with product throughput arise from three unit processes: upstream refining & transport; downstream transport; and combustion. Within each market scenario, the quantities of products handled each year are computed in volume units of barrels (bbl) according to the method outlined in Section *Applied Fuel Mix Scenarios* above. From quantities of product handled, emissions are computed according to the formula:

$$\text{net combustion emissions (tCO}_2\text{e)} = \text{fuel quantity (bbl)} \times [\text{EF}_{\text{combustion}} \text{ (tCO}_2\text{e/bbl)} + \text{EF}_{\text{feedstock cultivation}} \text{ (tCO}_2\text{e/bbl)} - \text{feedstock sequestration rate (tCO}_2\text{e/bbl)}]$$

where $EF_{\text{combustion}}$ is the emission factor of combustion, and $EF_{\text{feedstock cultivation}}$ is the emission factor of feedstock cultivation, including planting, harvesting, and fertilizer decay. For fossil fuels $EF_{\text{feedstock cultivation}}$ and $\text{feedstock sequestration rate}$ are zero, but for biogenic fuels these two values are summed with $EF_{\text{combustion}}$ to create the sense of “net combustion” that has become the convention in biofuels policy discussions.

Non-combustion emissions are computed as follows:

$$\text{non-combustion emissions (tCO}_2\text{e)} = \text{fuel quantity (bbl)} \times [\text{EF}_{\text{upstream}} \text{ (tCO}_2\text{e/bbl)} + \text{EF}_{\text{downstream}} \text{ (tCO}_2\text{e/bbl)}]$$

EF_{upstream} is drawn directly from GREET,¹⁹ while $EF_{\text{downstream}}$ is computed manually according to transport distances estimated by the project proponent.

¹⁹ GREET defaults to nominal values for fuel and feedstock transportation distances appropriate for applications in the United States.

Total emissions during the analysis period under each of the three scenarios are shown for No Action in Table 6.

product	Static scenario			Central scenario			State Goal scenario		
	com- bustion	non-com- bustion	total	com- bustion	non-com- bustion	total	com- bustion	non-com- bustion	total
	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>
gasoline	105.0	22.5	127.5	73.6	15.8	89.4	34.0	7.3	41.3
renewable gasoline	0.0	0.0	0.0	4.3	2.4	6.8	9.8	5.5	15.3
ethanol	6.2	12.9	19.1	6.2	12.9	19.1	6.2	12.9	19.1
diesel	40.7	8.5	49.2	33.1	6.9	40.0	12.6	2.6	15.2
renewable diesel	0.0	0.0	0.1	0.8	1.1	2.0	2.9	4.0	6.9
biodiesel	0.0	0.1	0.1	0.0	0.3	0.3	0.0	1.0	1.0
fuel oil	42.0	8.6	50.6	42.0	8.6	50.6	42.0	8.6	50.6
asphalt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
crude	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
propane	1.8	0.3	2.1	1.8	0.3	2.1	1.8	0.3	2.1
transmix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	196	53	249	162	48	210	109	42	151

Table 6 – Emissions associated with product throughput, under No Action. Emissions from spark ignition and compression ignition road fuels respond to the policy environment. In contrast, emissions from other throughput products are identical under all three scenarios. “MtCO_{2e}” means million tCO_{2e}.

Emissions under the Project action are shown in Table 7. Emission factors used to generate Table 7 are identical to those used to generate Table 6; only the quantities of throughput products differ.

product	Static scenario			Central scenario			State Goal scenario		
	com- bustion	non-com- bustion	total	com- bustion	non-com- bustion	total	com- bustion	non-com- bustion	total
	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>	<i>MtCO_{2e}</i>
gasoline	115.3	24.7	139.9	80.5	17.2	97.7	36.7	7.9	44.5
renewable gasoline	0.0	0.0	0.0	4.8	2.7	7.5	10.9	6.1	17.0
ethanol	6.8	14.2	20.9	6.8	14.2	20.9	6.8	14.2	20.9
diesel	44.7	9.3	54.0	36.2	7.5	43.8	13.5	2.8	16.3
renewable diesel	0.0	0.1	0.1	0.9	1.3	2.2	3.2	4.4	7.6
biodiesel	0.0	0.1	0.1	0.0	0.3	0.3	0.0	1.1	1.1
fuel oil	46.1	9.5	55.6	46.1	9.5	55.6	46.1	9.5	55.6
asphalt	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2
crude	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
propane	1.9	0.3	2.3	1.9	0.3	2.3	1.9	0.3	2.3
transmix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	215	58	273	177	53	230	119	46	166

Table 7 – Emissions associated with product throughput, under the Project action.

Interpretation of Results

Summary of Inventory

SeaPort Sound has control over emissions of construction and emissions of plant operations, but has nearly no control over emissions associated with product throughput (see discussion in *Causality* below). The two groups of emissions are treated separately here.

Emissions over which SeaPort Sound has control are summarized in Figure 5, for both the No Action and Project alternatives. Emissions are shown as cumulative values, for consistency with eventual assessments of gross Project impact to the atmosphere.

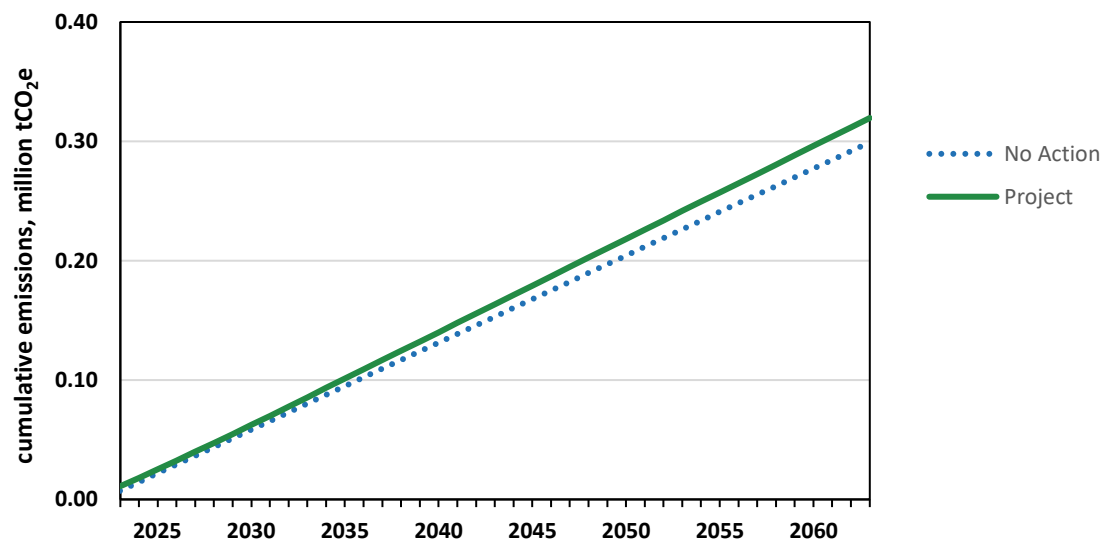


Figure 5 – Cumulative emissions associated with Project construction and SeaPort Sound Terminal operation from January 1 2024 through December 31 2063. To simplify presentation of results Project-case construction emissions accrue as of January 1 2024, though they occur between January 1 2022 and December 31 2023.

Figure 5 includes emissions of construction and operations. Emissions of construction are computed under the assumption that they occur during calendar years 2022-2023, but accrue to the cumulative results during calendar year 2024 for simplicity of presentation. As of 2063, cumulative construction and operation emissions will be 0.313 million tCO₂e in the Project alternative, and 0.292 million tCO₂e in the No Action alternative.

Emissions over which SeaPort Sound has little to no control are summarized in Figure 6, for both the No Action and Project Alternatives.

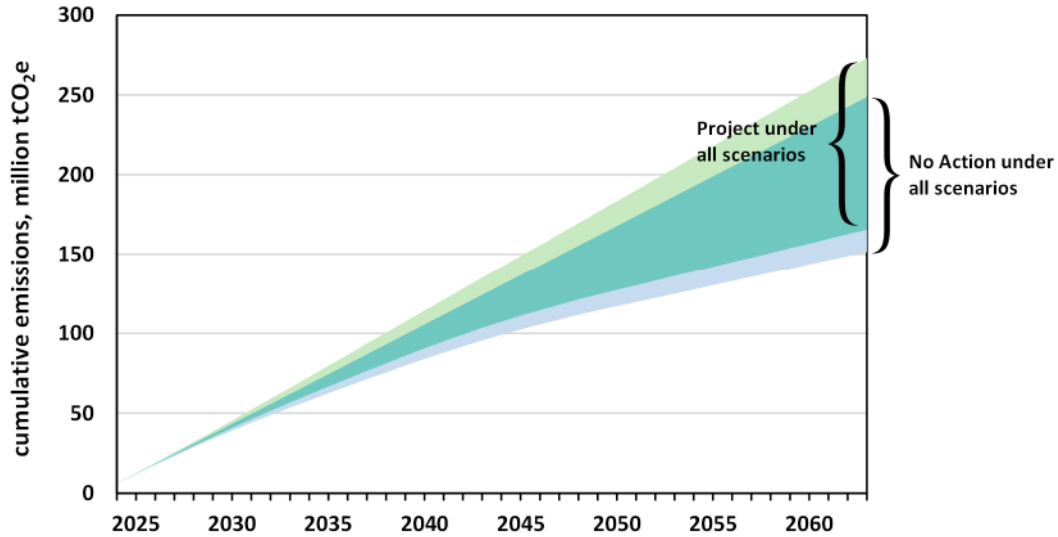


Figure 6 – Cumulative throughput emissions. The blue region represents the range of possible outcomes under the No Action alternative, and the green region represents the range of possible outcomes under the Project alternative.

Figure 6 describes the range of cumulative, throughput emissions that could result under the suite of scenarios evaluated. Potential throughput emissions associated with the No Action alternative appear as a blue wedge, and potential emissions associated with the Project alternative appear as a green wedge. The upper edge of each wedge represents the *Static* scenario, and the lower edge of each wedge represents the *State Goal* scenario. The two wedges overlap substantially, visible as a turquoise-colored area.

Numeric values for cumulative emissions in the six cases (the right-hand ends of the traces in Figure 5 and Figure 6) are summarized in Table 8.

action	cumulative emissions, million tCO ₂ e					
	Static scenario		Central scenario		State Goal scenario	
	construction operation	throughput	construction operation	throughput	construction operation	throughput
No Action	0.292	249	0.292	210	0.292	151
Project	0.313	273	0.313	230	0.313	166

Table 8 – Cumulative emissions over the 2022-2063 analysis period.

Causality

This report presents six attributional GHG inventories, which beg comparison through computing their differences. However, great care should be taken in inferring a consequential

inventory from attributional inventories. Indeed, substantial literature has been published warning specifically against this tempting exercise.²⁰

In the specific case here, the principal guiding document (City of Tacoma Scoping Document) requires consideration of upstream and downstream emissions of product throughput, that are largely if not entirely out of SeaPort Sound Terminal's control. Changes at SeaPort Sound Terminal are unlikely to impact either the regional demand for product liquids, or the manner in which those products are manufactured. Indeed, the only likely impact on the greater fossil fuels market is to change the pathways that the fixed quantities of fuels take from their manufacturers to their consumers.

Quantifying an apparent change to global GHGs as a difference between two throughput inventories would lead to profound overestimates of real-world impact.

Sensitivity Analysis and Uncertainty

The scenarios approach to this prospective LCI satisfies the requirement for sensitivity analysis given in the guiding ISO standards. Under the Project alternative, cumulative, absolute emissions from Table 8 vary from the Central scenario by +18.5% to -28.1% for the Static and State Goal scenarios, respectively. Under the No Action alternative, emissions vary +18.3% to -27.9%.

²⁰ See, for example: Richard J. Plevin, Mark A. Delucchi, and Felix Creutzig, "Using Attributional Life Cycle Assessment to Estimate Climate-Change Mitigation Benefits Misleads Policy Makers: Attributional LCA Can Mislead Policy Makers," *Journal of Industrial Ecology* 18, no. 1 (February 2014): 73–83, <https://doi.org/10.1111/jiec.12074>.

Annex A – Data Request Memo

MEMO

Subject: Carbon footprint study data requirements – SeaPort Sound plant modernization project.

From: Roel Hammerschlag

To: Matthew Kolata, TransMontaigne Partners LLC
Troy Goodman, TransMontaigne Partners LLC

Date: July 8, 2021

Doc. no.: SP-004(b)

Background

The City of Tacoma has requested that SeaPort Sound Terminal provide an Environmental Impact Statement (“EIS”) as a condition of authorizing the SeaPort Sound Terminal Modernization Project (“the Project”), city of Tacoma file number LU20-0107. An EIS Scoping Document issued by the City of Tacoma requires that the EIS include a “Life-cycle greenhouse gas analysis of the additional products stored on site – extraction, transportation, and consumption.” (“Carbon Footprint Study” or “the Study”)

Additionally, EIS Scoping Document item E(2)(b) requires assessment of greenhouse gas (GHG) emissions “from demolition, construction and decommissioning of onsite facilities.” Not stated in the EIS Scoping Document, but included for completeness, will be GHG emissions from facility operation.

This memo describes my best estimate at this time, of data needed to complete the Carbon Footprint Study and to assess GHG emissions from demolition, construction, decommissioning, and operation. As the Study proceeds I may discover additional data requirements, or I may need to adjust the definitions of some datasets.

Data Period

Historical operating and throughput data must cover a single five-year data period for conformance with EIS Scoping Document item D(2)(d). Provide historical data disaggregated by year, as five-point time series’ for calendar years 2016 through 2020 inclusive.

Demolition, construction and (de)commissioning data must cover the entire, planned period of demolition, construction & (de)commissioning. Temporal disaggregation is unnecessary.

Prospective operating data should be modeled to represent one complete year of stable operation following commissioning of the project. Do not include any transient operations related to commissioning.

Dataset

Please provide the most complete possible dataset as follows:

Demolition, Construction & Commissioning

1. Project schedule.

This can be very high level. Its primary purposes are to (a) validate (“idiot-check”) deployment and duty reported in item (2) Inventory of Construction Equipment; and (b) document & justify the anticipated start date of project operation.

2. Inventory of construction equipment.

For each piece of equipment used in construction supply:

- a) short description (*e.g.* “dump truck, 14 CY”)
- b) engine size (hp)
- c) fuel use rate (gal/hr)
- d) deployment (months)
- e) duty while deployed (hours/week)
- f) average load factor when on duty (%)

Hammerschlag LLC will assume each engine combusts diesel fuel unless you indicate otherwise.

3. Demolition waste.

Demolition waste should be disaggregated into the default taxonomy given for item (5) Bill of Materials below (except, that cement and aggregate will appear as “concrete” instead), with additional rubrics as necessary. Including a rubric for mixed waste is acceptable, as long as that rubric is designated to be 100% landfilled. For each rubric, provide:

- a) description of material type (*e.g.* “structural steel”)
- b) total mass produced by demolition (lb, ton, or kg)
- c) fraction of mass that will be re-used on site;
- d) fraction of mass that will be recycled off site;
- e) fraction of mass that is landfilled.

Items (c) (d) and (e) should sum to 100%, unless a special exception has been communicated to Hammerschlag LLC.

4. Landfill data.

- a) name;
- b) location; and
- c) methane recovery fraction, if known.

5. Bill of materials.

Please provide masses (*e.g.* lb, ton, or kg) of each material expected to be used in new construction. The mass quantities should be *inclusive* of re-used demolition waste. The following taxonomy of materials is customary and adequate for life-cycle assessment of typical industrial projects, but finer taxonomies and/or additional rubrics are acceptable:

- a) structural steel;
- b) stainless steel;
- c) aluminum;
- d) copper;
- e) rebar;
- f) cement;
- g) aggregate;
- h) asphalt; and
- i) wood.

Historical Operations

6. Piping & Instrumentation Diagram (PID) or equivalent for the entire, existing facility.

This serves two purposes. (a) We will use it as our primary exhibit in discussions toward defining the analysis boundary; and (b) it will be used to validate the equipment inventories.

PID should represent the facility as of December 31, 2020, but provide notes if any significant changes occurred between January 1, 2016 and December 31, 2020.

7. Liquid fuel consumption by fixed equipment.

For each unit of fixed equipment provide:

- a) short description or identifier;
- b) continuing vs. legacy; (*see explanation at item (9)*)
- c) type of fuel (gasoline, diesel, etc.); and
- d) fuel consumption during the data period (disaggregated by year); **or** if fuel consumption is unknown, then operating characteristics:
 - horsepower + duty, *or*
 - operating hours + fuel flow rate (gal/hr).

8. Liquid fuel consumption by mobile equipment.

Provide combined, mobile equipment fuel consumption during the data period, disaggregated by year and disaggregated by fuel. If bio-fossil fuel blends are used, inventory each blend (B10, E85, etc.) separately.

9. Facility electricity consumption.

Disaggregate consumption between *continuing* equipment that will operate after the project, versus *legacy* equipment that will cease to operate as a consequence of the project. If any electric meters host both continuing and legacy equipment, then provide engineering estimates of the meter share drawn by each.

10. Facility pipeline gas consumption.

Disaggregate consumption between continuing and legacy equipment. If any gas meters host both continuing and legacy equipment, then provide engineering estimates of the meter share drawn by each.

11. Inventory of all other emitting equipment.

Describe any other equipment that is known to emit either conventional air pollutants or GHGs. Distinguish between continuing and legacy equipment.

New Equipment

12. Inventory of liquid-fueled equipment to be commissioned.

Fixed and mobile equipment may be mixed in a single inventory. Multiple units meeting a single equipment specification may be combined in a single record. For each inventory record provide:

- a) short description or identifier;
- b) number of units to be commissioned;
- c) type of fuel (gasoline, diesel, etc.); and
- d) annual fuel consumption; **or**
if fuel consumption is unknown, then operating characteristics:
 - horsepower + duty, *or*
 - operating hours + fuel flow rate (gal/hr).

13. Inventory of electric-fueled equipment to be commissioned.

For each inventory record provide:

- a) short description or identifier;
- b) number of units to be commissioned;
- c) power rating (kW); and
- d) operating hours per year.

14. Inventory of pipeline gas-fueled equipment to be commissioned.

For each inventory record provide:

- a) short description or identifier;
- b) number of units to be commissioned;

- c) gas demand (mmBtu/hr or therm/hr); and
- d) operating hours per year.

Sources, Throughput, and Fates

15. All currently enforceable permits or other documents implying limits to the throughput of petroleum products of any type, or renewable fuel products of any type.

We are already in possession of Puget Sound Clean Air Agency Orders of Approval for NOC 11069 and NOC 11403, so you may omit those two documents from your response.

16. Tank inventory.

Inventory of existing tanks, indicating for each:

- a) unique name, number, or other designator;
- b) volume capacity;
- c) product categories the tank is *physically* capable of accepting;
- d) product category the tank contained on December 31, 2020;
- e) any authorized restrictions on the tank's use; and
- f) a description of changes to the tank's disposition expected during or after the plant modernization project, if any.

17. Inbound products registry.

Registry of all inbound products. Data must be disaggregated by year and cover the standard data period. Each registry record should include the following fields:

- a) unique name of the source (o.k. to disguise confidential business information ("CBI") as needed);
- b) calendar year covered;
- c) total volume;
- d) product category;
- e) mode of transport to SeaPort (pipeline, rail, truck, or marine); and
- f) distance to source.

Where sources are unknown or ambiguous, bundle like receipts into any convenient, named grouping of your choice. A valid value of (c) *total volume* is required for every registry record. The remaining fields may contain unknown or ambiguous values as needed.

If it is more convenient, you are welcome to provide disaggregated data at the BOL level. In this case, replace field (b) *calendar year covered* with (b) *date of receipt*.

18. Outbound products registry.


Registry of all outbound products. Data must be disaggregated by year and cover the standard data period. Each registry record should include the following fields:

- a) unique name of the destination (o.k. to disguise CBI as needed);
- b) calendar year covered;
- c) total volume;
- d) product category;
- e) character of use (distribution, refinery feedstock, fuel, lubricant, solvent, other);
- f) mode of transport (truck or marine);
- g) distance to destination.

Where destinations are unknown or ambiguous, bundle like loadings into any convenient, named grouping of your choice. A valid value of (c) *total volume* is required for every registry record. The remaining fields may contain unknown or ambiguous values as needed.

If it is more convenient, you are welcome to provide disaggregated data at the BOL level. In this case, replace field (b) *calendar year covered* with (b) *date of loading*.

Respectfully submitted,



Roel Hammerschlag, Principal
Hammerschlag LLC
tel. 360-339-6038
roel@hammerschlag.llc

Appendix B

Distribution List

DEIS Distribution

Notice of Availability for the DEIS was provided to all of the following parties, directing them to the project web page at www.cityoftacoma.org/SeaportPlantModernizationDEIS. The document was also posted to the Washington Department of Ecology SEPA Register, and a paper copy was made available at the Tacoma Public Library Main Branch. Materials are also available upon request.

Notice was also posted in the Tacoma Daily Index.

SEPA Distribution List

Neighborhood Councils	
Central	chair@cnc-tacoma.com
East Side	enact@live.com
New Tacoma	info@newtacomaneighbors.org
North End	officers@nenc.org
Northeast	yvonne.mccarty@comcast.net
South End	senco253@gmail.com
South Tacoma	board@southtacoma.us
West End	wenc@we-tacoma.org
Community Council of Tacoma	tylers65@gmail.com
Neighborhood/Business Groups	
Marshall McClintock, Chair	marshalm@q.com
Shawn Contento (President)	shawn@contentofinancialplanning.com
Billy Frederick (Vice President)	billy@chaletbowl.com
Karen Bowes (Secretary)	pfmarket@proctorfarmersmarket.com
Tonya Schneider (Treasurer)	tonya@compassrose.com
Marva Pelander	mpelander2@yahoo.com
Ruth Dalenius (President)	ruthnshoeu@gmail.com
Nancy Muse (Vice President)	mybayview@gmail.com
Afton Podolak (Secretary)	apodolak@ahbl.com
Pauline Zeitler (Treasurer)	pzeitler@columbiabank.com
Christina Smyre (President)	christinasmyre@gmail.com
Elizabeth Stewart (Vice President)	elizabeth.stewart@tapcocu.org
Angie Lokotz	angelokotz@gmail.com
Sharon Benson (President)	sharon@sharonbenson.com
Ethan Wing (BC)	ethanwing@windermere.com
Eric Jacobsen (Secretary)	ejacobsen@fpctacoma.com
Gloria Tucci (Treasurer)	gloriatucci@hotmail.com
Kristi Duke	kristi.stadiumdistrict@gmail.com
Mike Bowerman	mike@americanpawnbroker.com
Joseph Harper (President)	harperlawoffices@comcast.net

Shawn Tibbitts (Vice President)	tibbittsfernhill@outlook.com
Sherri Williams (Secretary)	minibreakmassage@aol.com
Marlene Evans (Treasurer)	beontime1@comcast.net
Oanh Lam (President)	loridashaircare@yahoo.com
Andy Chang (Vice President)	eat755@gmail.com
Hays Alexander (Treasurer)	fthill2003@yahoo.com
Huy Nguyen (Cultural Liasion)	vaiolife@yahoo.com
Tay Bui	cafelavie3724@yahoo.com
South Tacoma Business District Association	info@stbda.com
Pete Bristow (President)	pete@bristowsauto.com
Brian Arnold (Vice President)	barnold@farmersagent.com
Cindy Atwood (Secretary)	cindy.atwood@heritagebanknw.com
Karen Rich (Treasurer)	karen@securityrus.com
Larry Henning	larryhenning13@yahoo.com
Brendan Nelson	hacoffice15@gmail.com
Christina Smyre (President)	christinasmyre@gmail.com
Elizabeth Stewart (Vice President)	elizabeth.stewart@tapcocu.org
Angie Lokotz	angelokotz@gmail.com
Anthony Steele (President)	assteele@msn.com
Jennifer English (Vice President)	spuntacoma@gmail.com
Anne Artman (Secretary)	anneartman@mcfhc.org
Michelle Marconi (Treasurer)	drmarconi@marconicw.com
Joseph Atkinson (President)	Joeatkinson1@yahoo.com
Carol Velez (Vice President)	cvelez@franktobeyjones.com
Timothy Bridges (Secretary)	timothy.bridges@edwardjones.com
John Trueman (Treasurer)	jtrueman@valbridge.com
Sharon Benson (President)	sharon@sharonbenson.com
Ethan Wing (BC)	ethanwing@windermere.com
Eric Jacobsen (Secretary)	ejacobsen@fpctacoma.com
Gloria Tucci (Treasurer)	gloriatucci@hotmail.com
Kristi Duke	krisit.stadiumdistrict@gmail.com
Janice McNeal (President)	janicemcneal@janicemcneal.com
PJ Hummel (Vice President)	pj@pjhummel.com
Shylah Hales (Secretary)	shylah.hales@diamondparking.com
David D'Aniello (Treasurer)	David.daniello@gmail.com
Adjacent Jurisdictions	
Federal Way	planning@cityoffederalway.com
Fife	sfriddle@cityoffife.org
Fircrest	jwestman@cityoffircrest.net
Lakewood	FFiori@cityoflakewood.us
University Place	dswindale@cityofup.com
Pierce County	lhankel@co.pierce.wa.us

City Council Staff	
Victoria Woodards	victoria.woodards@cityoftacoma.org
John Hines	john.hines@cityoftacoma.org
Sarah Rumbaugh	srumbaugh@cityoftacoma.org
Keith Blocker	keith.blocker@cityoftacoma.org
Catherine Ushka	catherine.ushka@cityoftacoma.org
Joe Bushnell	jbushnell2@cityoftacoma.org
Kiara Daniels	kdaniels@cityoftacoma.org
Olgy Diaz	odiaz@cityoftacoma.org
Kristina Walker	kristina.walker@cityoftacoma.org
Staff:	Haley Campbell, Chantra Real
Other Interested Parties	
Communities for a Healthy Bay	mmalott@healthybay.org
Communities for a Healthy Bay	edilworth@healthybay.org
Puyallup Tribe of Indians	andrew.strobel@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	char.naylor@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	brandon.reynon@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	carolann.hawks@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	jeffrey.thomas@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	lisa.Anderson@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	Charlene.matheson@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	Russ.ladley@puyalluptribe-nsn.gov
Puyallup Tribe of Indians	separeview@puyalluptribe-nsn.gov
Puget Sound Clean Air Agency	SEPA@pscleanair.org
Port of Tacoma	twarfield@portoftacoma.com
Tacoma-Pierce County Health Department	sepa@tpchd.org
Department of Archaeology and Historic Preservation	sepa@dahp.wa.gov
WA Department of Fish and Wildlife	R6SSplanning@dfw.wa.gov
US Army Corps of Engineers	jenae.churchill@usace.army.mil
US Environmental Protection Agency	barton.justine@epa.gov
Department of Ecology, Shorelines	zmey461@ecy.wa.gov
Northwest Seaport Alliance	dwilson@nwseaportalliance.com

Public Comment on Determination of Significance/Scoping Notice

Alana Hall	alana.hall9@gmail.com
Alexa Fay	alexafpfay@gmail.com
Aliza Yair	alizabethannah@gmail.com
Andrea Gruszecki	innerlight.ws@gmail.com
Andrea O'Ferrall	andreaoferrall@comcast.net
Anita Woodruff	anitaw1610@gmail.com
Aries Dial	ariesh21@yahoo.com
Asphodel Denning	asphodeldenning@hotmail.com
Barbara Bonfield	bgbonfield@gmail.com
Barbara Stevenson	bbstvnsn15@gmail.com
Bradley Barton	barton.bradley3@gmail.com
Brandon Juhl	brandon.juhl@gmail.com
Brenda Cummings	brensiv2@yahoo.com
Carolyn Treadway	Cwt2014@PlanetCare.us
Cherie Jackson	cjack105@gmail.com
Christy B	christyb4@comcast.net
Christy Bear	christy2@softbear.com
Craig Jacobrown	CJACOBROWN@GMAIL.COM
Danial Border	ddddddanial@gmail.com
Daniel Villa	dan@350tacoma.org
Davis Freeman	davis@davisfreeman.com
Derek Benedict	dsbened@frontier.com
Diane Burke	Gogirl315@gmail.com
Diane Shaughnessy	Dshau1@aol.com
Diane Shaughnessy	dshau1@aol.com
Eddie Goldstein	elmerofness@hotmail.com
edward Goldstein	elmerofness@hotmail.com
Elizabeth Cunningham	arcticgrandma@gmail.com
Erin Johnson	ecopley18@msn.com
Esther Kronenberg	wekrone@gmail.com
Gill Fahrenwald	anvilman@orcalink.com
Gillian Locascio	simplygillian@hotmail.com
Grace Hope	gracehope@gmail.com
Gregory Denton	greg.denton@gmail.com
Irene Bensinger	irene@trilliumwoods.com
Jacob Bailey	wraith1317@gmail.com
Jacquelyne Fisher	jfisher@harborwellbeing.com
James Probert	jeprobert@nventure.com
Janeen Provazek	provaj@hotmail.com
Janeen Provazek	provaj@hotmail.com
Jared Howe	jaredchowe@gmail.com

Jean Berolzheimer	jeanberolz@gmail.com
Jeanne Poirier	jeannepoirier@yahoo.com
Jenny Call	jennylynncall@gmail.com
Jenny Price	jennywprice@gmail.com
Jody Wright-Tenenberg	jwrightten@gmial.com
Joel Carlson	fox7799@gmail.com
JOHN DOHERTY	johnwdoherty@gmail.com
John Finkas	johnfinkas@gmail.com
Julie Andrzejewski	julieruth17@gmail.com
Kathy Porter	maegwin123@gmail.com
Katie Barlow-Farrar	katiebarlow95@gmail.com
Katie Hohnstein-Van Etten	kevanetten@gmail.com
Kenra Brewer	kenrabrewer@gmail.com
Kevin Gallagher	kevingal@uw.edu
Kim s	mattphotos@quidnunc.net
Lauren Tozzi	lrntozzi2@gmail.com
Lesley Paine	LesleyP26@gmail.com
Lin Hagedorn	mountainclimber4@gmail.com
Linda Cohan	lcohan1234@msn.com
Linda Cohan	lcohan1234@msn.com
Linda Hood	hoodwhite2@gmail.com
Linda Wasserman	coolauthor2@gmail.com
Liz Campbell	zil1000campbell@gmail.com
Lori Stefano	lorilstefano@gmail.com
Lorna Walker	lorniewalker@gmail.com
Lynne ashton	lynnewashton@gmail.com
Malakay Betor	malakay.list@gmail.com
Martha Bishop	martyl.bishop@gmail.com
Matt Johnson	northfalke@gmail.com
Matthew Boguske	matthew.boguske@gmail.com
Melodi Yanik	meloyanik@hotmail.com
Merri Whipps	merri.whipps@gmail.com
Michael and Barbara Hill	theelbehills@gmail.com
m'lou christ	Mnortie@yahoo.com
Nancy Farrell	nfarrellwa@gmail.com
Nancy Hausauer	nancy@nancyhausauer.com
Niki Quester	nikiq@centurytel.net
Pam Beal	pambeal@gmail.com
Pat Villa	padavilla@hotmail.com
Pete Stoppani	pete@stoppani.net
Phil Ritter	philtr@sonic.net
Rachel Wilson	wolfre26@yahoo.com
Radka Chapin	radka.chapin@gmail.com

Rob Briggs	rsb@turbonet.com
Roberta R Czarnecki	bonrosec@gmail.com
Roger Martin	fbrogert@yahoo.com
Rosemarie Wiegman	danceinmygarden@yahoo.com
Roxanne Ray	agonista@hotmail.com
Russell Dial	radial75@gmail.com
Russell Parks	russellpparks@gmail.com
Rusty West	rustytwest@gmail.com
Sara Bhakti	sarabhakti@yahoo.com
Sara Gratz	saracgratz@gmail.com
Sara Woodward	heverwood@nventure.com
Sarah Dunn	7sdunn@gmail.com
Sarah Meaden	10thdoctorsscarf@gmail.com
Savannah Lauritzen	savannahdawn04@hotmail.com
Scott McClay	scottmc@riseup.net
Scott Species	sspecies@yahoo.com
Shaina Kilpatrick	skilpatrick03@gmail.com
Sharon Miller	smilertoo@aol.com
Stacy Oaks	eddyssunprincess@gmail.com
Steven Storms	storms123@aol.com
Summer Montacute	summermontacute@gmail.com
Tadd Morgan	macbrazel3791@gmail.com
Therese Dowd	therese.dowd@gmail.com
Tika Bordelon	tikab1@gmail.com
Tom Craighead	tcvashon@gmail.com
TREVOR GRATZ	trevormgratz@gmail.com
Valentina warner	valentinawarner@gmail.com
Yonit Yogev	yonityogev@gmail.com

Postcard Notification

All property owners and residents within 1000 feet of the parcel.

Name	Address	City	State	Zip
Occupant	2507 50TH AVE NE	Tacoma	WA	98422
Occupant	4110 E 11TH ST	Tacoma	WA	98422
Occupant	3906 E 11TH ST	Tacoma	WA	98422
Occupant	2909 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2911 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2914 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2904 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2919 MARINE VIEW DR	Tacoma	WA	98422

Occupant	2834 MARINE VIEW DR	Tacoma	WA	98422
EDMAN HOLDINGS LLC	2502 MARINE VIEW DR	TACOMA	WA	98422-3509
Occupant	2415 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2326 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2649 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2648 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2526 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2621 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2411 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2505 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2628 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2530 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2613 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2408 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2407 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2429 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2501 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2503 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2810 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2928 MARINE VIEW DR	Tacoma	WA	98422
STELLFOX STEVEN W	2915 MARINE VIEW DR	TACOMA	WA	98422
Occupant	2750 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2405 MARINE VIEW DR	Tacoma	WA	98422
Occupant	2609 MARINE VIEW DR	Tacoma	WA	98422
Occupant	211 MCMURRAY RD NE	Tacoma	WA	98422
Occupant	101 MCMURRAY RD NE	Tacoma	WA	98422
Occupant	1509 TAYLOR WAY	Tacoma	WA	98421
Occupant	1601 TAYLOR WAY	Tacoma	WA	98421
Occupant	1621 TAYLOR WAY	Tacoma	WA	98421
Occupant	1901 TAYLOR WAY	Tacoma	WA	98421
Occupant	1801 TAYLOR WAY	Tacoma	WA	98421
Occupant	1851 TAYLOR WAY	Tacoma	WA	98421
HYLEBOS WATERFRONT PROPERTY LLC	1501 TAYLOR WAY	TACOMA	WA	98421-4100
CITY OF TACOMA - GG	747 MARKET ST RM 737	TACOMA	WA	98402-3701
WHIRLWIND SERVICES INC	12930 NE 178TH ST	WOODINVILLE	WA	98072-5708
DAVIS STEVEN E	6124 PANORAMA DR NE	TACOMA	WA	98422-1219
TARGA SOUND TERMINAL LLC	1600 BROADWAY STE 2000	DENVER	CO	80202-4929
DSD LOGISTICS LLC	18406 22ND DR SE	BOTHELL	WA	98012
GALER KARL	3604 S 356TH ST	AUBURN	WA	98001-9328
PORT OF TACOMA	PO BOX 1837	TACOMA	WA	98401-1837
TERRA5 COMPANY LLC	PO BOX 68697	SEATTLE	WA	98168-0697
POSTON ROBERT N ETAL	215 MALICOAT AVE	OAKLEY	CA	94561

WALRATH MVD LLC	11405 24TH AVE E	TACOMA	WA	98445-5140
BUFFELEN PARTNERS LLC	17837 1ST AVE S UNIT 711	NORMANDY PARK	WA	98148
TACOMA INDUSTRIAL PROPERTIES	PO BOX 2259	TACOMA	WA	98401-2259
M-P-S PROPERTIES INC	1762 6TH AVE S	SEATTLE	WA	98134-1609
LE PETOMANE XXV INC TTEE	35 E WACKER DR STE 1550	CHICAGO	IL	60601-2124

Public Comment on LU20-0107

First Name	Last Name	E-Mail
Abbie	Carrasco	carrasco123@comcast.net
Adina	Parsley	dickandpat3@gmail.com
Adriel	Brewster	adrieldrewster@outlook.com
Alex	Bernard	arbernard1@comcast.net
Alex	Schuster	aschuster97@gmail.com
Alexa	Fay	alexafpfay@gmail.com
Alexander	Humphreys	aleconnon@gmail.com
Alexandria	Nickerson	lxnickerson73@gmail.com
Alexis	Macdonald	macalexis@gmail.com
Aliza	Yair	alizahannah@gmail.com
Allan	Crawshaw	allanfsln@gmail.com
Alyson	Waldinger	alydanw@aim.com
Amanda	Niles	amandaniles18@gmail.com
Amy	Hansen	pittle.r.us@gmail.com
Amy	Palacios	skygirl07@hotmail.com
Anand	Naik	andynaik@gmail.com
Andreas	Madlung	amadlung@pugetsound.edu
Andrew	Fischer	afischer@jasonandfischer.com
Angeline	Blattenbauer	ablattenbauer@gmail.com
Anita	Kiefer	bo.kiefer67@gmail.com
Ann	Vasilev	wannw1985@aol.com
Anna	Nguyen	121312nguyen@gnail.com
Anne	Newsom	anne.newsom@gmail.com
Anne	Kroeker	annek@36524.com
Anne	Hepfer	anneoverseas@yahoo.com
Anneliese	Simons	tacomasummer@yahoo.com
April	Alberts	toothlessinpa@hotmail.com
Ariel	Vergen	ari@madsoki.com
Arielle	Threlkeld	ariellethrelkeld@gmail.com
Arnaud	Gazeau	gazzogaga@gmail.com
Ashleigh	Murray	ashleigh.murray03@gmail.com
Autumn	Hash	autumndiann83@gmail.com

Barbara	McPherson	barbara.mcpherson@gmail.com
Barbara	Ocskai	barbara@soulproprietor.org
Barbara	Stevenson	bbstvsn15@gmail.com
Barbara	Bonfield	bgbonfield@gmail.com
Barbara	Blake	bkateblake@yahoo.com
Barbara	Peterson	bpeter@comcast.net
Barbara	Lamb	btlamb@whidbey.com
Barbara	Trapp	musicalbarbara@hotmail.com
Becky	Thimm	bdaisy@cox.net
Betsy	Robinson	betsylr@harboret.com
Bettina	Goodall	urbanark9@aol.com
Bill	Sheets	1polarbearstanding@comcast.net
BJ	Ogden	bjogden@verizon.net
Blake	Koehn	blake.koehn@gmail.com
Bonnie	Hughes	bonniewalsh@cox.net
Brad	Jones	bradly_jones@hotmail.com
Bradley	Barton	barton.bradley3@gmail.com
Bradley	Thompson	bradleythomp@gmail.com
Breck	Lebeque	brecklebeque@gmail.com
Brenda	Cummings	grannygreenmachine@gmail.com
Brett	Johnson	bmjohnson75@hotmail.com
Brian	Simpson	bas85310@yahoo.com
Brianna	Ancia	anciabri@gmail.com
Burcu	Koleli	burcukoleli@gmail.com
C	Barnes	beingcc@mac.com
Calvin	Beardemphl	your.gr8.pal.cal@gmail.com
Cara	Hall	cara.m.hall06@gmail.com
Cara	Hall	chall@plu.edu
Carlo	Voli	carlovoli@yahoo.com
Carmela	Micheli	carmela@harboret.com
Carol	Kindt	carolkindt@msn.com
Carol	Olivier	sagefemmes@yahoo.com
Carole Sue	Braaten	csbpigeons@hotmail.com
Carolyn	Massey	claudia1112003@outlook.com
Carolyn	Treadway	CWT2014@PlanetCare.us
Carrie	Woods	cwoods@pugetsound.edu
Cathy	Elford	celford56@gmail.com
Cecil	Bamford	bamfordcecil@gmail.com
Charles	Valdez	lady65killer@gmail.com
Cheryl	Hanna-Truscott	cheryl@cedarhollowstudio.com
Chris	Wooten	chriswooten@earthlink.net
Chris	Murphy	ltmurphyc@comcast.net
Christie	Mc Mearty	mcmrty1@yahoo.com

Christine	Caredda	chriscare441@aol.com
Christine	Ok	cyoo913@yahoo.com
Christopher	Marrs	chrismarrs157@gmail.com
Christopher	Petrich	cpetrich@coolphoto.com
Christy	B	christyb4@comcast.net
Claudia	Riedener	ixia@harbornet.com
Cornelia	Shearer	keelabear@q.com
Curtis	Cawley	cawley_21@hotmail.com
Cynthia	Endicott	cynthia.kirk.endicott@gmail.com
D	Eaton	dsnarla@gmail.com
Dana	Peregrine	danaperegrine@hotmail.com
Dance	Smith	dance.smith@gmail.com
Danial	Esposito	danjesposito@yahoo.com
Danial	Border	ddddddanial@gmail.com
Daniel	Villa	dan@350tacoma.org
Darcy	Skarada	dskarada@gmail.com
David	Kotz	davidkotzwoodworks@gmail.com
David	Perk	davidperk@comcast.net
David	Quiggle	dmquiggle@aol.com
David	Newman	dsnewman@ix.netcom.com
David	Mcinturff	mcntrff@gmail.com
David	Peha	quest447@gmail.com
Dawn	Brightwell	dawnlouise@rogers.com
Deborah	Lipman	deborah.a.lipman@gmail.com
Deborah	Sallee	deborah.sallee@gmail.com
Debra	Olsen	deb@luth.org
Deirdre	Cochran	deirdre122@gmail.com
Derek	Gendvil	dgendvil@gmail.com
Diane	Walkup	dianesh112@gmail.com
Diane	Witt	dianewi@comcast.net
Diane	Shaughnessy	dshau1@aol.com
Diane	Lord	puma125@msn.com
Diane	Bisset	resistancegranny@hotmail.com
Diane	Marks	shenyen@wavecable.com
Diann	Sheldon	diannshe@gmail.com
Dogan	Ozkan	barisicindogan@gmail.com
Don	Rahm	doncdc2451@msn.com
Donna	Klemka	croft1@comcast.net
Donna	Glaser	donna.glaser@gmail.com
Donna	Arnold	harleysgirlz2@gmail.com
Doreen	McGrath	doreenmcg@gmail.com
Dorinda	Kelley	dorindask@gmail.com
Dorothy and Edward	Hudson	dHUDSON@harbornet.com

Dylan	Ruggeri	dylanicholass@gmail.com
Dylan	Ruggeri	ruggerdn@plu.edu
Ed	Lynchehan	cowboyeddiejoe@comcast.net
Eddie	Goldstein	elmerofness@hotmail.com
Elaine	Luniuck-Olson	eluniuck@gmail.com
Elizabeth	Cunningham	arcticgrandma@gmail.com
Elizabeth	Davis	elizabeth.call2action@gmail.com
Elizabeth	Higbee-Robinson	HIGBEE.ROBINSONL@GMAIL.COM
Elizabeth	Chandler	riverwatcher88@gmail.com
Ellen	Floyd	edsf@harbornet.com
Ellen	Bakke	ellenbakke78@gmail.com
Elliott	Bales	esbales904@yahoo.com
Elly	Claus-McGahan	drelly@sound-decisions.org
Emily	Chicone	em1387@hotmail.com
Emily	Wood	emily.wood@gmail.com
Eric	Danielson	edanielson2010@gmail.com
Eric	Ericson	jbking2@icloud.com
Erica	Henson	edhenson98406@msn.com
Erin	Dilworth	edilworth@healthybay.org
Ernetta	Skerlec	ernieskerlec@earthlink.net
Eva	Cosgrove	evacosgrove@hotmail.com
Evan	Littmann	eblittmann@gmail.com
Frances	Blair	fblair39@centurylink.net
Garret	Peck	swrosepacoordinator@ECY.WA.GOV
Gary	Brill	garyalanbrill@gmail.com
Gary	Peniston	ghpghp@earthlink.net
Gemma	Duggins	gemma.duggins@gmail.com
Geoff	Cole	brgc@seanet.com
George	Pate	drgeorgepate@aim.com
Gergo	Farkas	farkas.gergo14@gmail.com
Gerry	Sperry	geronimoger@comcast.net
Gill	Fahrenwald	anvilman@orcalink.com
Glen	Anderson	glenanderson@integra.net
Grace	Dannen	capybarapug@gmail.com
Grant	Fujii	dzfujii@hotmail.com
Greg	Herzberg	ghelp@comcast.net
Gregory	Feleppa	gfeleppa@hotmail.com
Gregory	Denton	greg.denton@gmail.com
Hal	Anthony	threepines@centurylink.net
Hannah	Lange	langezannah26@gmail.com
Hans	Mueller	hansandmaxi@aol.com
Heather	Jarrell	heffneh@gmail.com
Heidi	Erdmann	angelsmom@foxinternet.com

Heidi	Jones	hcatjones@gmail.com
Heidi	Neidlinger	heidi.neidlinger@gmail.com
Helen	Moissant	hmoissant@aol.com
Henry	Loughman	henryhoo55@gmail.com
Holly	Crawford	hollycrawfordb@hotmail.com
Hoon	Hong	skyg35@yahoo.com
Ian	McCluskey	lanjmclluskey@gmail.com
Irene	Bensinger	irene@trilliumwoods.com
Isaac	Ehrlich	wisemiser9@gmail.com
Jaala	Smith	jaalasmith@gmail.com
Jack	Stansfield	jstansfield8981@gmail.com
Jacky	Smith	jakismith3344@gmail.com
Jadyn	Kane	jadyn.chessman@gmail.com
James	Bates	james.bates3@comcast.net
James	Mulcare	xsecretsx@cableone.net
Janeen	Provazek	provaj@hotmail.com
Janet	Hedgepath	gr8tefully@gmail.com
Janet	Weil	janet.weil13@gmail.com
Janet	Morberg	janmorberg@comcast.net
Janet	Higbee-Robinson	Jhhigbeerobinson@gmail.com
Janet	Delaney	jld215@sbcglobal.net
Jared	Howe	jaredchowe@gmail.com
Jasmine	Teofilo	jasminewantstogotocollege@gmail.com
Jay	Pine	ljaypine@gmail.com
Jaylie	Madison	jaylie.m.madison@gmail.com
Jayne	Carter	jpc.slp@gmail.com
Jean	Johnston	jeanjohnston2@aol.com
Jeanette	Pasty	jpasty@alamo.edu
Jeanne	Poirier	jeannepoirier@yahoo.com
Jeffrey	Pancier	jeffiejimmie@gmail.com
Jennifer	Burger	jeburger@gmail.com
Jennifer	Brave	jenbrave@yahoo.com
Jennifer	Lyne	jenlyneviola@gmail.com
Jenny	Rossetto	lifesrosy@comcast.net
Jerilyn	Hall	jeri2hall@gmail.com
Jessica	Trujillo	jes.trujillo@gmail.com
Jessica	Moist	Uiscah@gmail.com
Jill	Simpson	jickrill@gmail.com
JK	Deller	jdkdeller@gmail.com
Joan	James	mikejoanjames2@gmail.com
Joan G	Harris	jgharrismt@msn.com
Joann	Brown	betterdaym67@gmail.com
Joann	Varnell	joann.varnell@gmail.com

Joanna	Chesnut	joannachesnut@comcast.net
Jody	Delbridge	jodydel@harbornet.com
Jody	Wright-Tenenberg	jwrightten@gmail.com
John	Carmichael	cpuffin3@comcast.net
John	Barger	john@johnbarger.com
Jon	Sites	jonsites@mac.com
Jordan	Van Voast	jordanvvv@gmail.com
Josef	Sellers	josefrsellers@gmail.com
Joseph	McAree	joemcaree@comcast.net
Joseph	Stenger	joseph.stenger@gmail.com
Joy	Vartanian	dressagejoy@gmail.com
Joy	Caddock	joycaddock@gmail.com
Joy	Caddock	joyelizabethcaddock@gmail.com
JP	Kemmick	jpkemnick@gmail.com
Juan	La Torre	juanlatorre4art@gmail.com
Judith	Anderson	jlta@me.com
Judith	Presson	omajudy4@aol.com
Judy	Ferguson	medfordgrad@aol.com
Julie	Martinson	jmartinson8@gmail.com
Julie	Davidson	julie.imaginalo@gmail.com
Julie	Andrzejewski	julieruth17@gmail.com
Karen	Crowley	crowleyk1147@gmail.com
Karen	Deckel	kdeckel@maritime.edu
Karen	Richter	kerichter100@gmail.com
Kathryn	Jacobs	kjacobs@pennelynn.com
Kathy	Hewitt	ikathyhewitt@gmail.com
Kathy	Chadwell	kchadwell@aol.com
Kathy	Porter	maegwin123@gmail.com
Katie	Simmons	kti.smms@gmail.com
Katrina	Showlund	showk@hotmail.com
Katt	Merilo	katt.merilo@gmail.com
Kay	Brainerd	klbrainerd@gmail.com
Kelly	Keefer	gkkeef@q.com
Kenzie	Zirinsky	ellenkenab@yahoo.com
Keri	Zacher	zacherk@hotmail.com
Kevin	Hughes	anevolver@gmail.com
Kevin	Schmidt	kevin@kevinschmidt.com
Kevin	Gallagher	kevingal@uw.edu
Kevin	O'Brien	obrieke@gmail.com
KG		kingroom@hotmail.com
Kim	Seater	mattphotos@quidnunc.net
Kristina	Soman-Faulkner	ksomanfaulkner@gmail.com
Kristofer	Nystrom	knystrom2@comcast.net

Kyla	Anderson	sportzygirlkyla@yahoo.com
L	Adams	lzlddy@att.net
Laird	Desmond	laird.desmond@comcast.net
Lars	Liden	larliden@gmail.com
Laura	Zerr	godawgz5@msn.com
Laura	Regan	laregan43@gmail.com
Laura	Groothedde	laura.bteh@gmail.com
Laura	Messbauer	lauramessbauer@hotmail.com
Laura	Bartholet	lbartholet@ziontchestnut.com
Lauren	Sewell	sewelllauren@gmail.com
Lauri	Lindquist	lauri.lindquist@gmail.com
Lesley	Paine	LesleyP26@gmail.com
Leslie	Boyter	blackwinterrose@yahoo.com
Leslie	Kay	leslie.kay710@gmail.com
Leslie	Propp	spearson@pacifier.com
Levon	Hiatt	levonhiatt@yahoo.com
Lia	Craven	lia_craven@hotmail.com
Liisa	Wale	liisawale@gmail.com
Liisa	Wale	tumeric1969@gmail.com
Linda	Wasserman	coolauthor2@gmail.com
Linda	Hood	hoodwhite2@gmail.com
Linda	Gillaspy	lgillaspy@charter.net
Linda	Sutherland	linda31313@gmail.com
Linda	Carroll	lindalouise701184951@yahoo.com
Linda	Hagedorn	mountainclimber4@gmail.com
Linda	Vanderbilt	newlifepnw@gmail.com
Linda	Parrish	psallite@gmail.com
Lindsay	Walker	walker.lindsay3@gmail.com
Lisa Ann	Kelly	bluesunflowersb@gmail.com
Lisa Ann	Geddes	lgeddes813@hotmail.com
Lisa Ann	Stevens	lincolnpark86@msn.com
Lisette	West	lrlisette@yahoo.com
Liz	Cushman	jackandliz@yahoo.com
Liz	Campbell	zil1000campbell@gmail.com
Lizzy	Paul	elgrpa@gmail.com
Lloyd	Hedger	lloydmhedger@msn.com
Lorna	Walker	lorniewalker@gmail.com
Lorraine	Maida	greatlearningnow@gmail.com
Lorraine	Johnson	lorraine.d.johnson@gmail.com
Lucinda	Stroud	lucinda.stroud@gmail.com
Lynn	Barker	tobarks@msn.com
Mackenzie	Knapp	kknapp@plu.edu
Mae	Coker	cokermoe@gmail.com

Maradel	Gale	mkgale@uoregon.edu
Margaret	Berger	MargaretRBerger@gmail.com
Margarita	Andreeva	ritandreeva@gmail.com
Maria	Pascualy	yellowknife@comcast.net
Marion	Marsh	mmarsh1937@gmail.com
Mark	Houdashelt	mark.houdashelt@gmail.com
Mark	Harris	mpharri7@asu.edu
Mark	Canright	rebeccagroovypeace@gmail.com
Marty	Bostic	sbost23@hotmail.com
Mary	Wueste	maryw47@aol.com
Mary	Krohner	mekrohner@comcast.net
Mary	McGovern	mfm008@aol.com
Mary	Rollins	mfrl58@gmail.com
Marya	Bradley	mabstream@gmail.com
Matthew	Hobson	ethan_kain@hotmail.com
Matthew	Boguske	matthew.boguske@gmail.com
Maurinda	BullPlume	MaurindaBullplume02@gmail.com
Megan	Rowell	megan.e.rowell@gmail.com
Melanie	Sheats	nickchriszack@hotmail.com
Melinda	Mehring	mamehring@msn.com
Melissa	Heithaus	mheithaus@quine.com
Melissa	Roberts	mrhaddock7@gmail.com
Melody	Smith	melodyinharmony26@gmail.com
Micahel	Foster	michael.foster2@comcast.net
Michael	Alston	alstonm@gmail.com
Michael	Bordenave	mbordenave1016@gmail.com
Michael	Garrity	mdgarrity@gmail.com
Michael	Winger	mgwwgw@msn.com
Michael	Huseby	mhu2474946@aol.com
Michael	Honey	michaelkhoney@gmail.com
Michael and Barbara	Hill	theelbehills@gmail.com
Michelle	Ross	fishyflakes2377@yahoo.com
Michelle	He	hemichelle0@gmail.com
Michelle	Meyers	mgm9292@comcast.net
Mike	Regan	staroid@wavecable.com
Millie	Magner	milliemagner@gmail.com
Mlou	Christ	mnortie@yahoo.com
Nancy	Corr	cornnancy03@gmail.com
Nancy	Hansen	nancy@glenwood-gardens.com
Nancy	Farrell	nfarrellwa@gmail.com
Neil	Smith	ntsmith2k3@mac.com
Nicole	Hancock	nicolehancock@q.com
Nicole	Southwell	southwellnicole@gmail.com

Nikie	Walters	nikiewalters@gmail.com
Nischala	Knight	nischala.knight@gmail.com
Nolan	Hibbard	nolanhp@uw.edu
Norman	Baker	ntbakerphd@gmail.com
Paige	Lasley	paigelasley95@gmail.com
Pamela	Berg	betenoir123@gmail.com
Pamela	Clough	pam.clough@publicinterestnetwork.org
Pamela	Brocius	pam@citistaffing.com
Pamela	Kepford	pamkepford@hotmail.com
Pat	Wolff	partwolff@yahoo.com
Pat	Milliren	patmilliren@gmail.com
Patricia	Fero	patfero@gmail.com
Patrick	Haas	ps_tkd@yahoo.com
Paul	Kim	PKIM920@GMAIL.COM
Paula	Casner	paularcasner@gmail.com
Paula	Townsell	potownsell@gmail.com
Penelope	Loucas	phloucas@gmail.com
Pete	Weymiller	pweymiller@aol.com
Peyton	Noreen	pnoreen@plu.edu
Phil	Harty	philhartymusic@gmail.com
Phillip	Hope	phillip.hope@gmail.com
Querido	Galdo	querido@queridomundo.com
R	Vanstrien	zvan030@gmail.com
Rachel	Wilson	wolfre26@yahoo.com
Radka	Chapin	radka.chapin@gmail.com
Ranell	Nytrom	private-idaho@comcast.net
Rebecca	Canright	rchorse11@aol.com
Rebecca	Wolfe	reba4bronco@gmail.com
Rex	Rude	rex.rude.saiz@gmail.com
Ric	Berkholtz	ricberk7@gmail.com
Richard	Maclaurin	rsmaclaurin@gmail.com
Rita	Caruso Santamaria	rcwhitgr@smumn.edu
Rob	Briggs	rsb@turbonet.com
Robb	Krehbiel	robb.krehbiel@gmail.com
Robert	Posch	robertposch323@gmail.com
Roberta	Moore	1redsiggy@gmail.com
Roberta R	Czarnecki	bonrosec@gmail.com
Roger	Martin	fbrogert@yahoo.com
Ruchi	Stair	ruchi.stair@outlook.com
Russell	Dial	radial75@gmail.com
Russell	Robinson	russr@centurytel.net
Rusty	West	rustytwest@gmail.com
Ruth	Reid	7reid7@gmail.com

Sabine	Doenninghaus	sabine.doenninghaus@gmail.com
Saiyare	Refaei	saiyare.refaei@gmail.com
Sammy	Low	cougarcreek7@gmail.com
Sandy	Brizuela	samauri6@comcast.net
Sara	Bhakti	sarabhakti@yahoo.com
Sara	Peterson	swp.ga@hotmail.com
Sarah	Dunn	7sdunn@gmail.com
Sarah	Calvin-Stupfel	calvinsj@plu.edu
Sarah	Lanslaw	manxlassie912@gmail.com
Sarah	Kavage	sarah@gogoweb.com
Savannah	Lauritzen	savannahdawn04@hotmail.com
Scott	McClay	scottmc@riseup.net
Shambhavi	Taylor	om.shambhavi@gmail.com
Shannon	Lynn	shannonlynndiana@gmail.com
Shannon	Curtis	skcurtis@gmail.com
Shawna	Stonum	stonum.shawna@gmail.com
Shianne	Paynter	shianep97@gmail.com
Shirley	Shimada	shimadashirl@gmail.com
Shirley	Rogers	shirlrog55@gmail.com
Shirley	Storms	steve.storms.act@gmail.com
Siabhon	Ayuso	bliss916@gmail.com
Siri Elizabeth	Waldow	siriwaldow@me.com
Sonia	Zwilling	sonias_script@hotmail.com
South Sound Surfrider Foundation		sssfrfrider@gmail.com
Ste	Ho	orcadog85@gmail.com
Stena	Troyer	TROYERSTENA@GMAIL.COM
Stephanie	Monson	stefmonson@yahoo.com
Steve	Lien	lien.steve.rhonda@gmail.com
Steve	Way	scway45@gmail.com
Steve	Williams	prospect2125@aol.com
Steven	Storms	storms123@aol.com
Sulan	MLYNAREK	sulan.mlynarek@gmail.com
Susan	McMonigal	mcm_utz@yahoo.com
Susan	DeWitt	sedewitt4@gmail.com
Susan	Ryan	sryan@harbornet.com
Susan	Ervin	sueervin1@gmail.com
Susan	Kane	susan_kane1@msn.com
Susan	Ocopnick	susaninthe@mac.com
Susan	Landen	susanlanden@hotmail.com
Susan	Gorman	susantgorman@gmail.com
Susan	Thiel	susanthiel1948@gmail.com
Suzanne	Williams	suzannewilliams@nventure.com
Sylvia	Rodriguez	sylvia_lion@yahoo.com

Taylor	Greig	greigtm@plu.edu
Teresa	Hogan	hogancapecod@aol.com
Terrie	Ward	terrie.ward567@gmail.com
Therese	Dowd	therese.dowd@gmail.com
Thomasin	Kellerman	Kthomasin2@aol.com
Tika	Bordelon	tikab1@gmail.com
Timothy	Keeler	timwsiy@gmail.com
TJ	Thompson	tjthompsonmd@centurytel.net
Tom	Craighead	tcvashon@gmail.com
Toni	Mills	toniann1966@gmail.com
Tracy	Wiegman	danceinmygarden@yahoo.com
Tracy	Ouellette	tracyjouellette@gmail.com
Trevor	Gratz	trevormgratz@gmail.com
Twylia	Westling	westlingtwylia@yahoo.com
Tyrell	Hedlund	tyrellhedlund@gmail.com
Vana	Spear	vanaluane@yahoo.com
Vanessa	Skantze	psychomachia.arts@gmail.com
Vera	McLaughlin	verarosemclaughlin@gmail.com
Vladimir	Shakov	vladshakov@gmail.com
Will	Golding	willgolding92@yahoo.com
William	Johnston	jakesrake68@gmail.com
William	Biederman	wjb259@gmail.com
Yonit	Yogev	yonityogev@gmail.com
Yvonne	McCarty	yvonne.mccarty@comcast.net
		amelia524escobedo@yahoo.com
		amyminivan@yahop.com
		capancigdem@gmail.com
		davika.erickson@gmail.com
		jennajudge2@gmail.com
		kaylala427@gmail.com
		kingmarquis96@gmail.com
		maynardrick@outlook.com
		scottpatterson108@gmail.com
		serenity0156@gmail.com
		danaperegrine@hotmail.com
		yanellmaganar@gmail.com
		unluckyclovers@gmail.com
		evelynflopez@gmail.com
		geneophotos@hotmail.com
		sharethewealthorganics@gmail.com
		maryboynton101@gmail.com
		justincamarata@gmail.com

		kknapp@plu.edu
		heverwood@nventure.com
		pambeal@gmail.com
		barbarahill.weddingsbydesign@gmail.com
		jsweers23@gmail.com
		xsecretsx@cableone.net
		emily.breeann98@gmail.com
		bubblebuddyfan@gmail.com
		flori18009@gmail.com
		bbloomstine@gmail.com
		mikejoanjames2@gmail.com
		pweymiller@aol.com
		ixora@harboret.com

Appendix C

Cost of GHG Mitigation for the SeaPort Sound Plant Modernization Project Memorandum

MEMO

Subject: Cost of GHG Mitigation for the SeaPort Sound Plant Modernization Project

From: Roel Hammerschlag

To: Matthew Kolata, SeaPort Sound Terminal LLC
Josh Jensen, Anchor QEA

Date: April 14, 2022

Doc. no.: SP-009(c)

Background

The proposed SeaPort Sound plant modernization project (the Project) will induce greenhouse gas (GHG) emissions in the City of Tacoma due to project construction and due to increased operating emissions after project completion. The City of Tacoma is requesting mitigation of those GHG emissions that would accrue to the City of Tacoma GHG inventory. The most straightforward approach to such GHG mitigation would be the purchase of third-party verified, voluntary GHG offsets. However, SeaPort Sound Terminal LLC (SeaPort Sound) wishes to offer a financial contribution to the City of Tacoma that supports the City of Tacoma Climate Action Plan,¹ and supports urban or watershed forestry in particular. SeaPort Sound would like to know the dollar size of such a contribution that would make it commensurate with the purchase of equivalent GHG offsets.

Quantity of GHG Offsets Required

GHG mitigation is typically achieved through the purchase of GHG offsets. One offset is valued at -1.0 tCO₂e, or negative one metric ton of carbon dioxide equivalent. That is, GHG neutrality is achieved when the number of offsets to purchase equals the incremental tCO₂e caused by the project.

Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Terminal Modernization Project (the GHG Study Report)² estimates that the Project will induce 221 tCO₂e of on-site emissions from construction equipment. All construction emissions are incremental, since the construction activities would not have happened without the Project.

The GHG Study Report estimates cumulative, incremental emissions of operation to be 16,800 tCO₂e. The incremental emissions are computed as the difference between the Project's gross, cumulative operating emissions from 2024 through 2063; and gross, cumulative operating emissions without the Project from 2024 through 2063. These two values are

¹ City of Tacoma, "2030 Tacoma Climate Action Plan" (City of Tacoma, November 2021).

² Hammerschlag LLC document number SP-003(f).

308,700 tCO₂e and 291,900 tCO₂e respectively, leading to the incremental result
 $308,700 \text{ tCO}_2\text{e} - 291,900 \text{ tCO}_2\text{e} = 16,800 \text{ tCO}_2\text{e}$.

The total emissions requiring mitigation are the combined, incremental construction and operation emissions, that is $221 \text{ tCO}_2\text{e} + 16,800 \text{ tCO}_2\text{e} = \mathbf{17,021 \text{ tCO}_2\text{e}}$.

Temporal Effect

The 221 tCO₂e construction emissions will occur relatively immediately, but the 16,800 tCO₂e incremental operations emissions will occur over the course of forty years from 2024 through 2063. Because the climate system contains positive feedbacks, a reduction in emissions sooner has more value to climate stabilization than the same reduction later. The magnitude of this effect is unknown, but its sign is certain. Hence, the GHG reductions or removals represented by purchased offsets should occur simultaneously with or prior to the GHG emissions that they are intended to balance.

If SeaPort Sound were to purchase the entire 17,021 tCO₂e of offsets at the project outset, then the offsets would precede the emissions and the intended zero (or negative) GHG balance would be achieved. If SeaPort Sound were to purchase offsets gradually throughout the plant life, then those purchases may precede or coincide with the emissions but should not lag them.

Offset Pricing

In the United States there is negligible government regulation or tracking of the voluntary offsets market. The market for voluntary, third-party verified GHG offsets is best monitored with annual *State of the Voluntary Carbon Markets* reports published by Ecosystem Marketplace, a project of the non-profit organization Forest Trends.

Selling prices of GHG offsets tracked by Ecosystem Marketplace tend to break across the class of offset projects. Projects that avoid emissions are called “reductions,” and Ecosystem Marketplace reports that reductions sold at an average price of \$1.60/tCO₂e in 2020 and \$1.71/tCO₂e in 2021. Projects that draw down and sequester atmospheric CO₂ are called “removals,” and Ecosystem Marketplace reports that removals sold at an average price of \$7.93/tCO₂e in 2020 and \$7.98/tCO₂e in 2021.³

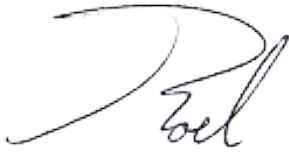
Cost of Mitigation

Forestry projects, including urban forestry projects, are removals not reductions. Hence, it is appropriate to fund them at the rate offset markets indicate for removals. The most recent

³ Stephen Donofrio et al., “Markets in Motion: State of the Voluntary Carbon Markets 2021 Installment 1” (Ecosystem Marketplace, 2021), 15. 2021 prices are based on trading January 1 – August 31 only; the final 2021 report has not yet been published.

reported rate for removals is \$7.98/tCO₂e. Hence, the anticipated cost of the Project GHG mitigation is 17,021 tCO₂e × \$7.98/tCO₂e = **\$136,000** (rounding to three significant digits).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Roel', with a large, sweeping flourish above the name.

Roel Hammerschlag, principal
Hammerschlag LLC
tel. 360-339-6038
roel@hammerschlag.llc

MEMO

Subject: Seaport Sound Plant Modernization: Increment to Product Transport Emissions in Pierce County

From: Roel Hammerschlag

To: Matthew Kolata, SeaPort Sound Terminal LLC
Josh Jensen, Anchor QEA

Date: October 9, 2022

Doc. no.: SP-011(b)

Background

The proposed SeaPort Sound plant modernization project (the Project) increases gross product storage capacity, which in turn may allow for increased product throughput. An increase in transport of products from the plant would create an increment to greenhouse gas (GHG) emissions of commercial transport in Pierce County. SeaPort Sound would like to know the gross size of this potential emissions increment over the 40-year Central Scenario activity forecast developed for the Draft Environmental Impact Statement.

Assumptions

Products handled by SeaPort Sound depart from the plant either by truck or marine. The increment in Pierce County transport emissions is assumed to arise from increases to truck or marine activity proportional to the increase in weight of product throughput.

Product transport GHG emissions are due to combustion of fossil fuels in internal combustion engines. On a 100-year global warming potential (GWP) basis, GHG emissions of internal combustion engines are dominated by carbon dioxide (CO₂). This analysis is restricted to CO₂ emissions.

Methodology

Hammerschlag LLC duplicated the transport emission factors coded in Argonne National Laboratory's *GREET* model, 2020 edition.¹ For each unit of fuel transported by a given mode GREET assigns: emissions of fuel combustion while transporting from source to destination, emissions of fuel combustion while backhauling the transport vehicle, and production (upstream) emissions of the fuels combusted during transport. SeaPort Sound is concerned only with direct emissions in Pierce County, so GREET-assigned fuel production emissions are

¹ Michael Q Wang, "GREET 2020 (Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies Model)," Microsoft Excel (Lemont, IL: Argonne National Laboratory, October 19, 2020), <https://greet.es.anl.gov/>.

omitted. Hammerschlag LLC derived the following product transport emission rates utilizing the constants provided in GREET:

mode	EF	1-way dist.
	$gCO_2/ton-mi$	mi
truck	107.9	24
marine	7.1	7

Table 1 – GREET-based emission factors of product transport modes, and characteristic transport distances. “EF” means emission factor. “gCO₂/ton-mi” means grams carbon dioxide per imperial ton-mile.

Table 1 also includes the nominal transport distances assumed for each mode. The distance assumed for truck transport is the characteristic radius of Pierce County, equal to the radius of a circle having the same geographic area as the county. The distance assumed for marine is the measured distance from the SeaPort Sound terminal to the extension of Pierce County’s northern boundary into the Puget Sound shipping lanes.

The mix of transport modes for each throughput product was provided by SeaPort Sound,² except for renewable gasoline which has not yet been handled at the Tacoma facility. Hammerschlag LLC assumed outbound renewable gasoline would behave identically to conventional gasoline (Table 2).

throughput product	outbound transport	
	truck	marine
gasoline	100%	--
RG	100%	--
ethanol	50%	50%
diesel	75%	25%
RD	100%	--
biodiesel	100%	--
fuel oil	5%	95%
asphalt	100%	--
propane	100%	--
transmix	100%	--

Table 2 – Transport mode shares for all throughput products. Shares are based on SeaPort Sound historical experience except for renewable gasoline. “RG” means renewable gasoline, “RD” means renewable diesel.

The mode shares were applied to throughput product forecasts generated to support *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Terminal Modernization Project*

² Matthew Kolata, “Tacoma EIS Inventory Data.Xlsx,” Microsoft Excel (TransMontaigne Partners, July 2021).

(the GHG Study Report).³ The GHG Study Report forecasts throughput volumes from calendar year 2024 through calendar year 2063 inclusive. Product throughput weights were computed for each year and mode, by multiplying the forecast volumes by GREET fuel densities.⁴

The GHG Study Report posits three future scenarios, but SeaPort Sound requires a single-valued result in order to govern the GHG offsets purchase decision. For this reason only the Central Scenario is considered in the remainder of this transport emissions estimate.

Result

Multiplying the mode-assigned throughput weight forecasts by the Table 1 emission factors and transport distances, and then summing across all 40 years, produces results as shown in Table 3. The gross increment to product transportation emissions in Pierce County is estimated to be (rounding to three significant digits) **18,500** metric tons of CO₂.

mode	transport	emissions
	mm ton-mi	tCO ₂
truck	168	18,107
marine	51	363
ALL MODES	219	18,471

Table 3 – Throughput product transport activity and emissions. All values are gross, calendar years 2024 through 2063 inclusive. “mm” means million, “tCO₂” means metric tons carbon dioxide.

GHG offsets are traded in units of metric tons carbon dioxide equivalent (tCO₂e). The quantity of offsets required to cover the entire project will simply equal the 40-year emissions forecast in metric tons CO₂ reported in *Result* above.

Respectfully submitted,

Roel Hammerschlag, principal
Hammerschlag LLC
tel. 360-339-6038
roel@hammerschlag.llc

³ Hammerschlag LLC document number SP-003(h).

⁴ See calculations in Hammerschlag LLC document number SP-008(c).

Appendix D

Notices of Construction Summary

Appendix D
Notices of Construction Summary

NOC No.	Issued	Coverage
Active Permits		
11917	12/24/2020	Added ability to blend butane into gasoline storage at the facility. No change to permit limit thresholds, carried forward from NOC 11403: Gasoline facility throughput: 501,875,000 gal/yr Gasoline throughput across the truck loading rack no more than 4,800 gal/min and no more than 40,000 gallons per 15 minutes. No gasoline or ethanol may be loaded onto rail cars.
11265	2/7/2018	Specifies marine throughput limits. All limits based on a consecutive 12-month period: Natural gasoline: 151,500,000 gal/yr Crude oil marine loading: 613,267,200 gal/yr Gasoline and ethanol marine loading: 107,310,000 gal/yr Isooctane marine loading: 126,000,000 bbl/yr Loading limit rate: All dock products: 7,000 bbl/hr or less
11069	3/8/2016	Provides the terminal with inert loading of vessels at the dock. Limit on throughput carried forward to NOC 11265. Natural gasoline, crude oil, gasoline, ethanol, and isooctane loading rates will not exceed the MVCU processing capacity of 7,000 bbl/hr.
10688	3/10/2014	Allows for the terminal to re-install a floating roof into tank 152 and enables that tank for storage of ethanol.
10582	7/15/2013	Issued during phase II buildout of the 2012 Renewable Fuels Project; allowed for construction of tank 212 with a floating roof for storage of gasoline.
Canceled/Superseded Permits		
10697	1/13/2016	Provides the terminal the ability to use a rolling 3-hour averaging period for the truck rack VOC CEMS. Limit throughputs are carried forward in future permits.
11403	7/31/2018	Superseded by NOC 11917. Issued for installation of new asphalt demisters; carries truck rack limits for emissions and physical limitations for facility wide gasoline throughput.
10965	6/29/2015	Superseded by NOC 11069. Modified the loading procedures for marine vessels requiring the use of the MVCU.
10554	2/28/2014	Superseded by NOC 10956. Issued for the MVCU and carried original designation for crude four tanks.
10325	7/17/2012	Canceled/superseded by 10697. Issued for phase I of the Renewable Fuels Project and relating to pipeline connection. Provided for gasoline storage in six tanks.
10152	3/18/2010	Canceled by NOC 11403. Issued for construction of a tank; required emissions generated through filling of that tank be routed to a demister.
9758	7/31/2008	Canceled by NOC 10697. Provided for a three-lane gasoline terminal and a loading limit of 95 million gal/yr. Upgrades and improved modeling that followed through for NOC 10325 canceled out this permit.
5992	6/21/1995	Canceled by NOC 10697. Placed a synthetic minor on the terminal limiting the combustion of fuel oil for heating purposes to 628,000 gal/yr.

Appendix D
Notices of Construction Summary

NOC No.	Issued	Coverage
5078	8/3/1993	Issued for the installation of a demister; referenced equipment has been removed from the site with the issuance of NOC 11403.
4974	12/15/1994	Canceled by NOC 10697. Provided for upgrade of two process heaters for the refinery.
4889	--	Canceled by NOC 10697. No record available; issued in relation to the refinery.
3893	5/7/1991	Provided for installation of an oil firing boiler; referenced equipment was removed with the issuance of NOC 10697.
2447 revised	10/17/1983	Issued with regard to the refinery and various tanks/on-site storage. Unknown whether the tanks/on-site storage were ultimately constructed.
2434-2447	10/17/1983	Canceled by NOC 10697. Included upgrades and modernization permits for the refinery.
2172	7/17/1980	Issued to retrofit several tanks; likely that work was not completed and construction period lapsed.
1953	7/12/1979	Equipment is no longer applicable due to NOC 11403. Provided for a mist eliminator to control emissions from truck loading.
1836	4/20/1979	Issued as part of a North Slope project to reduce emissions by converting tanks to handle distillate.
1793	11/29/1977	Equipment is longer on site due to NOC 11403. Demisters installed at the truck loading rack.

Notes:

--: unknown date

bbl/hr: barrel per hour

bbl/yr: barrel per year

CEMS: continuous emission monitoring system

gal/minute: gallon per minute

gal/yr: gallon per year

MVCU: Marine Vapor Construction Unit

NOC: Notice of Construction

VOC: volatile organic compound

Appendix E

Project Laws and Regulations

Appendix E
Project Laws and Regulations

Law or Regulation	Description	Applicability
Federal		
Maritime Security: Facilities (33 CFR 105)	Requires marine facilities meeting specific requirements to prepare a Facility Security Plan that must be approved by the USCG.	Public Services and Utilities
Facilities Transferring Oil or Hazardous Materials in Bulk (33 CFR 154)	Requires facilities transferring oil or other hazardous materials in bulk to submit an operations manual to USCG for approval.	Environmental Health and Safety
Oil and Hazardous Material Transfer Operations (33 CFR 156)	Specifies procedures and requirements for transferring oil and other hazardous materials to/from vessels.	Environmental Health and Safety
Oil Pollution Prevention (40 CFR 112)	Requires facilities to prepare and implement a spill prevention control and countermeasure plan in accordance with good engineering practices.	Environmental Health and Safety, Earth
Oil Pollution Act of 1990 (33 USC 40)	Expands the federal government’s ability to prevent and respond to oil spills and preserves state authority to establish laws governing oil spill prevention and response.	Environmental Health and Safety
National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300)	Establishes area committees to plan for and coordinate spill response. In the Pacific Northwest, planning for significant oil and hazardous spills is conducted through the three-state (Washington, Oregon, and Idaho) Northwest Area Contingency Plan.	Environmental Health and Safety, Plants and Animals
Limits on Liability (33 USC 2704)	Establishes limits on liability of a responsible party to incur costs from an incident.	Environmental Health and Safety
Clean Air Act of 1970 (42 USC 7407)	Delegates to states primary responsibility for assuring air quality within the geographic area comprising the state by submitting an implementation plan which will specify the manner in which primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region within the state.	Air
Hazardous Materials Transportation Act (49 USC 51)	Regulates all aspects of hazardous materials packaging, handling, and transportation for vessel, truck, and rail.	Environmental Health and Safety

Law or Regulation	Description	Applicability
<p>CWA Sections 401 and 402 (33 USC 1251 et seq.)</p>	<p>The Proposed Action does not include any in-water work requiring a permit under Section 401 of the CWA. Discharge of stormwater from the Project site requires a permit under Section 402 of the CWA. Stormwater discharges are regulated by EPA through NPDES, which is administered in Washington by Ecology. Separate stormwater permits are required for construction and operation.</p> <p>NPDES Construction Stormwater General Permit. Construction site operators are required to obtain an NPDES Construction Stormwater General Permit if their activities disturb 1 acre or more and discharge stormwater to a surface water of the state. Construction of the Proposed Action would require coverage under Ecology’s current Construction Stormwater General Permit for work occurring over approximately 1.4 acres.</p> <p>NPDES ISIP. The Project site has been operating under an Ecology-issued ISIP for its stormwater discharges to Hylebos Waterway (NPDES Permit No. WA0003204). The ISIP, which was last updated in 2018, states that stormwater discharges from the site must not cause or contribute to a violation of state surface water, groundwater, or sediment management standards or human health-based criteria in the National Toxics Rule (40 CFR 131.36). In accordance with ISIP condition G.4, SeaPort Sound may be required to inform Ecology of planned changes to on-site facilities under the Proposed Action. In accordance with ISIP condition G.5, modification to stormwater treatment facilities may require submittal of engineering reports, plans, and specification submittals that require Ecology approval.</p>	<p>Water</p>
<p>CWA Section 404 (33 USC 1251 et seq.)</p>	<p>Section 404 of the CWA regulates discharge of dredge or fill materials into wetlands and waters of the United States. The Proposed Action does not include any activities affecting wetlands or waters of the United States; however, wetlands and waters of the United States (Hylebos Waterway) are located near the Project site.</p>	<p>Plants and Animals</p>

Law or Regulation	Description	Applicability
SDWA (42 USC 300f et seq.)	<p>The SDWA was established to protect the quality of the nation’s drinking water. It applies to actual and potential sources of drinking water, both surface water and groundwater. EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The DOH regulates Group A public water systems under state law and as delegated by EPA under the SDWA. Group A water systems have 15 or more service connections or serve 25 or more people 60 or more days per year. Tacoma Water supplies water to the study area and is a Group A public water system. State regulations for Group A systems are provided in Chapter 246-290 WAC. The Project site is served by Tacoma Water.</p> <p>The SDWA also requires every state to develop a wellhead protection program. DOH administers the wellhead protection program in Washington. All Group A public water systems must prepare a water system plan that includes a wellhead protection plan. Local wellhead protection programs must delineate wellhead protection zones and determine their susceptibility to pollution. The study area lies outside of any designated wellhead protection zones.</p>	Water
ESA (16 USC 1536)	<p>The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by USFWS and NOAA Fisheries. USFWS has primary responsibility for terrestrial and freshwater organisms, and NOAA Fisheries addresses marine fish and wildlife such as whales and anadromous fish. Under the ESA, species may be listed as either endangered or threatened. “Endangered” means a species that is in danger of extinction throughout all or a significant portion of its range. “Threatened” means a species that is likely to become endangered within the foreseeable future. The proposed Project would not require permitting under the ESA because the Project has no federal nexus, but because ESA-listed species occur near the Project site, it is included for reference.</p>	Plants and Animals
Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801)	<p>The objectives of this act are to prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable supply of seafood. The act governs Essential Fish Habitat, which is defined to include “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The proposed Project would not require permitting under the act because the Project has no in-water work, but because fish species and habitats covered by the act occur near the Project site, it is included for reference.</p>	Plants and Animals

Law or Regulation	Description	Applicability
Marine Mammal Protection Act (16 USC 1361 et seq.)	The act prohibits, with certain exceptions, the "take" (including harassment, hunting, capturing, collecting, or killing) of marine mammals in U.S. waters and by U.S. citizens on the high seas and the importation of marine mammals and marine mammal products into the United States. The Project does not include any in-water work, but the site is connected by Hylebos Waterway to Commencement Bay, which is used by marine mammals.	Plants and Animals
Bald and Golden Eagle Protection Act (16 USC 668-668c)	This act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs. The act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." There are no documented bald or golden eagle nests on or within 0.25 mile of the Project site, but bald eagles are present along Commencement Bay and likely use the Project area as part of larger foraging areas.	Plants and Animals
Migratory Bird Treaty Act (16 USC 703-712)	The Migratory Bird Treaty Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by USFWS. The Project site itself does not provide migratory bird habitat, but wetlands, shorelines, and forested areas in the vicinity may be used by migratory birds.	Plants and Animals
State		
Archaeological Sites and Resources (RCW 27.53)	Prohibits unpermitted excavation of an archaeological site.	Archaeological, Historical, and Cultural Resources
Project Review Under the Growth Management Act (RCW 43.21.240)	When requirements of this section are satisfied, a county, city, or town reviewing a project action shall determine that the requirements for environmental analysis, protection, and mitigation measures in the county, city, or town's development regulations and comprehensive plans provide adequate analysis of and mitigation for the specific adverse environmental impacts of the project action to which the requirements apply.	Transportation
Transportation Regulations (RCW 81)	Regulates transportation in Washington State and administers railroad safety provisions allowed under 49 USC 20106 and state law (RCW 81.04.540), rules for the equipment used by common carriers (RCW 81.44), and railroad crossings (RCW 81.53).	Environmental Health and Safety

Law or Regulation	Description	Applicability
Pilotage Act (RCW 88.16)	Creates a state board of pilotage commissioners that regulates pilot licenses, training, and rest periods. Requires large oil tankers on Puget Sound to employ licensed pilots and have a tug escort to reduce the risk of oil spills. Currently, as required under RCW 88.16.260, the Washington State Board of Pilotage Commissioners and Ecology are working to adopt tug escort rules for Puget Sound.	Environmental Health and Safety, Water, Plants and Animals
Transport of Petroleum Products – Financial Responsibility (RCW 88.40)	Defines and prescribes financial responsibility requirements for vessels that transport petroleum products across state waters and facilities that store, handle, or transfer oil or hazardous substances near navigable waters of the state.	Environmental Health and Safety
Vessel Oil Spill Prevention and Response (RCW 88.46)	Establishes rules and regulations for tank vessels that carry oil and enter navigable waters of the state. Ecology is developing a quantitative modeling framework to assess current and potential future risks of oil spills in Washington waters as required by RCW 88.46.250.	Environmental Health and Safety, Water, Plants and Animals
Oil and Hazardous Substance Spill Prevention and Response (Oil Spill Act) (RCW 90.56)	Establishes programs to reduce the risk and develop an approach to respond to oil and hazardous substance spills; provides a simplified process to calculate damages from an oil spill; holds responsible parties liable for damages resulting from injuries to public resources.	Environmental Health and Safety
Hazardous Chemical Emergency Response Planning and Community Right-to-Know Act of 1986 (WAC 118-40)	Establishes requirements for federal, state, and local governments, and industry to improve hazardous chemical preparedness and response through coordination and planning; provisions include public notification about chemicals used at facilities.	Environmental Health and Safety
Facility Oil Handling Standards (WAC 173-180)	Establishes minimum standards for safe oil transfer operations to meet a zero-spill goal established by the legislature.	Environmental Health and Safety, Earth
Oil Spill Contingency Plan Requirements (WAC 173-182)	Requires larger oil handling facilities and commercial vessels to have state-approved oil spill contingency plans that describe their ability to respond to oil spills.	Environmental Health and Safety, Transportation
Oil Spill Natural Resources Damage Assessment (WAC 173-183)	Establishes procedures for convening a resource damage assessment committee, pre-assessment screening of damages, and selecting the damage assessment method.	Environmental Health and Safety
Vessel Oil Transfer Advance Notice and Containment Requirements (WAC 173-184)	Requires facility operators who transfer oil to provide Ecology with a 24-hour advance notice of transfer.	Environmental Health and Safety
Growth Management Act (RCW 36.70A)	Requires many cities and counties in Washington to adopt comprehensive plans which articulate goals, objectives, policies, actions, and standards to manage and plan for population growth.	Land Use
Shoreline Management Act (RCW 90.58)	Establishes regulations for managing the use, environmental protection, and public access of the state's shorelines.	Land Use
State and Protected Species (Chapter 220-610 WAC)	Designates the list of state endangered species.	Plants and Animals

Law or Regulation	Description	Applicability
Bald Eagle Protection Rules (WAC 220-610-100)	The purpose of these rules is to protect the bald eagle habitat and populations so that the species is not classified as threatened, endangered, or sensitive in Washington State. The rules promote cooperative efforts with landowners to manage for eagle habitat needs. There are no documented bald or golden eagle nests on or within 1 mile of the Project site, but bald eagles likely use the Project area as part of larger foraging areas.	Plants and Animals
PHS Program	The WDFW PHS list includes species and habitats for which special conservation measures should be taken. Priority habitats are habitat types or elements with unique or significant value to a large number of species. A priority habitat may consist of a unique vegetation type, dominant plant species, or a specific habitat feature. Priority species include State Endangered, Threatened, Sensitive, and Candidate species; vulnerable animal groups (e.g., seabird concentrations, heron rookeries, and bat colonies); and vulnerable species of recreational, commercial, or Tribal importance. Species are often considered a priority only within a nesting, roosting, foraging, or breeding area, regular gathering area, or migration corridor. (WDFW 2021a). The PHS list does not carry regulatory authority but is used by local governments in creating and administering critical areas and shoreline regulations, and in assessing potential impacts of projects. Some PHS habitats are located in the Project area. (WDFW 2021b).	Plants and Animals
WNHP	Established in 1977, WNHP catalogs the plants, animals and ecosystems of the state and prioritizes conservation needs. This information helps to guide state conservation funding and the designation of state natural areas. WNHP maintains the Natural Heritage Information System, a database and mapping of rare species and rare/high-quality ecological communities. The program does not have regulatory authority, but this information is used by governments and others to support code development and guide conservation activities (WNHP 2021).	Plants and Animals
Hydraulic Code Rules (Chapter 220-660 WAC)	The rules were established to protect fish life. They require project proponents to obtain a Hydraulic Project Approval permit from WDFW for activities that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state. The Project does not propose any in-water work.	Plants and Animals
Washington State Constitution, Article XI, County, City, and Township Organization	Section 11, Police and Sanitary Regulations, states that any county, city, town, or township may make and enforce within its limits all such local police, sanitary, and other regulations as are not in conflict with general laws.	Public Services and Utilities
Public Health and Safety (Title 70 RCW)	Establishes state standards for healthcare facilities, health departments, hospital districts, jails, and others.	Public Services and Utilities

Law or Regulation	Description	Applicability
Public Utilities (Title 80 RCW 80)	Creates the Washington Utilities and Transportation Commission, which regulates the rates, services, facilities, and practices of businesses that supply utility services to the public.	Public Services and Utilities
Water Quality Standards for Surface Waters of the State of Washington (WAC Chapter 173-201A)	Section 401 of the CWA requires certification by Ecology that a permitted activity meets state water quality standards that have been established consistent with public health and public enjoyment of the waters and the propagation and protection of fish, shellfish, and wildlife. The standards specify "designated uses" for waterbodies in Washington, including recreation, aquatic life, drinking water supply, and other miscellaneous uses. Criteria are set that limit chemical and bacterial pollutant levels in both marine and freshwaters and specify allowable physical parameters, such as oxygen, turbidity, and temperature, that affect aquatic life. Compliance with state surface water standards is required under SeaPort Sound's ISIP.	Water
Regulation of Public Groundwaters (RCW 90.44) Water Quality Standards for Groundwaters of the State of Washington (WAC Chapter 173-200)	The state groundwater quality standards are intended to prevent degradation of groundwater in the state and to protect beneficial uses such as drinking water. They establish numerical limits for the allowable levels of contaminants in state groundwaters. The standards apply to any activity that has potential to contaminate groundwater quality. If Ecology determines there is a potential for groundwater pollution, it can require groundwater monitoring or other measures. Compliance with state groundwater standards is required under SeaPort Sound's ISIP. Ecology has the authority to designate special groundwater management areas where the aquifer is a primary source of public water supply, is being overused, is at risk of contamination, or has been designated as a sole-source aquifer by EPA. The study area lies outside of any special groundwater management areas.	Water
Washington State Sediment Management Standards (WAC Chapter 173-204)	The state sediment management standards were established to reduce and ultimately eliminate adverse effects on biological resources and significant human health threats from surface sediment contamination. Criteria are set that limit chemical pollutant levels in sediments in both marine and freshwaters. Ecology maintains a list of contaminated sediment sites based on their relative risk to human health and the environment and determines where cleanup is needed. Numerous sediment cleanup projects have been undertaken in Hylebos Waterway. Compliance with state sediment management standards is required under SeaPort Sound's ISIP.	Water

Law or Regulation	Description	Applicability
Local		
Heavy Haul Industrial Corridor (TMC 11.55)	Authorizes issuance of special permits for movement and operation of vehicles in excess of the legal weight limits within the heavy haul industrial corridor in such circumstances wherein the load is a sealed ocean-going container and an applicant can show good cause for such movements.	Transportation
City of Tacoma Zoning (TMC 13.06)	Provides descriptions of the zoning regulations and criteria for the City.	Land Use
Archaeological, Cultural, and Historic Resources (TMC 13.12.570)	Requires documentation if recorded cultural resources are present within 500 feet of a City-permitted project, or if structures older than 50 years will be demolished.	Archaeological, Historical, and Cultural Resources
City of Tacoma Comprehensive Plan	The City's official statement concerning future growth and development, including goals, policies and strategies for the health, welfare, safety and quality of life of Tacoma.	Land Use
City of Tacoma SMP	Carries out responsibilities imposed by the Shoreline Management Act. No in-water work is proposed as part of the Proposed Action. However, the Proposed Action would include work within upland shoreline areas regulated under the SMP. Proposed work would occur within the Hylebos Waterway 200-foot shoreland area designated as S-10 Port Industrial, High-Intensity. A small portion of the work would also occur within the 50-foot marine buffer for Hylebos Waterway, including the replacement of flow and pH meters, trenching in the stormwater pipeline relocation area, and the installation of new manholes for the stormwater line alignment.	Land Use, Water, Plants and Animals

Law or Regulation	Description	Applicability
Critical Areas Preservation (TMC 13.11)	<p>The City's critical areas code regulates the following types of critical areas:</p> <p>Wetlands (TMC 13.11.300). The code classifies wetlands and provides buffers, development standards, and mitigation requirements for wetlands or buffer impacts.</p> <p>Streams and riparian habitats (TMC 13.11.400). The code classifies stream types and provides buffers, development standards, and mitigation requirements for stream or buffer impacts.</p> <p>Fish and Wildlife Habitat Conservation Areas (TMC 13.11.500). Defined to include areas identified as being of critical importance to the maintenance of fish and wildlife species. Relevant to this Project, they include lands and waters containing State Priority Habitats and Species; waters of the state; and areas with which state- or federally designated endangered, threatened, and sensitive species have a primary association.</p> <p>Flood hazard areas (TMC 13.11.600). Flood hazard areas are classified according to flood insurance rate maps (TMC 13.11.610). Flood hazard area development standards are provided in TMC 13.11.620. The study area is located outside of any mapped flood hazard areas.</p> <p>Aquifer recharge areas (TMC 13.11.800). These areas are classified based on the susceptibility of the aquifer to degradation and contamination (TMC 13.11.810). Standards for development in aquifer recharge areas (TMC 13.11.820) are in accordance with TMC 13.09 for the South Tacoma Groundwater Protection District. The study area is located outside of the South Tacoma Groundwater Protection District.</p> <p>Geologically hazardous areas (TMC 13.11.700): This section contains the general provisions, including designation, applicability, and classification of geologically hazardous areas.</p>	Earth, Water, Plants and Animals
City of Tacoma Charter, Article IV, Public Utilities	Establishes the City's powers, as granted by state law, to create and operate public utilities for supplying water, light, heat, power, and transportation, as well as sewage and refuse collection, treatment, and disposal services.	Public Services and Utilities
TMC Title 2, Building and Development Code	Sets minimum standards for construction, light, ventilation, heating, sanitation, security, fire, and life safety in structures. Adopts the International Building, Residential, and Plumbing Codes.	Public Services and Utilities, Earth
TMC Title 3, Fire and Emergency Medical Services	Provides the City's Fire Prevention Code, which adopts the International Fire Code. Establishes responsibilities for emergency medical transportation in the City.	Public Services and Utilities
TMC Title 7, Police	Defines the authority of the Chief of Police, designates the location of the City jail.	Public Services and Utilities

Law or Regulation	Description	Applicability
TMC Title 12, Utilities	Establishes the City's electrical code and adopts the National Electric Code and provisions of RCW 19.28 and WAC 296.46B related to electrical installations. Regulates use of the City's sanitary sewer and sets forth requirements for pretreatment of industrial waste. Regulates stormwater, including all direct and indirect discharges to receiving waters and the municipal stormwater system. Regulates the collection, management, and proper handling of all solid waste, including recyclable materials, originating from residential, commercial, agricultural, and industrial operations and other sources within the City; defines prohibited materials (toxic, extremely hazardous, dangerous and hazardous, or liquid waste); and establishes regulation of water utility services by the municipal water supply system of the City.	Public Services and Utilities
Industrial Wastewater Pretreatment Program (TMC Subchapter 12.08C)	<p>The City prohibits industrial users from discharging certain pollutants to the City's sewer system. This includes substances that create fire or explosive hazards, wastewater with very high or low pH, viscous or solid substances that can cause blockage, high-temperature wastewater, substances that can cause toxic fumes, large volumes of noncontact cooling water, pesticides, sludge, and other substances that can cause a violation of the City's NPDES municipal discharge permit for its wastewater treatment plants. Industrial users discharging wastewater to the municipal sewer system are required to provide wastewater treatment and obtain an industrial wastewater permit from the City.</p> <p>SeaPort Sound has an IWDP (Permit No. TAC-035-2021) for its on-site wastewater treatment system, which discharges to the City's sewer system. The IWDP was issued in 2021 and expires in 2026. The permit may need to be updated for the new on-site wastewater treatment system under the Proposed Action. In accordance with IWDP condition IV.G and standard condition J, changes to the currently authorized pretreatment system or volume of discharge, respectively, may require notification to the City.</p>	Water
Stormwater Management (TMC Subchapter 12.08D)	The City has a municipal NPDES permit that includes requirements for developing, operating, and managing stormwater infrastructure.	Water

Notes:

WDFW, 2021a. PHS on the Web. Accessed August 2021. Available at: <https://geodataservices.wa.gov/hp/phs/>.

WDFW, 2021b. Priority Habitats and Species List. Accessed August 2021. Available at:

<https://wdfw.wa.gov/sites/default/files/publications/00165/wdfw00165.pdf>.

WNHP, 2021. Natural Heritage Program. Accessed August 2021. Available at: <https://www.dnr.wa.gov/NHPdata>.

CFR: *Code of Federal Regulations*

City: City of Tacoma

CWA: Clean Water Act

DOH: Washington State Department of Health

Ecology: Washington State Department of Ecology

EPA: U.S. Environmental Protection Agency

ESA: Endangered Species Act

ISIP: Industrial Stormwater Individual Permit
IWDP: Industrial Wastewater Discharge Permit
NOAA Fisheries: National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NPDES: National Pollutant Discharge Elimination System
PHS: Priority Habitats and Species
Project: SeaPort Sound Terminal, LLC, Plant Modernization Project
RCW: Revised Code of Washington
SDWA: Safe Drinking Water Act
SMP: Shoreline Master Program
TMC: Tacoma Municipal Code
USC: *United States Code*
USCG: U.S. Coast Guard
USFWS: U.S. Fish and Wildlife Service
WAC: Washington Administrative Code
WDFW: Washington State Department of Fish and Wildlife
WNHP: Washington Natural Heritage Program

Appendix F
Species Included on the Priority Habitats
and Species List for Pierce County

**Table F-1
Bird Species Included on the Priority Habitats and Species List for Pierce County**

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Common loon (<i>Gavia immer</i>)	SS/None	VA	Breeding sites, migratory stopovers, and regular concentrations	Foraging in Hylebos Waterway and Commencement Bay
Marbled murrelet (<i>Brachyramphus marmoratus</i>)	SE/FT	VA	Any occurrence in suitable habitat	Unlikely; nearest mapped nesting areas are more than 20 miles away on public lands containing old-growth forest; densities of the species in south Puget Sound are very low (Lance and Pearson 2021).
Western grebe (<i>Aechmophorus occidentalis</i>)	SC/None	VA	Breeding areas, migratory stopovers, regular concentrations, and regular occurrences in winter	Observed in Commencement Bay during winter and may also use Hylebos Waterway for foraging on fish (EEI 2015). Breeds during the summer on lakes in eastern Washington.
Great blue heron (<i>Ardea herodias</i>)	None/None	VA	Breeding areas	Foraging in wetlands near Hylebos Waterway and Commencement Bay; known to perch on structures near Hylebos Waterway and move to shoreline and mudflats during low tide (EEI 2015). Rookery recorded 0.9 mile from project site in forested area by WDFW; last recorded activity was in 2000.
Harlequin duck (<i>Histrionicus histrionicus</i>)	None/None	RCT, VA	Breeding areas and regular concentrations in salt water	Foraging in Hylebos Waterway and Commencement Bay

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Western High Arctic brant (<i>Branta bernicla</i>)	None/None	RCT, VA	Regular concentrations in foraging and resting areas and migratory stopovers	Unlikely; species prefers eelgrass, and none is mapped within 1 mile of the Project site.
Golden eagle (<i>Aquila chrysaetos</i>)	SC/None	State listing	Breeding and foraging areas	No
Northern goshawk (<i>Accipiter gentilis</i>)	SC/None	State listing	Breeding areas, including alternate nest sites and post-fledging foraging areas	No
Mountain quail (<i>Oreortyx pictus</i>)	None/None	RCT	Any occurrence	No
Sooty grouse (<i>Dendragapus fuliginosus</i>)	None/None	RCT	Breeding areas and regular concentrations	No
Band-tailed pigeon (<i>Columba fasciata</i>)	None/None	RCT	Regular concentrations and occupied mineral sites	Possible in forested areas north of Marine View Drive
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	SE/FT	State listing	Any occurrence	No suitable habitat (densely vegetated riparian areas); believed extirpated in Washington
Northern spotted owl (<i>Strix occidentalis</i>)	SE/FT	State listing	Any occurrence	No suitable habitat (old-growth forest).
Vaux's swift (<i>Chaetura vauxi</i>)	SC/None	State listing	Breeding areas and communal roosts	No
Black-backed woodpecker (<i>Picoides arcticus</i>)	SC/None	State listing	Breeding areas and regular occurrences	No
Pileated woodpecker (<i>Dryocopus pileatus</i>)	SC/None	State listing	Breeding areas	Possible in forested areas north of Marine View Drive
Oregon vesper sparrow (<i>Pooecetes gramineus affinis</i>)	SE/FP	State listing	Any occurrence	No suitable habitat (grassland, shrub-steppe, agricultural areas)
Slender-billed white-breasted nuthatch (<i>Sitta carolinensis aculeata</i>)	SC/None	State listing	Any occurrence	No

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Streaked horned lark (<i>Eremophila alpestris strigata</i>)	SE/FT	State listing	Any occurrence	No suitable habitat (grasslands)
Western Washington breeding concentrations of cormorants (Phalacrocoracidae), storm-petrels (Hydrobatidae), terns (Laridae), and alcids (Alcidae)	None/None	VA	Breeding areas	Pigeon guillemot breeding site mapped by WDFW north of Marine View Drive. Double-crested cormorants (<i>Phalacrocorax auritus</i>) are known to use Hylebos Waterway and nearby structures for roosting (EEI 2015).
Cavity-nesting ducks: wood duck (<i>Aix sponsa</i>), Barrow's goldeneye (<i>Bucephala islandica</i>), common goldeneye (<i>B. clangula</i>), bufflehead (<i>B. albeola</i>), and hooded merganser (<i>Lophodytes cucullatus</i>)	None/None	RCT	Breeding areas	Bufflehead and Barrow's goldeneye are known to use Hylebos Waterway (EEI 2015).
Waterfowl concentrations: (Anatidae, excluding Canada geese in urban areas)	None/None	RCT, VA	Significant breeding areas and regular concentrations in winter	Cackling geese are known to use Hylebos Waterway and nearby structures for roosting (EEI 2015).
Western Washington nonbreeding concentrations: Barrow's goldeneye, common goldeneye bufflehead	None/None	RCT, VA	Regular concentrations	Bufflehead and Barrow's goldeneye are known to use Hylebos Waterway (EEI 2015).
Western Washington nonbreeding concentrations: Charadriidae Scolopacidae Phalaropodidae	None/None	VA	Regular concentrations	Foraging may occur in wetlands and mudflats along Hylebos Waterway and Commencement Bay during low tide.

Notes:

FP: petitioned for federal listing

FT: Federal Threatened

PHS: Priority Habitats and Species

RCT: species of recreational, commercial, and/or Tribal importance

SC: State Candidate

SE: State Endangered

SS: State Sensitive

VA: vulnerable aggregations

WDFW: Washington Department of Fish and Wildlife

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021a

Table F-2**Terrestrial Mammal Species Included on the Priority Habitats and Species List for Pierce County**

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Keen's myotis (<i>Myotis keenii</i>)	SC/None	VA	Any occurrence	Potentially use tree cavities in forested area north of Marine View Drive
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SC/None	VA	Any occurrence	Potentially use tree cavities in forested area north of Marine View Drive
Western gray squirrel (<i>Sciurus griseus</i>)	ST/None	State listing	Any occurrence	No suitable habitat present (Garry oak woodlands)
Mazama (Western) pocket gopher (<i>Thomomys mazama</i>)	ST/FT	State listing	Any occurrence	No suitable habitat present (prairie soil types)
Cascade red fox (<i>Vulpes vulpes cascadenis</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (alpine and subalpine areas)
Fisher (<i>Pekania pennanti</i>)	SE/None	State listing	Any occurrence	No suitable habitat present (undisturbed forest)
Pacific marten (<i>Martes caurina</i>)	None/None	RCT	Regular occurrences	No suitable habitat present (forested mountain areas)
Wolverine (<i>Gulo gulo</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (alpine and subalpine forest)
Columbian black-tailed deer (<i>Odocoileus hemionus columbianus</i>)	None/None	RCT	Regular concentrations and migration corridors	Potential foraging, movement, breeding, and refuge area in forest north of Marine View Drive.
Elk (<i>Cervus elaphus</i>)	None/None	RCT	Calving areas, migration corridors, and regular concentrations in winter and foraging areas along coastal waters	No suitable habitat present (grasslands, meadows, or clearcuts, interspersed with closed-canopy forests)
Mountain goat (<i>Oreamnos americanus</i>)	None/None	RCT	Breeding areas and regular concentrations	No suitable habitat present (alpine and subalpine areas)

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Roosting concentrations of big brown bat (<i>Eptesicus fuscus</i>), myotis bat (<i>Myotis</i> spp.), and pallid bat (<i>Antrozous pallidus</i>)	None/None	VA	Regular concentrations in naturally occurring breeding areas and other communal roosts	Potentially use tree cavities in forested area north of Marine View Drive

Notes:

FT: Federal Threatened

PHS: Priority Habitats and Species

RCT: species of recreational, commercial, and/or Tribal importance

SC: State Candidate

SE: State Endangered

VA: vulnerable aggregations

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021

Table F-3

Amphibian, Reptile, and Insect Species Included on the Priority Habitats and Species List for Pierce County

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Amphibians				
Cascade torrent salamander (<i>Rhyacotriton cascadae</i>)	SC/Petitioned for federal listing	State listing	Any occurrence	No suitable habitat present (areas near freshwater mountain streams)
Larch Mountain salamander (<i>Plethodon larselli</i>)	SS/None	State listing	Any occurrence	No suitable habitat present (steep rocky slopes, talus)
Van Dyke's salamander (<i>Plethodon vandykei</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (mountain forests and streams)
Oregon spotted frog (<i>Rana pretiosa</i>)	SE/FT	State listing	Any occurrence	No suitable habitat present (perennial waterbodies with zones of shallow water and abundant emergent or floating vegetation); USFWS states the species is not known to currently occur in Pierce County (USFWS 2021).
Western toad (<i>Anaxyrus boreas</i>)	SC/None	State listing	Any occurrence	Could potentially use forests north of Marine View Drive for dispersal or overwintering
Reptiles				
Western pond turtle (<i>Actinemys marmorata</i>)	SE/ Petitioned for federal listing	State listing	Any occurrence	No suitable habitat present (ponds or lakes with grasslands or open woodlands nearby); largely extirpated from Puget Sound lowlands (WDFW 2021)
Insects				
Pacific clubtail (<i>Gomphus kurilis</i>)	SC/None	State listing	Any occurrence	Uses ponds, lakes, slow streams; unlikely to be present, only two known populations in Washington (Xerces Society 2021)
Johnson's hairstreak (<i>Callophrys johnsoni</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (prairies)

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Mardon skipper (<i>Polites mardon</i>)	SE/None	State listing	Any occurrence	No suitable habitat present (prairies)
Puget blue (<i>Icaricia icarioides blackmorei</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (prairies)
Taylor's checkerspot (<i>Euphydryas editha taylori</i>)	SE/FE	State listing	Any occurrence	No suitable habitat present (prairies)
Valley silverspot (<i>Speyeria zerene bremnerii</i>)	SC/None	State listing	Any occurrence	No suitable habitat present (prairies)

Notes:

FE: Federal Endangered

FT: Federal Threatened

SC: State Candidate

SE: State Endangered

SS: State Sensitive

USFWS: U.S. Fish and Wildlife Service

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021

**Table F-4
Marine Fish Species Included on the Priority Habitats and Species List for Pierce County**

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Forage Fish				
Pacific herring (<i>Clupea pallasii</i>)	SC/None	RCT, VA	Regular concentrations and breeding areas	No spawning areas mapped in study area; pre-spawner herring holding areas present in Commencement Bay off of Maury Island (WDFW 2021c)
Longfin smelt (<i>Spirinchus thaleichthys</i>)	None/None	RCT, VA	Regular concentrations and breeding areas	Unlikely to occur in study area; rarely found in central or southern Puget Sound (Penttila 2007)
Surf smelt (<i>Hypomesus pretiosus</i>)	None/None	RCT, VA	Regular concentrations and breeding areas	No spawning areas mapped in study area. Nearest mapped spawning sites are at Brown's Point and near mouth of Sitcum Waterway and Puyallup River (WDFW 2021c).
Pacific sand lance (<i>Ammodytes hexapterus</i>)	None/None	RCT, VA	Regular concentrations and breeding areas	No sand lance spawning areas mapped in study area. The nearest mapped spawning sites are near the mouth of Puyallup River and along Commencement Bay near Ruston and Brown's Point (WDFW 2021c).

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Rockfish				
Black rockfish (<i>Sebastes melanops</i>), bocaccio rockfish (<i>S. paucispinis</i>), brown rockfish (<i>S. auriculatus</i>), canary rockfish (<i>S. pinniger</i>), copper rockfish (<i>S. caurinus</i>), greenstriped rockfish (<i>S. elongatus</i>), quillback rockfish (<i>S. maliger</i>), redstripe rockfish (<i>S. proriger</i>), yelloweye rockfish (<i>S. ruberrimus</i>), and yellowtail rockfish (<i>S. flavidus</i>)	SC/Federal listings for Puget Sound Georgia Basin DPS of the following: bocaccio rockfish (FE), canary rockfish (FT), and yelloweye rockfish (FT)	RCT, VA	Regular concentrations	Commencement Bay, potentially Hylebos Waterway
Bottomfish				
English sole (<i>Pleuronectes vetulus</i>)	None/None	RCT	Breeding areas	Commencement Bay, potentially Hylebos Waterway
Rock sole (<i>P. bilineatus</i>)	None/None	RCT	Regular concentrations and breeding areas	Commencement Bay, potentially Hylebos Waterway
Other Marine Fish				
Pacific cod (<i>Gadus macrocephalus</i>)	SC/None	RCT, VA	Regular concentrations and breeding areas	Commencement Bay, potentially Hylebos Waterway
Pacific hake (<i>Merluccius productus</i>)	SC/None	RCT, VA	Regular concentrations and breeding areas	Commencement Bay, potentially Hylebos Waterway
Walleye pollock (<i>Gadus chalcogrammus</i>)	SC/None	RCT, VA	Regular concentrations and breeding areas	Commencement Bay, potentially Hylebos Waterway

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Lingcod (<i>Ophiodon elongatus</i>)	None/None	RCT, VA	Any occurrence	Commencement Bay, potentially Hylebos Waterway

Notes:

DPS: distinct population segment

FE: Federal Endangered

FT: Federal Threatened

RCT: species of recreational, commercial, and/or Tribal importance

SC: State Candidate

VA: vulnerable aggregations

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021

Table F-5

Anadromous and Freshwater Fish Species Included on the Priority Habitats and Species List for Pierce County

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Pacific lamprey (<i>Lampetra tridentata</i>)	None/None	RCT	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway
River lamprey (<i>L. ayresii</i>)	SC/None	RCT, VA	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway
White sturgeon (<i>Acipenser transmontanus</i>)	None/None	RCT, VA	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway
Bull trout/Dolly Varden trout (<i>Salvelinus confluentus/ S. malma</i>)	SC/FT (Bull trout)	RCT, VA	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway
Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	SC/FT (Puget Sound ESU)	RCT, VA	Any occurrence	Fall Chinook salmon have been documented in Hylebos Creek (WDFW 2021d) and are likely to be present in Hylebos Waterway at some times of year.
Chum salmon (<i>O. keta</i>)	SC/None	RCT, VA	Any occurrence	Fall chum salmon have been documented in Hylebos Creek (WDFW 2021d) and are likely to be present in Hylebos Waterway at some times of year.
Coastal resident/sea-run cutthroat trout (<i>O. clarkii clarkii</i>)	None/None	RCT	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway
Coho salmon (<i>O. kisutch</i>)	None/None	RCT, VA	Any occurrence	Coho salmon have been documented in Hylebos Creek (WDFW 2021d) and are likely to be present in Hylebos Waterway at some times of year.
Kokanee salmon (<i>O. nerka</i>)	None/None	RCT	Any occurrence	Not present; move between streams and lakes
Pink salmon (<i>O. gorbuscha</i>)	None/None	RCT, VA	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Rainbow trout, steelhead, and inland redband trout (<i>O. mykiss</i>)	SC/FT (Puget Sound DPS)	RCT	Any occurrence	Winter steelhead have been documented in Hylebos Creek (WDFW 2021d) and are likely to be present in Hylebos Waterway at some times of year.
Sockeye salmon (<i>O. nerka</i>)	SC/None	RCT, VA	Any occurrence	Potentially present in Commencement Bay and Hylebos Waterway

Notes:

DPS: distinct population segment

FP: petitioned for federal listing

FT: Federal Threatened

PHS: Priority Habitat and Species

RCT: species of recreational, commercial, and/or Tribal importance

SC: State Candidate

SE: State Endangered

SS: State Sensitive

VA: vulnerable aggregations

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021

Table F-6
Marine Mammal Species Included on the Priority Habitats and Species List for Pierce County

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
California sea lion (<i>Zalophus californianus</i>)	None/None	VA	Haul outs	Possible foraging in study area; known to haul out on buoys, floats, and log booms in Commencement Bay near the mouth of Hylebos Waterway (WDFW 2000)
Dall's porpoise (<i>Phocoenoides dalli</i>)	None/None	VA	Regular concentrations in foraging areas and migration routes	Possible but unlikely to occur in study area; species appears to be declining and is uncommon in Puget Sound (Smultea et al. 2017).
Gray whale (<i>Eschrichtius robustus</i>)	SS/FE (Western North Pacific DPS)	VA	Any occurrence	Possible but unlikely to occur in Commencement Bay; major feeding areas are in northern Puget Sound
Harbor porpoise (<i>Phocoena phocoena</i>)	SC/None	VA	Regular concentrations in foraging areas and migration routes	Possible foraging in study area; commonly observed in Puget Sound during recent aerial surveys (Smultea et al. 2017)
Harbor seal (<i>Phoca vitulina</i>)	None/None	VA	Haul outs	Possible foraging in study area; known to haul out on buoys, floats, and log booms in Commencement Bay near the mouth of Hylebos Waterway (WDFW 2000). Harbor seals have been observed in the waterway (EEI 2015).
Killer whale (orca) (<i>Orcinus orca</i>)	SE/FE (southern resident DPS)	VA	Vulnerable aggregations; regular concentrations in foraging areas and migration routes	Known to occur in Commencement Bay; unlikely in Hylebos Waterway

Species	State/Federal Listing Status	Criteria for Inclusion on PHS List	Areas Considered Priorities in PHS List	Potential Habitat Use in Study Area
Steller (northern) sea lion (<i>Eumetopias jubatus</i>)	None/FT	VA	Haul outs	Possible foraging in study area; known to be relatively common Puget Sound (Smultea et al. 2017)

Notes:

DPS: distinct population segment

FE: Federal Endangered

FT: Federal Threatened

SC: State Candidate

SE: State Endangered

SS: State Sensitive

VA: vulnerable aggregations

Sources (unless otherwise noted in table): WDFW 2021a, 2021b; USFWS 2021b; NOAA Fisheries 2021

Appendix G

Transportation Assessment – SeaPort Sound Terminal Modernization Project

Memorandum

Date: October 25, 2023

To: Justin Ranes and Matthew Kolata, SeaPort Sound
Dan Berlin and Josh Jensen, Anchor QEA, LLC

From: Anjum Bawa, AICP

Subject: Transportation Assessment – SeaPort Sound Plant Modernization Project

PT23-0088

Introduction

This technical memorandum summarizes our assessment of potential transportation impacts for the proposed SeaPort Sound Plant Modernization Project at the Seaport Sound Terminal located at 2628 Marine View Drive, Tacoma, in the State of Washington. Our assessment is based on technical information available in the Draft Environmental Impact Statement (EIS) dated July 2022, review of transportation infrastructure service within the site and in its immediate vicinity, and information obtained from Seaport Sound Terminal staff concerning the day-to-day operations of the facility and any change resulting from the proposed modernization activities. Provided below is a description of the project followed by a discussion of existing operations of the terminal. We then summarize change in number of vehicular, marine vessel, and railcar trips associated with the proposed modernization of the terminal. The net new trips are then compared to permitted levels for the site. We conclude the technical summary with our findings which are as follows:

- The project will not result in exceeding the permitted limits of average monthly vessel calls, rails cars, and daily truck loadings under existing plus project conditions.
- An assessment of additional truck loadings indicates that the proposed project will result at most one additional truck trip during the evening peak hour, which is considered negligible.
- The proposed project will result in less than significant transportation impact associated with minor increases in marine vessels, railcar unloadings, and trucks loadings.
- The project's construction activity could result in a temporary adverse effect on adjacent roadway. However, with the implementation of the proposed mitigation measures, the impact of construction activity is determined to be less than significant.



Project Description

As part of the modernization project, a portion of SeaPort Sound Terminal would be upgraded to provide operational flexibility and modernized facilities to meet the increasing market demand for renewable/low-carbon fuels. The project will involve demolishing the existing refinery at the terminal and replacing it with fixed cone roof storage tanks and upgraded wastewater and stormwater infrastructure. The project will increase the storage capacity at the terminal for low-carbon fuels to improve SeaPort Sound's flexibility in response to the increasing market demand for fossil fuel alternatives. As part of the project, the existing storage capacity is proposed to be increased by approximately 11% and include a variety of products including renewable and biofuels. SeaPort Sound is not seeking to increase its current permit limits associated with facility throughput and emissions as part of the project.

Figure 1 shows the location of the project and its adjacent street system. Figure 2 shows the existing site and Figure 3 illustrates the proposed site plan.

Existing Conditions

SeaPort Sound Terminal is located within the City of Tacoma's industrial Tideflats Subarea on the north side of Hylebos Waterway. Hylebos Waterway is an industrial waterway that borders the south side of the terminal. The terminal is accessible via road, rail, and water. The terminal includes a five-lane truck loading rack along Marine View Drive, a vessel pier in Hylebos Waterway and a rail facility located on the south side of Hylebos Waterway along Taylor Way, which connects to the main terminal via an underground pipeline. SeaPort Sound is not seeking to change its existing road access or truck loading rack capacity, number of rail offloading spaces, or water access via the marine berth in Hylebos Waterway as part of the project.

The portion of the terminal located north of Hylebos Waterway is served by multiple driveways along the southside of Marine View Drive and one driveway along E 11th Street.



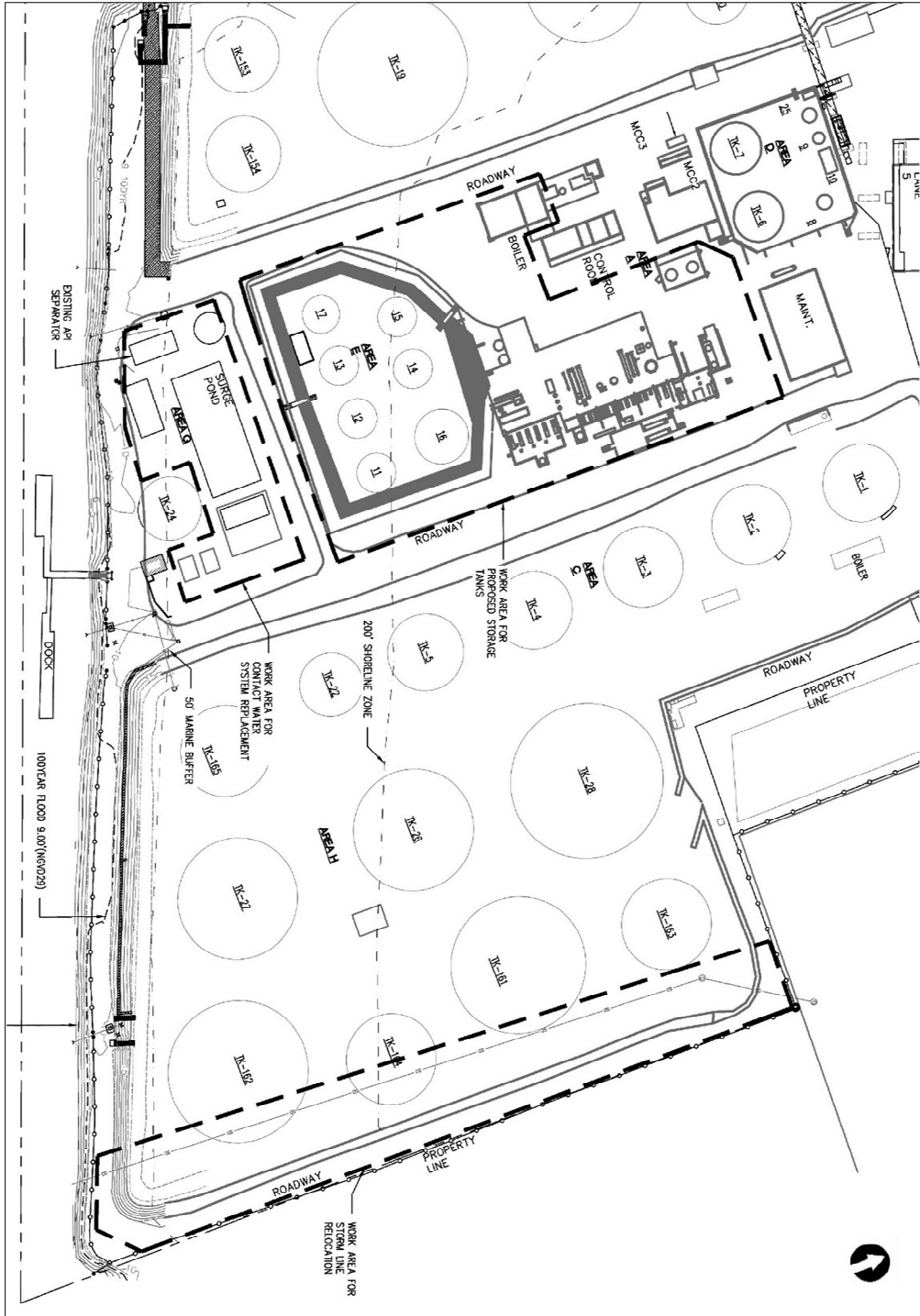
Figure 1 – Project Location



NOTES:
1. Horizontal datum is Washington State Plane South Zone, North American Datum of 1983, U.S. Feet.
2. Aerial image is USDA National Agriculture Imagery Program (USDA 2019).



Figure 2 – Existing Site



Source: SeaPort Sound Terminal Modernization Project, Draft EIS, July 2022



Street Network

Provided below is a brief description of streets adjacent to SeaPort Sound Terminal:

- **Marine View Drive**, designated as State Route 509 (SR-509), is located along the northeast side of Hylebos Waterway providing access between Taylor Way and Browns Point to the northwest. The street is configured with one travel lane in each direction and a two-way-left-turn channelizer median in the middle.
- **E 11th Street** connects with Marine View Drive in the northeast. In the south, the street goes over the Hylebos Waterway via the Hylebos Bridge and connects with Taylor Way and Alexander Avenue E. The street is configured as one travel lane in each direction between Taylor Way and Marine View Drive and two-lanes in each direction between Taylor Way and Alexander Avenue E.
- **Taylor Way** provides vehicular access to the portion of the terminal south of Hylebos Waterway and runs between E 11th Street in the northwest to SR509 (Frontage Road) in the southeast. The street serves the industrial properties on both sides with one travel lane in each direction.
- **McMurray Road NE** provides vehicular access between Marine View Drive in the Southeast and Browns Point Boulevard in the Northwest. McMurray Road NE intersection with Marine View Drive is in the middle of the span of site along Marine View Drive. The street is configured with one travel lane in each direction.

Existing Facility and Operations

The facility currently includes an inactive refinery, wastewater treatment plant, 52 above-grade storage tanks, a five-lane truck loading rack, and vessel pier in Hylebos Waterway. In addition to the above core functions, the site contains a laboratory building as well. The inactive refinery area includes a boiler building, refinery equipment and piping of many sizes located within a containment berm.

SeaPort Sound Terminal has permits limiting its throughput on various products transported through the terminal. Provided below is a summary of transportation throughput limits in Table 1. SeaPort Sound Terminal transportation data collected between 2016 and 2020 was used in this analysis to be consistent with time-period evaluated for the Draft Environmental Impact Statement.



Table 1 – SeaPort Sound Terminal Permitted Throughputs

Product	Limitation	Permit Reference
Truck Loading	300 trucks per day	City of Tacoma, 2011 SHR2011-40000162962
Truck Loading of Propone	50 trucks per day	City of Tacoma, 2006a
Marine Vessels (Marine Terminal)	68 vessel calls per month	City of Tacoma, 2013a SHR2013-40000203722 LU19-0066
Rail cars (South terminal)	540 cars per week	SHR2013-40000203722 LU19-0066

As discussed in the draft Environmental Impact Statement (EIS) dated July 2022, recent terminal activity resulted in the following throughput per year summarized in Table 2 below.

Table 2 – SeaPort Sound Terminal Recent Annual Throughput by Year

Year	Marine Vessel Calls	Rail Cars Unloaded	Truck Loading
2016	478	3,838	56,444
2017	497	5,489	68,187
2018	527	6,521	67,987
2019	577	6,831	66,807
2020	414	6,514	58,953



As shown in Table 2, the site experienced higher number of vessel calls, rail car unloadings, and truck loading in Year 2019. Provided below is summary of average monthly trips under all three modes of transportation in 2019 compared with permit limits shown in Table 1.

Table 3 – SeaPort Sound Terminal - Average Monthly Trips in Year 2019 Compared with Permit Limits

Description	Marine Vessel Calls	Rail Cars Unloaded	Truck Loading
Permitted Limit	68	2,340	9,125
2019 Monthly Average	49	569	5,536 ^[1]
<i>Percent of Permit Limit</i>	<i>72%</i>	<i>24%</i>	<i>61%</i>

Source: SeaPort Sound Terminal, LLC, December 2020

[1] – The most recent data from SeaPort Sound Terminal indicates a total of 5,548 truck loadings in the month of May 2023. This is similar and slightly higher than the 2019 monthly average of 5,536 truck loadings.

Using data summarized in Table 3, provided below is a summary of our methodology and assumptions to estimate net new trips estimated for marine vessels, number of rail cars and number of truck trips associated with the proposed project:

- In year 2019, which represents a higher range of annual activity at the terminal, marine vessel calls were 72% of permitted monthly average. Rail car unloadings and truck loadings were 24% and 61% of permitted monthly average, respectively.
- At 61% average monthly loadings, it amounts to approximately 180 truck loadings per day compared to 300 loadings permitted. In a traffic impact analysis dated May 2011 prepared by Heffron Transportation, Inc for the *SeaPort Sound Refining Facility Expansion and Access Revisions*, truck trips were summarized for each hour of the day based on data provided by SeaPort Sound Terminal.
- Per Table 1 – Sound Refining – Average Weekday Trip Generation Estimates (Attachment 1):
 - At 40% of permitted limit of 300 truck loadings, the site generated a total of 120 inbound / 120 outbound trips throughout the day observed in April 2011.
 - Per the prior traffic impact analysis, most truck loading activity occurs during the typical business hours of the facility between 6:00 AM and 6:00 PM.



- A total of 10 truck trips (5 inbound and 5 outbound) were observed during the evening peak hour of 5:00 PM – 6:00 PM.
- Similarly, a total of 120 daily vehicular trips (60 inbound / 60 outbound) were estimated to be generated from employees, contractors, vendors, and visitors. During the evening peak hour of 5:00 PM – 6:00 PM, a total of 13 vehicular trips (1 inbound / 12 outbound) were estimated.

Table 4 summarizes the trip generation at the site in Year 2011 as described in May 2011 Traffic Impact Analysis.

- Applying the temporal distribution of truck traffic to May 2023 trucking loadings, at 61% or 180 truck loadings of permitted levels (300 truck loadings), it is estimated that the site generates 360 daily truck trips (180 inbound / 180 outbound). During the evening peak hour between 5 PM and 6 PM, a total of 15 trips (7 inbound / 8 outbound) trips are estimated for the site.
- It is assumed that level of vehicular trips from employees, contractors, vendors, and visitors has not changed and therefore, estimated to be a total 120 daily vehicular trips (60 inbound / 60 outbound) and during the evening peak hour, a total of 13 vehicular trips (1 inbound / 12 outbound).

Table 5 summarizes trip generation estimates based on May 2023 truck loadings.

Table 4 Trips Generation Summary Based on 2011 Operations

Time of day	Employee, Contractors, Vendors, Visitors			At April 2011 Truck Loadings			At Total Permitted Truck Loadings		
	In	Out	Total	120 per day (40%)			300 per day		
	In	Out	Total	In	Out	Total	In	Out	Total
Daily	60	60	120	120	120	240	300	300	600
5 pm - 6 pm	1	12	13	5	5	10	12	13	25

Source: Table 1 – Sound Refining – Average Weekday Trip Generation Estimates, SeaPort Sound Refining Facility Expansion and Access Revisions, Heffron Transportation, Inc, May 2011.



Table 5: SeaPort Sound Terminal: Average Weekday Vehicular Trip Generation

Time of day	Employee, Contractors, Vendors, Visitors ^[1]			At May 2023 Truck Loadings			At Total Permitted Truck Loadings		
	In	Out	Total	180 per day (61%)			300 per day		
				In	Out	Total	In	Out	Total
Daily	60	60	120	180	180	360	300	300	600
5 pm - 6 pm	1	12	13	7	8	15	12	13	25

[1] - Source: SeaPort Sound Refining Facility Expansion and Access Revisions, Heffron Transportation, Inc, May 2011.

Existing Vehicular Circulation and Access

All trucks have access to the site through a truck entrance driveway along the east side of E 11th Street, south of Marine View Drive. These trucks leave the property via a driveway located in the northeast corner of the property along Marine View Drive. Most (if not all) of these trucks traveling to the site for fuel loading are double-tanker trailer trucks. To enter the site, these trucks make a right turn from northbound E 11th Street onto eastbound Marine View Drive. These trucks then proceed to the loading rack which has five lanes of loading capacity. It takes approximately 25 minutes to load or unload each truck at the rack. If all five lanes are occupied 24 hours per day, the facility could serve about 58 trucks per day per lane or a total of approximately 300 trucks per day, which is the permitted level of truck loadings. It should be noted that SeaPort has never operated at these full capacity levels.

Access is provided for employees, contractors, vendors, and visitors via a driveway along Marine View Drive just southeast of the intersection of McMurray Road and Marine View Drive. Just to the driveway's north-northwest, there is a parking lot surrounding the Terminal office where vehicles are typically parked. There are approximately 35 parking spaces for employee and visitor parking adjacent to the Terminal office.

Proposed Project Trip Generations

As shown in Table 4, the terminal currently generates approximately 180 truck loadings, which is 61% of the site's permitted limit of 300 truck loadings. The current operation generates on average 360 daily truck trips (180 inbound / 180 outbound) and 120 vehicular trips (60 inbound / 60 outbound) from employees, contractors, vendors, and visitors.



The proposed project seeks to expand storage capacity by 11% to accommodate low-vapor-pressure bulk liquids, such as diesel, biodiesel, renewable fuel stock, and fuel oil. According to information gathered from terminal staff, the increase in capacity of 11% could result, on average, in the turnover of one tank per month, or 160,000 barrels in thirty days. Renewable diesel is most likely to occupy the additional tank capacity due to a projected increase in market demand. Key assumptions used to represent the increased capacity in support of the transportation analysis are listed below:

- Two-thirds, or 66%, of this additional inbound fuel will arrive via marine vessels and one-third, or 33%, would arrive via railroad.
- The above amounts to a net increase of up to three vessel calls per month to transport approximately 105,600 barrels to the site via water and up to 78 rail cars per month to transport 52,800 barrels via railroad in a typical month.
- The above amounts is a negligible increase in vessel calls at the marine terminal, or approximately three rail cars every day at the rail terminal along Taylor Way.
- Distribution of 160,000 barrels of fuel product every month amounts to approximately 5,350 barrels every day. Given where the market conditions are trending towards renewable fuels, it is reasonable to assume that by the time the project construction is complete, renewable diesel will displace 50% of existing ultra-low sulfur diesel. This amounts to approximately 2,670 barrels of fuel that is distributed by trucks.
- A typical double-tanker truck has a capacity to load 9,800 gallons or 233 barrels of fuel. This amounts to approximately twelve trucks in a day.
- The proposed project will not result in additional employees, contractors, vendors, or similar requiring access to the site.

Table 6 is a trip generation summary of net new vehicular trips from the proposed project.



Table 6: Trip Generation Summary with Proposed Project

Scenario	Time	Vehicular Trips from Employee, Contractors, Vendors, Visitors ^[1]			Trucks Trips: May 2023 Level (61% of Permitted Limit)		
		In	Out	Total	In	Out	Total
Existing Conditions	5:00 PM – 6:00 PM	1	12	13	7	8	15
	Daily Total	60	60	120	180	180	360
Project Net New Trips	5:00 PM – 6:00 PM	-	-	-	1	0	1
	Daily Total	-	-	-	12	12	24
Existing Plus Project	5:00 PM – 6:00 PM	1	12	13	8	8	16
	Daily Total	60	60	120	192	192	384

As shown above, the proposed project will add up to 24 daily truck trips of which one trip could be added in the evening peak hour. With the proposed project, the site could generate up to 384 daily truck trips, of which 16 will occur in the evening peak hour. ***An increase of one trip during the evening peak hour is considered negligible and it is not expected to result in a significant impact on adjacent roadways and intersections during the evening peak hour.***

Table 7 provides a comparative summary of existing plus project conditions and permitted levels. As shown in table, the proposed project will remain well within the permitted levels on all three modes (marine, railroad, and roadway).



Table 7 – SeaPort Sound Terminal – Existing plus Project Conditions Compared with Permit Limits

Description	Marine Vessel Calls (Monthly)	Rail Cars Unloaded (Monthly)	Truck Loading (Daily)
Permitted Limit	68	2,340	300
Existing plus Project	49+3 = 52	569+78 = 647	180+12 = 192
<i>Percent of Permit Limit</i>	76%	28%	64%

Construction Traffic Assessment

Construction could affect the vehicular capacity of adjacent intersections and roadways with additional traffic associated with construction workers, hauling, deliveries, etc. It could also disrupt other modes with potential closure of sidewalks, blockage of bicycle facilities, delays to transit routes and relocation of bus stops. While temporary in nature, this section summarizes an assessment of temporary adverse effects related to construction activity associated with the proposed project.

City of Tacoma Municipal Code (8.122.090 – Construction) requires that all construction and demolition activity, excluding emergency work, shall not be performed between the hours of 9:00 p.m. and 7:00 a.m. on weekdays or between the hours of 9:00 p.m. and 9:00 a.m. on weekends and federal holidays. The code allows for provision for after-hours work on weekdays and weekends if the sound level created by the work does not exceed the limits identified in the code (8.122.080 (a)).

The proposed project will involve demolition of the existing refinery at the terminal and construction of new fixed cone roof storage tanks and upgraded wastewater and stormwater infrastructure.

Overview of Construction Activity

- Demolition activities for the proposed project include removing the existing refinery equipment, boiler, and 24-foot by 41-foot building and foundation (984 square feet); seven storage tanks of varying sizes (plus two water storage tanks in the wastewater treatment system area); the 450-linear-foot earthen containment berm associated with the removed



tanks (approximately 400 cubic yards [cy]); and appurtenances including various pumps, equipment, and related piping.

- Approximately 13,000 square feet of pavement within the demolition area will be removed.
- To remove approximately 100 linear feet of existing stormwater and contact water piping within the demolition area, excavation of approximately 8,320 cy below the existing grade will be required.
- New storage tanks will be constructed to replace the demolished tanks. The new tanks will range in diameter from 20 to 70 feet and will be between 35 and 60 feet tall.
- A new contact water drain line will be installed from the containment area to the replaced wastewater treatment system to the south.
- A vehicle access ramp will be located at the southwest entrance. In total, approximately 7,800 cy of fill will be placed over the demolition area.
- Portions of the existing contact water system will be removed, including the existing oil-water separator and other related equipment and piping.
- No soil excavation will be required for removing the existing structures and appurtenances within the contact water system area. Approximately 390 cy of clean fill material will be used as backfill to support installation of the replaced contact water system features.
- Approximately 702 cy of excavation will be required to install the replacement stormwater line.

Construction will be completed using heavy equipment that may include backhoes, excavators, mobile and stationary cranes, dump trucks, and watering trucks (for dust control if needed). Demolished materials and excavated soil will be removed and disposed of or recycled at an approved off-site facility.

Construction Schedule

Construction would be expected to begin in 2025, with operations beginning in 2026.

Construction Truck Access, Staging, Deliveries, and Construction Worker Parking

- Construction truck access will be limited to the existing two driveways: Marine View Drive driveway east of the intersection with McMurray Road NE; and E 11th Street driveway located south of the intersection with Marine View Drive. The construction activity would likely create a limited increase in traffic to the site's vicinity. However, the Project is located in an industrial zone with existing truck traffic and infrastructure, which can accommodate the short-term increase of traffic associated with construction.
- Based on information obtained from SeaPort Sound Terminal staff, all construction staging, loading, and unloading activity will occur within the existing site boundary.
- Construction worker vehicular access will be provided at the Marine View Driveway and all temporary construction worker parking will be accommodated within the site. Construction workers often travel to and from a worksite outside of the typical peak commute hours.



Construction traffic generated by the Project will be limited to what is required for construction and will use main arterials to the extent practicable. The construction activity will not require the need to impede public access to perimeter transportation infrastructure including sidewalks and vehicular travel lanes on Marine View Drive and E 11th Street, bus stops, bike lanes, and crosswalks. Nonetheless, the influx of this material and equipment could create impacts on the adjacent roadway network based on the following considerations:

- There may be intermittent periods when material deliveries are required. However, delivery vehicles will not need to park along adjacent roadways.
- Some of the materials and equipment could require the use of large trucks (18-wheelers), which could create temporary queuing or congestion on the adjacent roadways for relatively small periods of time.

The applicant is encouraged to prepare a construction management plan, prior to construction, which could include the following:

- Location of construction staging areas for materials, equipment, and vehicles.
- Notification procedures for adjacent property owners and public safety personnel.
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.
- Provisions for removal of trash generated by project construction activity.
- A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager.

Based on the above information, it is determined that the project's construction activity could result in a temporary adverse effect on adjacent roadway. However, with the implementation of the proposed mitigation measures, the impact of construction activity is determined to be less than significant.

Findings

The project will add 11% to the SeaPort Sound Terminal's storage capacity and result in approximately 160,000 barrels per month of product in and out of the facility. This product, which is likely to be majority renewable diesel fuel, will arrive at the site primarily via water and rail and then distributed via trucks. The terminal is currently limited to 68 marine vessel calls and 2,340 rail cars in a month. Daily truck loadings are limited to 300. Provided below is a summary of our technical analysis and conclusion.



- Additional inbound product could result in a potential increase of up to three (3) vessel calls on an average per month and total for the monthly average could potentially increase from 49 to 52 vessel calls (6% increase).
- Rail terminal could see a potential increase of approximately 78 rail cars for a potential increase from 569 to 647 rail cars (14% increase) on average per month.
- Average daily truck loading will increase from 180 to 192 (7% increase) with the proposed project.
- The project will not exceed the permitted limits of average monthly vessel calls, rails cars, and daily truck loadings under existing plus project conditions.
- An assessment of additional truck loadings indicate that the proposed project will result at most one additional truck trip during the evening peak hour, which is considered negligible.
- The construction activity related to the project could result in a temporary adverse effect on adjacent roadway but with the implementation of the proposed mitigation measures, the impact of construction activity is determined to be less than significant.

Based on our analysis, it is determined that the proposed project will result in minor increases in marine vessels, railcar unloadings, and trucks loadings and therefore, it is determined that the proposed project will result in a less than significant transportation impact.

Attachments

1. Table 1, SeaPort Sound Refining Facility Expansion and Access Revisions, Heffron Transportation, Inc, May 2011.
2. Year 2019 monthly average of vessel calls, rail cars, and trucks, SeaPort Sound Terminal's response to the December 7, 2020, City of Tacoma Comments on SeaPort Sound Terminal Modernization Project Application.

Appendix H

Response to Comments

1 Final Environmental Impact Statement Comments and Responses

1.1 Introduction

This appendix provides responses to public comments received on the State Environmental Policy Act (SEPA) *Draft Environmental Impact Statement* (Draft EIS) issued by the City of Tacoma (City) for the SeaPort Sound Terminal, LLC (SeaPort Sound), Plant Modernization Project (Project; LU20-0107) located on the Hylebos Waterway at 2628 Marine View Drive in Tacoma, Washington. SeaPort Sound consultants prepared the SEPA Draft EIS for review by the City in July 2022. As the SEPA lead agency, the City determined that the Draft EIS met the regulatory and statutory requirements of SEPA and issued a Notice of Availability on November 10, 2022.

1.2 Comment Process

The Draft EIS was published in November 2022, and interested parties were notified electronically and via postcard mailer of the document's availability and opportunities to comment. Comments were accepted during a 45-day public comment period, which ended on December 27, 2022. The Draft EIS and its appendices were available for public review throughout the entire length of the public comment period on the City's Project website. The City's Project website was developed to provide information through the duration of the SEPA process. During the public comment period, the website included a link to the Draft EIS materials and an online comment form.

A public meeting was held at the City Council Chambers on December 5, 2022, to introduce the Draft EIS and direct interested parties on where and how to comment. In total, 215 comment letters were received by email from individuals, city and state agencies, organizations, businesses, and Tribes as summarized in Table 1.

Table 1
Summary of Comment Submittals by Commenter Type

Commenter	Number of Comment Submittals Received
Tribes	2
Individuals	203
Public Agencies	2
Organizations	4
Businesses	4
Total	215

1.3 Comment Analysis

A comment analysis process was developed to organize and track the comments received during the Draft EIS comment period. First, a coding structure was developed to identify each commenter and the nature of their comments. Each commenter was listed in a database, and their comments were categorized. Then, common topics and issues were grouped and summarized to be responded to by technical experts. Attachment 1 includes the database used to organize comments.

The comments have been organized into the following categories in Section 2 of this appendix:

- 2.1 State Environmental Policy Act Process
- 2.2 Tribal Coordination
- 2.3 Proposed Action
- 2.4 Mitigation Measures
- 2.5 Cumulative Effects
- 2.6 Earth
- 2.7 Air
- 2.8 Water
- 2.9 Plants and Wildlife
- 2.10 Energy and Natural Resources
- 2.11 Archaeological, Historical, and Cultural Resources
- 2.12 Environmental Health and Safety
- 2.13 Land and Shoreline Use
- 2.14 Transportation
- 2.15 Public Services and Utilities
- 2.16 Environmental Justice
- 2.17 Opposition to or Support for the Project

For each of these topics, Section 2 first summarizes the comments received, then provides a response. Additional issues presented in the comment letter for each section are further addressed in subheadings following the general comment response sections, where applicable. Sections of the *Final Environmental Impact Statement* (Final EIS) are referenced where appropriate to indicate where information may be found to support the responses. A compiled set of comments received is included in Attachment 2.

1.4 Guide to this Appendix

Although the comment analysis process captured the full range of comments that were received, it is important to note that this appendix provides a response to a summary of the comments rather than a statistical analysis of general public opinion. The commenting process should not be viewed as a vote-counting process; SEPA emphasizes responding to the content of comments received.

All comments submitted during the public comment period were reviewed and considered in the development of this appendix and the Final EIS. Where relevant and appropriate, revisions identified in the comments, as well as other substantive changes, have been incorporated into the Final EIS. All substantive comments on the Draft EIS have been responded to in this appendix. Responses to comments in this report rely on information available at the time and identify the analyses that are in development or anticipated to be developed in the future through other processes.

The Final EIS consists of this comment response appendix (Appendix H), an updated Fact Sheet, a final summary, and the Final EIS text and appendices. The Final EIS is being issued under Washington Administrative Code (WAC) 197-11-460 and completes the SEPA process.

2 Response to Comments

2.1 State Environmental Policy Act Process

2.1.1 *Comment Summary*

Commenters stated that the Draft EIS does not meet the requirements of SEPA because it does not adequately evaluate the environmental impacts of the proposed Project. Commenters suggested that a wider range of alternatives should be evaluated.

2.1.2 *Comment Summary Response*

SeaPort Sound prepared and submitted a SEPA Draft EIS to the City in July 2022. The City reviewed and determined that the Draft EIS analysis—including direct and indirect impacts of the Proposed Action, cumulative effects, and mitigation measures—met the regulatory and statutory requirements of SEPA and was consistent with the City’s “EIS Contents and Final Scoping Document” memorandum dated March 9, 2021 (Schultz 2021). The City issued a Notice of Availability on November 10, 2022. Mitigation measures were developed with the City and the Washington State Department of Ecology (Ecology) for consistency with Washington State regulations, the Greenhouse Gas Assessment for Projects (GAP) rule, and the City’s *2023 Climate Action Plan*.

The City determined that the Draft EIS considered an adequate range of alternatives to accomplish the Project’s purpose and need, which is to “provide SeaPort Sound operational flexibility and modernized facilities to better meet increasing market shift towards renewable/low-carbon fuels.” Alternatives with reduced storage capacity would not meet the Project’s purpose and need to meet increasing market shift toward renewable/low-carbon fuels.

2.2 Tribal Coordination

2.2.1 *Comment Summary*

Commenters asked whether the Puyallup Tribe of Indians had been consulted regarding the Project, recognizing the importance of incorporating Puyallup Tribe input into the environmental review process. More specific comments were received from the Puyallup Tribe, which are summarized in the following subheadings:

- Annual Reporting Reviews
- Hylebos Creek Water Quality
- Air Quality

2.2.2 *Comment Summary Response*

Tribal coordination on the Proposed Action has been a priority throughout the SEPA review process. The City met with the Puyallup Tribe as part of early engagement efforts in July 2020 after the Project SEPA Checklist was published. The City reached out to the Puyallup Tribe during scoping in March 2021 with an opportunity to comment, and no comments were received. A subsequent meeting between the City and the Puyallup Tribe was held in December 2022 during the Draft EIS public notice period to discuss preliminary feedback on the materials. The Puyallup Tribe also submitted two comment letters in December 2022 as part of the Draft EIS public notice process. Responses to comments from the Puyallup Tribe are included herein.

SeaPort Sound acknowledges Tribal treaty fishing rights and understands that coordination with the Puyallup Tribe is essential to protect these resources.

The response to comments Sections 2.8 and 2.9 (Water and Plants and Wildlife) and Final EIS Chapters 3.3 and 3.4 include additional details on measures proposed to avoid or minimize potential impacts on aquatic resources.

2.2.3 *Annual Reporting Reviews*

2.2.3.1 **Annual Reporting Comment Summary**

The Puyallup Tribe requested to consult on yearly reporting requirements.

2.2.3.2 **Annual Reporting Comment Response**

SeaPort Sound acknowledges this request and will coordinate with the City on annual reporting and consultation opportunities with the Puyallup Tribe per Tacoma Municipal Code 13.06.080.F.

2.2.4 Hylebos Creek Water Quality

2.2.4.1 Hylebos Creek Water Quality Comment Summary

Should nearby surface waters be impacted during construction, the Puyallup Tribe requested immediate notification and additional information including but not limited to updated temporary erosion and sediment control (TESC) and stormwater pollution prevention plans (SWPPPs) and a list of the contaminants found with concentration and depth measurements.

2.2.4.2 Hylebos Creek Water Quality Comment Response

SeaPort Sound acknowledges this request for notification and will coordinate with the City and Ecology to develop reporting and notification requirements should impacts to nearby surface waters occur during construction. Measures to be taken during construction and operation of the Project to protect nearby surface waters are described in the response to comments Sections 2.8 and 2.9 (Water and Plants and Wildlife) in this appendix and in Final EIS Sections 2.5.1, 3.3, and 3.4.

2.2.5 Air Quality

2.2.5.1 Air Quality Comment Summary

The Puyallup Tribe comment letter raises concerns regarding the potential impact on the health of the people residing in and around the port area from greenhouse gas (GHG) emissions. The letter also expresses concern about cumulative dust emissions from construction projects over time and requests additional information regarding dust control mitigation measures. The letter states that population estimates for the area over the next 40 years may be underestimated, which makes it difficult to predict what impact such emissions may have on the local population over time.

2.2.5.2 Air Quality Comment Response

SeaPort Sound acknowledges the Puyallup Tribe's concern regarding local impacts from emissions and has worked closely with the City and Ecology to develop a strategy to mitigate construction and operational GHG emissions from the terminal that may be emitted within Pierce County over time. The EIS construction mitigation measure MM-18 includes employing dust suppression equipment as needed during grading activities to reduce potential dust emissions. Additional best management practices (BMPs) will be implemented during construction to reduce potential impacts to the environment as described in Final EIS Sections 2.5.1 and 3.2.4. Appendix A of the Final EIS analyzes GHG emissions until 2063 and assumes that the facility operations would reach maximum capacity by 2033 while remaining under existing permitted limits. The modeling uses a range of fuel mix scenarios that consider several market outcomes to capture the uncertainty around emissions. The modeling is not contingent on population estimates but is based on the amount of fuel that is stored and moves through the terminal. Additional information related to this topic is provided in the comment summary response subsection in Section 2.7 (Air) of this appendix.

2.3 Proposed Action

2.3.1 *Comment Summary*

Commenters suggested that the Project cannot be called a “clean fuels” project for the following reasons: 1) the facility supplies fossil fuels in addition to biofuels; and 2) the fuel mix will remain unchanged despite the construction of new storage tanks meant to expand options for storing biofuels.

More specific comments were received on the following topics, summarized in the following subheadings:

- Tank Handling Details
- Storage Capacity

2.3.2 *Comment Summary Response*

Section 2 of the Draft EIS acknowledged that SeaPort Sound distributes both fossil and renewable fuels in response to market demand. Crude oil has not been offered at the terminal since 2016. The ratio of renewable fuels at the terminal has continued to increase over time in response to increased market demand and legislative priorities. The Draft EIS evaluated a Static scenario in which the market fuel mix remains unchanged for both the No Action and Action alternatives (described in Final EIS Section 2.3.1). However, the Static scenario is considered unlikely due to recent legislation that will increase demand for renewable and low-carbon fuels. The other two scenarios evaluated under both alternatives anticipate an increased demand for renewable and low-carbon fuels in the marketplace due to recent legislation and using predictive models that are reflective of regional trends and forecasts.

Several commenters allege that the Project is an attempt to surreptitiously expand the facility, with no plan to change the inventory fuel mix. This is not the case. The marketplace is quickly shifting toward a need for storing and transporting more renewable fuels, such as renewable diesel, and requires terminals such as SeaPort Sound to modernize to adapt to this market. It is anticipated that renewable diesel may displace fossil fuel capacities at terminals in response to current and future legislation and increased demand. With the passage of House Bill 1091, it is expected that low-carbon fuels will continue to displace traditional fuels as market demand for low-carbon fuels increases. SeaPort Sound is in a position to accommodate the increased demand on renewable diesel, and the Project would allow the flexibility to adapt to this changing marketplace.

SeaPort Sound’s operations, including facility throughput and emissions, are regulated by a variety of regulatory permits and approvals, described in Section 2.2.1 and Appendix E of the Final EIS. SeaPort Sound is not seeking to increase these previously adopted regulatory authorizations.

As described in the Draft EIS, tanks within the proposed expansion area will have fixed cone roofs designed to store low-vapor-pressure bulk liquids such as diesel, biodiesel, renewable diesel and feedstocks, renewable diesel, and fuel oil. This would preclude the storage of high-vapor-pressure bulk liquids (i.e., gasoline and ethanol) within these tanks without retrofitting or replacing the tanks with a floating roof system, which would require separate authorizations beyond what is proposed with this EIS.

2.3.3 Tank Handling Details

2.3.3.1 Tank Handling Details Comment Summary

Commenters requested additional details related to the decommissioning of existing tanks and the filling and operation of new tanks.

2.3.3.2 Tank Handling Details Comment Response

The Final EIS Chapter 2.5 (Proposed Action) was updated with additional information to describe how existing tanks will be decommissioned and how new tanks will be filled and operated.

2.3.4 Storage Capacity

2.3.4.1 Storage Capacity Comment Summary

Commenters state that the Draft EIS market demand approach to analysis of storage capacity did not fully assess impacts resulting from the use of new storage tanks at full capacity. As a result, they state that impacts to public health, the environment, and wildlife resulting from increased rail, vessel, and truck traffic have not been fully evaluated.

2.3.4.2 Storage Capacity Comment Response

The terminal has never operated at full nameplate (operational) capacity, and it would be physically impossible for it to do so. Due to the nature of logistics and standard operating procedures, the terminal cannot achieve 100% capacity. WAC 197-11-060 states that the EIS should “carefully consider the range of probable impacts,” which was considered as part of the Draft and Final EIS assessment. In order to assess **probable** impacts, the EIS needs to make an assumption regarding the fraction of nameplate capacity that can support actual throughput. The EIS assumption is that the current ratio of throughput to nameplate capacity will persist in the future. Hence, the maximum anticipated throughput will increase proportionately to the increase in nameplate capacity. Appendix A of the Final EIS analyzes GHG emissions until 2063 and conservatively assumes that facility operations would reach maximum anticipated throughput by 2033. The maximum anticipated throughput as of 2033 is 11% higher than the current throughput, just as the nameplate capacity will be 11% higher than the current capacity.

2.4 Mitigation Measures

2.4.1 Comment Summary

Commenters stated that proposed GHG mitigation measures are insufficient to offset the potential impacts of the Project. Some commenters suggested, as an example, that trees throughout the City are routinely neglected, improperly maintained, and/or cut down. Mitigation measures related to southern resident killer whale (SRKW) are discussed in Section 2.9 (Plants and Wildlife) of this appendix.

2.4.2 Comment Summary Response

The Draft EIS was submitted to the City in July 2022, and mitigation measures were deliberated by the City and Ecology. In total, 39 mitigation measures are identified in the Final EIS Section 2.5.1 to address potential impacts of the Proposed Action. The City and Ecology coordinated prior to issuance of the Draft EIS and determined that mitigation should be provided for GHG emissions within Pierce County, consistent with the GAP rule and the City's SEPA framework and *2023 Climate Action Plan*. The City also issued a cover letter with the Draft EIS that summarizes the following mitigation measures that are "real, permanent, enforceable, verifiable, and additional" and are adequate to mitigate for Project impacts. The following mitigation measures from the City's letter have been incorporated into the Final EIS Section 2.5.1.5:

- **MM-34:** To mitigate for GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project* [GHG Study Report; Appendix A of the Final EIS]), SeaPort Sound will calculate the purchase price of third-party-verified GHG offsets. Expenditure of the funds will be in the following priority order:
 - Restore a segment of the shoreline riparian buffer adjacent to the SeaPort Sound terminal. The area would be monitored and maintained for 5 years and protected in perpetuity.
 - Contribute funds toward the City's Urban Forestry Program. This mitigation measure is consistent with the City's *2030 Climate Action Plan* sustainability goals and will help the City achieve local GHG emissions drawdown targets.
 - Contribute funds toward a local restoration project proposed by the City or approved third party occurring on or near the Tideflats area that will be monitored and protected in perpetuity.
 - Purchase third-party-verified GHG offsets.
- **MM-36:** All construction equipment used for the Project is required to use biofuels wherever possible and will be Tier 4 diesel engines.
- **MM-37:** There will be annual reporting of established baseline capacity, throughput, and facility emissions per regulations in Tacoma Municipal Code 13.06.080.F.

Restoration of shoreline riparian areas can be and has been highly successful in the Tideflats area. Restoration projects required as part of previous SeaPort Sound permits have included installing native riparian vegetation, periodic monitoring reports to be submitted to the City to evaluate whether the Project is meeting its performance standards, and a bond (financial security) to be posted by the applicant that is not released until the restoration monitoring period is completed. Permit-required restoration areas have also been protected in perpetuity through a notice on title that is attached to the parcel (see Final EIS Figure 2-7).

The mitigation strategy includes mitigating for GHG emissions from operation of the terminal and outbound transportation GHG emissions within Pierce County. Two memoranda, included in Appendix C of the Draft EIS, were prepared by the GHG Study Report author, Hammerschlag LLC, calculating the approximate emissions that would be emitted within Pierce County using Argonne National Laboratory's Greenhouse Gases, Regulated Emissions, and Energy use in Transportation (GREET) modeling. To determine cost per ton of GHG, or carbon dioxide equivalent, the Ecosystem Marketplace report was referenced, which tracks the selling price of GHG offsets (Donofrio et al. 2021). This mitigation strategy is both applicable and adequate to mitigate for unavoidable impacts from the Project.

The mitigation measure related to providing funding to the Urban Forestry Program has a clear and direct tie to the City's *2023 Climate Action Plan*, which includes specific goals related to supporting urban forestry initiatives, expanding urban forestry and natural stewardship to facilitate planting and/or care of 10,000 trees annually, and expanding urban forests. SeaPort Sound supports one of the comments that the City consider funding target areas in Tacoma that have been identified as having disproportionately low tree canopy, such as the South End and Eastside, to also further environmental justice goals, through the Urban Forestry Program.

One commenter suggested that SeaPort Sound should be responsible for offsetting in excess of 25 million tons of carbon dioxide equivalent. Requiring SeaPort Sound to mitigate for secondary impacts that are outside of the control of SeaPort Sound and their direct operations does not meet the SEPA criteria and is not required. WAC 197-11-660 requires mitigation measures to be "reasonable and capable of being accomplished." As described in the GHG Study Report, changes at the SeaPort Sound terminal are unlikely to impact either the regional demand for product liquids or the manner in which those products are manufactured. Instead, the only likely impact on the greater fossil fuels market is to change the pathways that the fixed quantities of fuels take from their manufacturers to their consumers.

2.5 Cumulative Effects

2.5.1 *Comment Summary*

Commenters requested that the EIS include a cumulative impacts analysis that compiles permitting and SEPA review since 2006 or earlier and addresses the impacts of the combined projects.

Commenters also requested that the EIS include the increase of fuel products projected under the Puget Sound Energy (PSE) Liquefied Natural Gas (LNG) Facility and the potential cumulative impacts with the approval of the Project.

2.5.2 *Comment Summary Response*

A cumulative impacts analysis that compiles permitting and SEPA review since 2006 or earlier and addresses the impacts of the projects is provided in Draft and Final EIS Sections 2.2.2 and 4.

SEPA requires evaluation of how the effects of the Proposed Action may contribute to the environmental effects of other past, present, and reasonably foreseeable future actions. Cumulative effects are those that could result in the combination of effects from individual Project actions occurring over time. The Final EIS includes a table of present and reasonably foreseeable future projects as Table 4-1.

Although the increase in capacity at the SeaPort Sound facility could increase vessel traffic, the increase would not extend beyond existing permitted limits, which were established through previous environmental review. A transportation assessment completed to support the response to comments (Appendix G of the Final EIS) found that vessel calls could increase by three vessels on average per month (6% increase), up to 78 rail cars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. The addition of up to three vessels per month on the waterway from the SeaPort Sound Project is minor and would not result in significant cumulative impacts. Section 4 of the Final EIS has been updated to describe potential cumulative impacts of this Project relative to the PSE LNG facility.

2.6 Earth

2.6.1 *Comment Summary*

Comments related to earth resources were focused largely on risk of earthquakes and associated hazards including soil liquefaction, landslides, tsunamis, and seiches and how these could damage the site facilities and surrounding area if they occur.

Potential contamination of site soils resulting from past and recent industrial uses of the property was another issue raised by several commenters; this is addressed under Section 2.12 (Environmental Health and Safety) of this appendix.

2.6.2 *Comment Summary Response*

The Final EIS text has been revised to incorporate more current references about seismic hazards as suggested by several commenters.

The Final EIS Section 3.1.1.3.1 addresses earthquakes generated along the Cascadia Subduction Zone. Text has been added to this section regarding the Tacoma Fault Zone and associated potential **shallow earthquakes**, which could potentially be more damaging than a deeper earthquake along the subduction zone.

The Final EIS Section 3.1.1.3.2 describes that the Project vicinity is not within a City-designated **landslide hazard area**, and the site itself does not have steep slopes. It states that steep slopes north of Marine View Drive may not be stable during an earthquake event. However, a landslide from off of the property to the north would impact existing facility infrastructure before impacting the proposed development area.

The Final EIS Section 3.1.1.3.3 acknowledges that the Project vicinity is in an area identified as having a high potential for **liquefaction** during an earthquake. According to International Building Code (IBC) Chapter 18, Section 1803.5.12, for sites where liquefaction potential has been identified, the designer must conduct an “assessment of potential consequences of liquefaction and soil strength loss” and then determine how these consequences can be mitigated, whether through deep foundations, structural systems, ground stabilization, or some combination thereof (ICC 2021). The IBC does not preclude the construction of new facilities strictly based on the presence of potentially liquefiable soils at a site.

The Final EIS Section 3.1.1.3.4 has been revised to include a summary of recent **tsunami** mapping by the Washington Department of Natural Resources and the American Society of Civil Engineers.

Several comments mentioned the risk of **seiches**, which can also be triggered by earthquakes or landslides similar to tsunamis. A discussion of seiches has been added to Final EIS Section 3.1.1.3.4.

Final EIS Sections 3.1 and 4.3.1 have been revised to provide more detail about the potential for damage to site facilities and the surrounding area during a large earthquake. The EIS conclusions remain the same. Under the Proposed Action, all new facilities will be designed and constructed to modern engineering standards, including seismic requirements. Detailed geotechnical investigations, studies, and analysis will be conducted as part of future design to support the selection of the best suited techniques to minimize risks resulting from an earthquake and related hazards.

2.7 Air

2.7.1 Comment Summary

Commenters expressed concern about public health issues related to air quality (e.g., particulates, nitrogen dioxide, and volatile organic compounds [VOCs]). Commenters asked why the Draft EIS did not analyze the impacts of increased toxic air pollutants or hazardous air pollutants as a result of increased facility storage, transportation, on-site operations, and combustion. Commenters also stated that the Draft EIS did not align with the One Tacoma Comprehensive Plan or the *2030 Climate Action Plan* and does not address the City of Tacoma Climate Emergency Resolution. Commenters expressed concern about the effects of climate change on frontline communities within the City and surrounding area.

More specific comments were received on the following topics, which are summarized in the subheadings that follow:

- Low-Carbon Fuel Standard (formerly LCFS, now currently regarded as the Washington Clean Fuels Program)
- Upstream and Downstream Analysis
- GHG Analysis (Appendix A of the Draft EIS) range of evaluation

2.7.2 Comment Summary Response

As described in Draft EIS Section 3.2.1, air quality in the greater Tacoma-Pierce County area has improved in recent years and is generally good. However, the Draft EIS acknowledged there are days when particulate levels are above U.S. Environmental Protection Agency (EPA) standards (for example, when there are wildfires in the region). Many human activities and natural processes beyond SeaPort Sound's control influence local air quality. Operation of the SeaPort Sound terminal complies with permits issued by the Puget Sound Clean Air Agency (PSCAA) as described in Draft EIS Section 3.2.1.4. PSCAA inspects the facility to ensure compliance and has not identified any unacceptable emissions or odors that would require further control.

The City specifically requested analysis of additional GHG emissions, not toxic air pollutants or hazardous air pollutants, based on the nature of the Project. The Draft EIS described existing air emissions from the facility, which are below major source limits and managed under required permits from PSCAA. It should be noted that emissions from the fuel streams passing through the plant are considered secondary effects and are market based, not a direct result of the Project. The new tanks will be used to store fuel streams for transfer and will not be used to produce or refine any products. The City's Climate Emergency Resolution is addressed in Final EIS Section 3.5.4.3.

The Project includes mitigation measures consistent with the City's *2030 Climate Action Plan* sustainability goals and will help the City to achieve local GHG emissions drawdown targets.

Mitigation is intended to address GHG emissions anticipated to be produced from Project construction and operation of the new tanks over the next 40 years (as calculated per the GHG Study Report [Appendix A of the Final EIS]).

The GHG Study Report does not quantify or account for the existing refinery in any reported calculations. The existing refinery is not being considered as a functional part of the existing facility or baseline to demonstrate a reduction in emissions.

2.7.3 *Low-Carbon Fuel Standard (Washington Clean Fuels Program)*

2.7.3.1 Low-Carbon Fuel Standard Comment Summary

The Draft EIS made the assumption that SeaPort Sound will be regulated by the Washington Clean Fuels Program, so their emissions will go down. Commenters requested clarification of whether the SeaPort Sound facility will actually be regulated by the Washington Clean Fuels Program because they do not own the fuels they store and move.

2.7.3.2 Low-Carbon Fuel Standard Comment Response

As an entity that stores and sells bulk liquids, SeaPort Sound is regulated by the Washington Clean Fuels Program (Revised Code of Washington [RCW] 70A.535) for fuel tracking. The program applies market wide, and will change the market, including the types of fuel that are used. The Project will support the program by increasing SeaPort Sound's ability to carry renewable fuels through the terminal.

2.7.4 *Upstream and Downstream Analysis*

2.7.4.1 Upstream and Downstream Analysis Comment Summary

Commenters stated that the analysis improperly omits upstream and downstream emissions.

2.7.4.2 Upstream and Downstream Analysis Response

The GHG Study Report prepared by Hammerschlag and included as Appendix A of the Final EIS was prepared to account for GHG emissions related to the Proposed Action, including upstream and downstream emissions. The system boundary used in the GHG Study Report to evaluate GHG emissions includes both upstream and downstream emissions. Upstream refining and transport are indicated by the process unit "refining & transport" appearing inside the thick-bordered, green rectangle representing the system boundary in Figure 2 (page 7) of the GHG Study Report. The meaning of "refining & transport" is elaborated in a paragraph following Figure 2 on page 7. Downstream transport of throughput products is indicated by the process unit "transport" appearing inside the thick-bordered, green rectangle representing the system boundary in Figure 2 (page 7) of the GHG Study Report. The meaning of "transport" is elaborated in a paragraph appearing after Figure 2 on page 7 (Hammerschlag 2022).

2.7.5 Greenhouse Gas Analysis (Appendix A of the Final EIS)

2.7.5.1 Greenhouse Gas Analysis Comment Summary

Commenters suggested the GHG life cycle analysis is incomplete or inaccurate for the following reasons:

- It does not account for leakage, meaning lost vapor emissions of product en route.
- It does not have enough data to accurately count the GHGs that come from transporting the fuels.
- It relies on data from an outdated version of the International Panel on Climate Change (IPCC) climate change assessment despite the release of a new version.
- It uses the 100-year Global Warming Potential (GWP) factor in its equations rather than the 20-year GWP. This type of analysis deflates the actual increase in GHGs over the lifetime of the facility, making it appear to be not as bad as it actually is.
- The modeling does not show the impact of increased storage capacity.
- Clarification is needed in Figures 4a and 4b.

2.7.5.2 Greenhouse Gas Analysis Comment Response

Accounting for Leakage: The GHG analysis computed inbound fuel transport emissions using Argonne National Laboratory's GREET model, 2020 release (Wang 2020). GREET 2020 includes VOC losses in the life-cycle emissions of fuels. GREET also amplifies upstream fuel production and transport demands to account for the volatilized fuel prior to loss.

Transportation Data: GREET assumes U.S.-typical transport distances when assessing upstream emissions of fuels. For inbound fuels, the GHG analysis uses these U.S.-typical distances because SeaPort Sound does not know the sources of all fuels or their precursors. The transport emissions computed by GREET from its U.S.-typical distance assumptions represent the most accurate possible result. SeaPort Sound does know approximate destinations for outbound fuels. The GHG analysis computed outbound product transport emissions to each of these destinations accounting for fuel volume transported, transport mode, and distance to the destination.

IPCC Data: At the time the Draft EIS was assembled, the IPCC's Fifth Assessment Report was the most recent report and furthermore is the default resource for GREET, which is relied on in the GHG analysis.

100-Year GWP: The 100-year GWP is the standard in GHG accounting worldwide and is the default used in GREET.

Increased Storage Capacity Modeling: The Project model used for the GHG analysis assumes a gross capacity increase from 1.50 million barrels to 1.66 million barrels, or an 11% increase in capacity. Gross product throughput is modeled to increase by this same proportion over 10 years

following construction. This 10-year ramp-up in throughput is visible in the left-hand portion of Figure 4b in Appendix A of the Final EIS.

Clarification in Figures 4a and 4b: The PSCAA comment letter requested clarification in Figures 4a and 4b regarding market assumptions. The GHG analysis assumes that under No Action the facility will maintain a constant throughput of spark-ignition fuels and a constant throughput of compression-ignition fuels. Even though the facility throughput in each ignition category remains constant, policy changes the **mix** of renewable and nonrenewable fuels that make up each ignition category. The market factors are part of both analyses; they determine the mix of renewable and nonrenewable fuels that make up each ignition category. Those mixes are visible as changing shares of green-shaded areas in the spark-ignition category and changing shares of blue-shaded areas in the compression-ignition category. These changing shares appear in both the No Action Alternative (Figure 4a) and the Proposed Action (Figure 4b).

2.8 Water

2.8.1 *Comment Summary*

Comments related to water included the effects of sea level rise, increased flooding, management of stormwater, industrial wastewater, and requirements for updates to facility plans and permits. These topics are addressed in the following subsections.

Numerous commenters stated that the Project would increase the amount of vessel traffic and therefore the risk of oil spills. Section 3.3.4.5 of the Final EIS has been updated to include the results of a recent transportation study, which is included as Appendix G of the Final EIS. Please see also the responses in Section 2.9 of this appendix (Plants and Wildlife).

2.8.2 *Sea Level Rise and Flooding*

Commenters stated that the Draft EIS failed to address sea level rise. Final EIS Section 3.3 has been revised to add a discussion of sea level rise, using recent data from the University of Washington. Projected sea level rise will increase the likelihood of flooding. However, rising sea levels are anticipated to occur gradually, and SeaPort Sound will design its facilities to accommodate and adapt to these changes over time, including measures to prevent release of hazardous substances from the site.

2.8.3 *Stormwater*

One commenter stated that the proposed replacement of the blocked stormwater line should be considered part of the baseline requirements of the facility's permits and not a benefit of the Project. As stated in EIS Section 3.3.1.2.2, this line handles stormwater that originates from off-site right-of-way areas along Marine View Drive. As such, this off-site stormwater is not part of

SeaPort Sound's permitting responsibilities. SeaPort Sound proposes to replace the blocked stormwater line to support a properly functioning stormwater system and to relocate the line outside of the footprint of the current tanks.

Another commenter requested that the Final EIS should summarize all of the data and compliance for the facility's National Pollutant Discharge Elimination System Permit (NPDES permit) No. WA0003204. The Final EIS Section 3.3.1.2 summarizes the facility's stormwater permit reporting requirements. The data and compliance history for the terminal can be found online on the Ecology Permitting and Reporting Information System database.

The Puyallup Tribe requested that if discharge to surface waters or soil or groundwater contamination occurs as a result of work under the Construction Stormwater General Permit, they request immediate notification and additional information including but not limited to updated TESC and SWPPPs and a list of the contaminants found with concentration and depth measurements. The Ecology Construction Stormwater General permit and plans, such as a SWPPP and a contractor-developed contaminated media management plan, will be in place to avoid and minimize potential impacts and can be updated as needed. Ecology will be notified if any spills occur.

Ecology stated that it must be notified if construction stormwater will be discharged from outfalls covered under the facility's NPDES permit (No. WA0003204). Final EIS Section 3.3.3.1 has been revised to include this requirement. Ecology also stated that SeaPort Sound will need to provide notification and updated documentation to reflect changes to the site under the facility's NPDES permit. The EIS MM-28 states the following:

MM-28: All applicable operations manuals, plans, and permits will be updated to reflect new facilities. This includes but is not limited to the facility's Industrial Stormwater Individual Permit; Industrial Wastewater Discharge Permit (IWDP); Spill, Prevention, Control, and Countermeasure Plan; *SeaPort Sound Terminal LLC Facility Contingency Plan*; Facility Security Plan; Emergency Response Plans; and others as needed.

2.8.4 Industrial Wastewater

Commenters asked specifically what volume of discharge of industrial wastewater is anticipated. They asked about the impacts of facility wastewater discharges on the City's maintenance and operation of water treatment facilities.

As stated in EIS Section 3.3.1.3, SeaPort Sound operates under a City IWDP that limits the volume and rate of wastewater discharge to the City sewer system and the level of certain contaminants allowed to remain in wastewater following on-site treatment. The current permit limit is 100,800

gallons of flow maximum per day (City of Tacoma Permit TAC-035-2021). SeaPort Sound is required to regularly sample and test wastewater from the on-site treatment system for IWDP compliance before it is discharged to the City sewer system. As stated in the EIS, wastewater from the Project site represents a small volume relative to overall discharge from the Central Treatment Plant, and the Project is expected to have minimal effects on municipal wastewater management because the discharge would fall within allowable IWDP limits issued by the City. Direct reductions to wastewater may present themselves through the replacement of the steam boiler; however, SeaPort Sound does not have the ability to accurately document the volume of current wastewater that is composed of boiler-generated water. SeaPort Sound anticipates a new IWDP will be issued by the City, which may have new conditions and discharge limitations assigned to it, considering maintenance and operation of the City's treatment facilities.

2.8.5 Updates to Facility Plans and Permits

The Final EIS Section 3.3 describes the existing permits in place for the facility and the updated plans and permits that will be required under the Proposed Action. Additional text has been added to this section to clarify that SeaPort Sound will notify Ecology of facility changes and will provide updated permit applications and plans to Ecology as required.

2.9 Plants and Wildlife

2.9.1 Comment Summary

Commenters stated that the Draft EIS did not adequately assess the impacts of a potential increase in product transport traffic resulting from the proposed 11% increase in storage capacity. Several commenters requested that the EIS evaluate impacts if the facility were to transport product at the maximum rates allowed under its permits.

Concerns were expressed about potential impacts from spills, vessel strikes, and vessel noise as they might affect SRKWs. Commenters requested more information about potential differences in the impacts of spills due to the transport of different types and amounts of products and requested clarification about measures that will be implemented to minimize these risks. Commenters provided additional information regarding SRKW sightings in the Project vicinity and requested that the EIS evaluate product transportation impacts across SRKW critical habitat.

These topics are addressed in the following subsections. Comments regarding Tribal fishing areas are addressed in Section 2.2 (Tribal Coordination).

2.9.2 Product Transport Traffic

The Draft EIS Section 3.4.4.1 acknowledged that transport of product from the Project site could increase in the future. After publication of the Draft EIS, SeaPort Sound retained a transportation

consultant to assess and quantify the potential traffic increase under the Proposed Action. The results of that assessment are provided in Appendix G of the Final EIS and discussed in further detail in Section 2.14 (Transportation) of this appendix. Overall, the assessment concludes that the Proposed Action is expected to result in an additional three marine vessel calls on average per month; an additional 78 rail cars unloaded per month; and an additional 12 truck loading trips per day at the SeaPort Sound facility. This represents an increase of 6%, 14%, and 7% for vessels, rail, and trucks over the facility's existing trips, respectively.

As shown in Appendix G of the Final EIS, the total of the existing trips plus those projected under the Proposed Action would constitute 76%, 28%, and 64% of the facility's permit limits for marine vessels, rail cars, and trucks, respectively. To date, the facility has never reached its maximum permitted limits, and this is unlikely to occur in the future. The facility's ability to load and unload product is constrained by the capacity of its truck lanes, rail, and dock. The estimated trip increases summarized in this subsection and discussed in Section 2.14 (Transportation) of this appendix provide a realistic scenario of potential future traffic increases.

The Proposed Action would not introduce any new products other than those that are already stored on site; therefore, the impacts of a spill would not differ substantially from current conditions in terms of type of materials.

Rail access to the terminal is provided along Taylor Way on the south side of Hylebos Waterway, connecting to the main terminal by an underground pipeline. The City approved a Shoreline Substantial Development Permit for the addition of four rail spur lines at this site in 2019 following an environmental review and public comment (City of Tacoma 2019). The Taylor Way project increased the number of rail car unloading stations from 36 to 68 on the site, allowing more rail cars to be managed on the site at any given time and to relieve rail traffic at nearby intersections. The Project did not request any increase in facility rail throughput beyond that authorized by the PSCAA. The City issued a SEPA Determination of Nonsignificance concurrently with the shoreline permit after determining that the rail project was unlikely to result in adverse environmental impacts to traffic, public safety, water quality, or other elements of the environment.

2.9.3 *Southern Resident Killer Whale*

2.9.3.1 **Critical Habitat**

Federally designated critical habitat for SRKWs includes marine areas of Puget Sound with water at least 20 feet deep, as well as coastal areas (71 *Federal Register* 69056; NOAA Fisheries 2022). This information has been added to Final EIS Section 3.4.1.3.7.

2.9.3.2 Additional Sighting Data

Killer whale sighting data for Elliott Bay, Commencement Bay, and Nisqually Estuary (Puget Sound inland waters north and south of the Project site) from 2018 through 2022 have been added to Final EIS Section 3.4.1.3.7. These sighting data include resident and transient killer whales.

2.9.3.3 Threats to Southern Resident Killer Whale

Several commenters noted there are numerous threats to the survival of the SRKW population. The Final EIS Section 3.4.4.1 acknowledges the risks of spills and associated impacts on wildlife, including SRKWs. The following information is intended to provide additional context for the Project. The Final EIS Section 3.4.4.1 has also been revised.

The SRKW was listed as endangered under the Endangered Species Act in 2005. In the listing, the National Oceanic and Atmospheric Association, National Marine Fisheries Service (NOAA Fisheries), identified the following three main threats to SRKW survival: 1) scarcity of prey; 2) high levels of contaminants from pollution; and 3) disturbance from vessels and noise. The small population size of SRKWs and their social structure (traveling in pods) also put them at risk for a catastrophic event, such as an oil spill, that could affect the entire population (NOAA Fisheries 2021a).

Vessel traffic from shipping, fishing, whale-watching, and recreational activities is a pervasive source of anthropogenic noise inputs in SRKW habitat (Holt and Noren 2008). SRKWs rely on echolocation and communication to support their critical foraging and social needs; physical and acoustic disturbance from vessels can impair these functions (NOAA Fisheries 2021a). Vessel strikes are also recognized as a threat to and cause of mortality of SRKW (Uguen-Csenge 2020; Raverty et al. 2020).

In its recent 5-year review of SRKW status, NOAA Fisheries states the following: “Despite being studied for more than 40 years, it is unclear which threat to this killer whale population is the most important for recovery. Furthermore, the threats likely interact to produce additive or synergistic effects” (NOAA Fisheries 2021b).

SeaPort Sound will continue to address those items that are under its control. The facility will continue to comply with all local, state, and federal requirements to avoid product spills or leakage at the Project site; properly manage its stormwater and industrial wastewater; and responsibly design, construct, and manage its equipment and processes to avoid and minimize environmental contamination. The Proposed Action includes upgrading facility equipment to meet modern engineering standards, which will help to further reduce the risk of contaminants leaving the site.

The transportation assessment (Appendix G of the Final EIS) estimates an increase of approximately three marine vessel calls on average per month at the facility under the Proposed Action. As stated previously, third parties operate the marine vessels that call at the SeaPort Sound facility and are subject to numerous regulations to increase safety and minimize spill risk, as discussed in

Sections 3.3 and 3.7 and Appendix E of the Final EIS. The addition of three marine vessel trips on average per month is minor relative to the amount of existing vessel traffic on Puget Sound, and these vessels would continue to be subject to the same regulations as well as any new requirements that may be added in the future to further reduce the risk of a catastrophic spill.

As stated in the Final EIS, these requirements help to minimize the risk and consequences of accidents along product transport routes. Compliance is the responsibility of parties transporting these materials and the agencies who issue and enforce transport permits. In addition, because the Project is expected to result in a minor increase in vessel calls at the facility (approximately three calls on average per month), and because vessels are required to abide by existing and future regulations, the Proposed Action is not expected to significantly increase the risk of spills, vessel strikes, or vessel noise impacts on SRKWs.

2.9.3.4 Additional Measures to Reduce Threats to Southern Resident Killer Whale

The following information is provided in response to comments requesting more detailed information about measures to reduce threats to SRKWs from spills, vessel strikes, and vessel noise. As stated previously, SeaPort Sound does not control off-site transport of product. The facility will continue to comply with requirements that apply to its facility, as described in Sections 3.3, 3.4, and 3.7, and Appendix E of the Final EIS.

In response to comments, SeaPort Sound has added the following new mitigation measure for the Proposed Action to the Final EIS:

MM-38: To support and promote methods for reducing marine vessel risks to SRKWs, SeaPort Sound will include language in its *Terminal Information Manual*, which is distributed to marine operators calling at the terminal. The language will encourage vessel operators to hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional Whale Report Alert System and emerging resources such as the upcoming Cetacean Desk of the Vessel Traffic Service in U.S. Coast Guard's Puget Sound sector to slow down near Southern Residents in near real-time. It will also encourage vessel operators to minimize the distances that secondary and service vessels (escorts, fueling, etc.) travel and/or to choose routes and timing that reduce overlap with Southern Resident foraging areas.

The following updated regulations and voluntary programs addressing spill risk and protection of marine mammals, including SRKWs, have been added to Final EIS Sections 3.4.4.1 and 4.3.4:

- Regulations for Class 1 facilities (including SeaPort Sound) under WAC 173-180-025
- More information about the Washington State Southern Resident Orca Task Force (Executive Order 18-02)

- Northwest Area Contingency Plan for spill response
- Geographic response plans for spill response
- Emergency response towing vessel at Neah Bay
- Engrossed Substitute House Bill 1578 titled "Reducing Threats to Southern Resident Killer Whales by Improving the Safety of Oil Transportation Act"
- Updated tug escort rules being developed by the Washington State Board of Pilotage Commissioners and Ecology under RCW 88.16.260
- State modeling framework to assess current and potential future risks of oil spills in Washington waters as required by RCW 88.46.250
- Quiet Sound program to better understand and reduce the cumulative effects of acoustic and physical disturbance from large commercial vessels on SRKWs
- WhaleReport Alert System to alert large commercial vessels to the presence of whales and reduce the risk of collision and disturbance
- The Advanced Notice of Oil Transfer system (33 *Code of Federal Regulations* 156.118)
- Requirements for tank vessels operating in Washington
- NOAA Fisheries updated action plan for SRKWs

2.10 Energy and Natural Resources

2.10.1 *Comment Summary*

Commenters asked for more details about how the new heater will result in a reduction in energy and water use at the facility and reduce GHG emissions.

2.10.2 *Comment Summary Response*

The proposed heater is designed specifically for the proposed operation and is an industry standard used for the circulation of thermal fluids in a closed loop system. The efficiency of the system is impacted by the thermal fluid's ability to retain heat throughout its journey in the loop. Continued maintenance and upkeep of the equipment and thermal fluid will maintain the efficiency of the heater throughout its useful lifespan.

The facility does not have a separate water meter specific to the terminal's boiler. However, a review of 2022 water bills shows that the facility averaged approximately 12,800 gallons per day, whereas past estimations of water usage used for permitting purposes shows the terminal averages a daily usage at approximately 12,000 gallons, with a daily maximum of 22,000 gallons. SeaPort Sound does not have a separate meter to track water usage from the boiler, and it is not possible to extract the boiler volumes from drinking water, sanitary, or other functional uses; however, SeaPort Sound estimates that more than 80% of the water usages is attributed to the boiler and has calculated the reduction in annual water use from the new boiler to be approximately 5 million gallons.

The current boiler system operates without any discernable return of steam condensate to the boiler; the majority of steam is expelled at steam traps throughout the terminal and not returned to the boiler. The boiler is constantly under a charging load to maintain temperature and pressure on the steam heating system. The proposed system is a closed loop system, which will benefit from the circulation of already heated thermal fluid. The estimated savings of up to 30% accounts for the benefits created from operating the system in a closed loop with a return on stored thermal energy back to the heater. The new boiler has the potential for reduced energy usage (by up to approximately 8%) if the thermal fluid needs to be reheated.

2.11 Archaeological, Historical, and Cultural Resources

2.11.1 Comment Summary

Commenters requested development of an Inadvertent Discovery Plan to be implemented during construction.

2.11.2 Inadvertent Discovery Plan

As described in the Final EIS Section 3.6.3, ground disturbance is not expected to extend beyond 10 feet below the surface and would likely occur within imported fill, not native sediments or soils. This is anticipated to have minor impacts on archaeological, historical, or cultural resources. However, as stated in the Final EIS Section 3.6.3.1 (MM-27), an Inadvertent Discovery Plan will be prepared and would be followed during construction to avoid or minimize potential impacts on archaeological resources.

2.12 Environmental Health and Safety

2.12.1 Comment Summary

Comments on environmental health and safety requested additional information on the following topics:

- Details regarding handling and disposal of potentially contaminated soils during Project construction
- Soil sampling on the Project site due to the potential for contamination resulting from industrial uses
- Concern about public health issues related to risk of explosion, spills, and storage containment breaches
- Requirements for safe handling and disposal of construction debris including hazardous materials
- Additional contaminated sites in the Project vicinity, as indicated by Ecology
- Additional design requirements for safety and containment, as referenced by Ecology

2.12.2 Comment Summary Response

Contaminated Soils and Sampling: The Final EIS Section 3.1.3 states that because of the potential to encounter contaminants during excavation, soils would be tested and disposed of at an approved, off-site disposal facility. If groundwater is encountered during construction, it would be treated on site in accordance with permit requirements. MM-25 in Section 3.7.3.1 of the Final EIS requires the construction contractor to develop a contaminated media management plan to address the characterization, segregation, and disposal of any contaminated soils or groundwater potentially encountered during excavation. These types of detailed plans are typically developed by the contractor that will be performing the work so that it can identify the most effective methods to comply with permit requirements based on site-specific conditions and its experience with similar projects.

If any contamination is discovered during construction, the release of hazardous substances will be reported to Ecology as required by WAC 173-340-300(2). If contamination of soil or groundwater is readily apparent, or is revealed by sampling, Ecology will also be notified. The Final EIS Section 3.7.3 has been revised to provide this additional detail.

Risk of Explosion: As described in the Final EIS Section 3.7.1.1, none of the products stored on site are explosive, even under elevated temperatures or pressures, and all products have a 1 or 2 rating for health hazards. The tanks installed within the expansion area will be new tanks that are constructed to modern codes and will carry similar materials that are already present on site. Therefore, the risk of explosion at the site is low.

Spills and Containment Breaches: Project design, construction practices, and operational safety plans and procedures described in the Final EIS will serve to avoid and minimize the potential for spills or containment breaches affecting human health and to respond in the unlikely event of such an incident. See the Final EIS Section 3.7.3.1 for construction measures and Section 3.7.4.2 for measures to be applied during Project operation.

Although spills cannot be completely prevented, the potential impacts from spills can be avoided or minimized through compliance with appropriate regulations and implementation of preventative measures and response preparedness. All vessels within Washington waters are required to implement minimization measures to prevent spills and reduce impacts associated with accidental releases, as described in Sections 2.5.1, 3.4, 3.7, and 4 of the Final EIS. The use and operation of vessels outside the SeaPort Sound terminal are outside the scope and control of SeaPort Sound and are considered secondary effects. However, parties operating these vessels must abide by regulations related to spill prevention and response. The SeaPort Sound terminal also employs incident prevention, preparation, and response as described in the Final EIS Section 3.7.1.2.

Handling and Disposal of Construction Debris: MM-26 states that asbestos and other hazardous wastes used or encountered during construction will be properly disposed of in accordance with appropriate regulations. In addition, the Final EIS Section 3.10.3.4 states that the construction contractor would be required to prepare a demolition plan for City review, describing the anticipated type and amount of construction and demolition wastes, proposed recycling and reuse strategies, and arrangements to coordinate transport of the remaining waste to licensed disposal sites.

Contaminated Sites in Project Vicinity: The Final EIS Section 3.7.1.3 has been revised to add the contaminated sites in the Project vicinity as indicated by Ecology.

Design Requirements: Section 3.7.4 has been revised to state that the Project design will comply with National Fire Protection Association requirements to ensure proper spacing, grading, and drainage as required by state law (WAC 173-80). The Project design will also ensure that any spills onto the soil will be sufficiently contained and readily recoverable as required by state regulations (WAC 173-80).

2.13 Land and Shoreline Use

2.13.1 *Comment Summary*

Commenters stated that this type of facility should not be allowed on the Tideflats area and that the City zoning is inconsistent with state law in this area.

2.13.2 *Comment Summary Response*

The Proposed Action is not seeking to change the underlying zoning for this area and is consistent with existing uses both on and in the vicinity of the site.

2.14 Transportation

2.14.1 *Comment Summary*

Commenters stated the Draft EIS did not adequately address transportation impacts such as an increased risk of spills, leakage, and impacts to local transportation infrastructure (roads, highways, and railways) due to an increase of ship, rail, and truck traffic. Commenters expressed concern that the Draft EIS did not account for adverse impacts resulting from the increase in traffic from semi-truck, private, and commercial vehicles because the Project area is not currently served by regular public transit routes. A description of vehicular traffic associated with demolition and construction was also requested.

2.14.2 *Comment Summary Response*

As described throughout the Draft and Final EIS, although the Proposed Action would increase storage capacity, SeaPort Sound is not seeking permit modifications to change the currently permitted use at the Project site or increase its permitted throughput volume limits. A transportation assessment completed to support the response to comments (Appendix G of the Final EIS) found that vessel calls could increase by up to three vessels on average per month (6% increase), up to 78 rail cars per month (14% increase), and up to 12 trucks per day (7% increase) from existing conditions. As demonstrated in the transportation assessment, a minor increase from existing transportation trends could occur as a result of the increase in storage capacity; however, that is dependent on market conditions, which are subject to fluctuations from year to year. Information from the transportation assessment has been added to the Final EIS Section 3.9.4.

The potential risks of spills, leakage, and impacts to local transportation infrastructure are assessed in the Final EIS, and additional information is provided in this appendix. Because the Proposed Action will result in only a minor increase of marine monthly vessel calls, rail cars, and truck loadings, and the site will continue to remain within its permitted levels for each of these modes of transportation, it is anticipated that impacts will be negligible and less than significant.

The Project is located on Taylor Way, which is not currently served by public transit. However, based on the transportation assessment, potential increases in traffic and their potential impacts to nearby intersections would be negligible based on existing conditions.

Section 3.9.3 has been updated to include a description of construction transportation and equipment to be used for construction of the Project. The transportation assessment in Appendix G of the Final EIS includes BMPs to be implemented by the contractor to avoid or minimize potential transportation impacts from construction.

2.15 **Public Services and Utilities**

2.15.1 *Comment Summary*

Commenters raised concerns that the Project will divert the resources of the Tacoma Fire Department and other emergency responders away from the community to the SeaPort Sound terminal. Another commenter was concerned that the Project will cause an increase in rates for residential Tacoma Power customers who will effectively “subsidize” the additional power usage from the Project.

2.15.2 *Comment Summary Response*

Emergency Response: The slight increase in storage volume at the Project site is unlikely to significantly increase demands for emergency response at the terminal because of the fire suppression, spill prevention and control, and response measures that are in place at the terminal.

The Project includes a new fire water loop system that will expand fire response capabilities site wide. The EIS Sections 3.10.1 and 3.10.4 acknowledge that Tacoma Fire Department response times do not currently meet performance standards. SeaPort Sound will update its emergency response plans with the Project and provide this information to emergency response agencies to ensure they have the latest information about the new facilities. The Tacoma Fire Department has been involved in the review process for this Project. Additional mitigation measures are described in the Final EIS Section 3.10.4.7.

Electricity: One comment letter stated that the Project “will consume an additional 8.1 million kilowatt hours (kWh) of electricity from Tacoma Public Utility.” However, this is incorrect. As described in the Final EIS Section 3.5.1.1, the SeaPort Sound facility used an average of approximately 8.1 million kWh of electricity each year between 2016 and 2020, which represented approximately 0.3% of electricity supplied by Tacoma Power to industrial customers in its service area in 2019. Changes in electricity use during Project operation (described in the Final EIS Section 3.5.4.1) are not expected to be large enough, relative to Tacoma Power’s overall customer base and other factors, to result in changes in the amount of electricity available to other users. Tacoma Power sets rates for electricity use considering many factors, so speculating on changes to residential Tacoma Power customer rates is not possible.

2.16 Environmental Justice

2.16.1 Comment Summary

Commenters raised concerns about public health and safety impacts to residents of the Northwest Detention Center that is 3 miles from the terminal. They also requested expanding the scope of consideration for environmental justice populations to be greater than 0.5 mile.

2.16.2 Comment Summary Response

The SeaPort Sound terminal is located within an area zoned for heavy industry and on an industrial corridor (Marine View Drive) that is intended to accommodate commercial and industrial traffic. The property is currently used for industrial purposes including the storage and transfer of bulk liquids. The Project includes the expansion of an existing use. The Project includes mitigation measures (as outlined in Section 3.8.3.1 of the Final EIS) that will reduce impacts to nearby communities, which would include residents of the Northwest Detention Center, located 2.5 miles southwest of the Project site. This includes measures to reduce air and dust emissions and minimize noise and traffic impacts. In addition, the Draft EIS found that the Proposed Action would have no significant adverse impacts on any aspect of the environment; therefore, no disproportionate impacts are expected to minorities or low-income populations, using either 0.5-mile or a larger radius.

2.17 Opposition to or Support for the Project

SeaPort Sound appreciates the time and attention that commenters committed to reviewing the Draft EIS and expressing their opinions in support or opposition to the Project. The City and other agencies will continue to review the comments and use them to inform permitting decisions as appropriate.

3 References

- City of Tacoma, 2019. *SeaPort Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU 19-0066)*. November 15, 2019.
- Donofrio, S., P. Maguire, K. Myers, C. Daley, and K. Lin, 2021 "Markets in Motion: State of the Voluntary Carbon Markets 2021 Installment 1." *Ecosystem Marketplace* 2021:15.
- Hammerschlag (Hammerschlag LLC), 2022. *Study Report: Inventory of Greenhouse Gas Emissions – SeaPort Sound Plant Modernization Project*. Hammerschlag LLC document No.: SP-003(h). Prepared for Anchor QEA, LLC. April 29, 2022.
- Holt, M.M., and D.P. Noren, 2008. "Speaking up: Killer Whales (*Orcinus orca*) Increase Their Call Amplitude in Response to Vessel Noise." *The Journal of Acoustical Society of America* 125(1):10.1121/1.3040028.
- ICC (International Code Council), 2021. International Building Code. Accessed August 3, 2023. Available at: <https://codes.iccsafe.org/content/IBC2021P2/chapter-18-soils-and-foundations>.
- NOAA Fisheries (National Oceanic and Atmospheric Administration, Marine Fisheries Service), 2021a. *Species in the Spotlight: Priority Actions 2021–2025*. March 2021. Accessed August 1, 2023. Available at: <https://media.fisheries.noaa.gov/2021-04/SIS-Action-Plan-2021-SRKW-FINAL%20508.pdf>.
- NOAA Fisheries, 2021b. *Southern Resident Killer Whales (Orcinus orca): 5-Year Review: Summary and Evaluation*. National Marine Fisheries Service West Coast Region, Seattle, Washington. December 2021. Accessed August 1, 2023. Available at: <https://media.fisheries.noaa.gov/2022-01/srkw-5-year-review-2021.pdf>.
- NOAA Fisheries, 2022. Protected Resources App (Critical Habitat Mapping). Accessed August 31, 2023. Available at: <https://www.fisheries.noaa.gov/resource/map/protected-resources-app>.
- Raverty, S., J. St. Leger, D.P. Noren, K. Burek Huntington, D.S. Rotstein, and F.M.D. Gulland, et al., 2020. "Pathology Findings and Correlation with Body Condition Index in Stranded Killer Whales (*Orcinus orca*) in the Northeastern Pacific and Hawaii from 2004 to 2013." *PLoS ONE* 15(12):e0242505. <https://doi.org/10.1371/journal.pone.0242505>.
- Schultz, S., 2021. Memorandum to: Troy Goodman, SeaPort Sound Terminals. Regarding: LU20-0107: EIS Contents and Final Scoping Document. March 9, 2021.

Uguen-Csenge, E., 2020. "Ship Strikes 'Significant' Cause of Death for Southern Resident Killer Whales, UBC Study Finds." *CBC News*. December 3, 2020. Accessed on August 31, 2023. Available at: <https://www.cbc.ca/news/canada/british-columbia/ship-strikes-significant-cause-of-death-for-southern-resident-killer-whales-ubc-study-finds-1.5826030>.

Wang, M.Q., 2020. GREET 2020 (Greenhouse gases, Regulated Emissions, and Energy use in Technologies model; 2020). Accessed August 3, 2023. Available at: <https://greet.es.anl.gov/>.

Attachment 1

Comments Database

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
BUS-001	Bryan Wombles	Associated Construction and Engineering	Business	12/21/2022	Email	SUP
BUS-002	Ted Lehmann	CMS Energy Advisors	Business	12/21/2022	Email	SUP
BUS-003	Mike Dorthalina	Nationwide Boiler Inc.	Business	12/22/2022	Email	SUP
BUS-004	Scott Best	Nationwide Boiler Inc.	Business	12/27/2022	Email	SUP
GOV-001	Sarah Penfield, Derek Rockett, Brittany Flittner, Honor Carpenter	Department of Ecology	Government Agency	12/27/2022	Letter	TC, MM, CE, EAR, WAT, PW, EHS, LSU, TRA, EJ
GOV-002	John Dawson	Puget Sound Clean Air Agency	Government Agency	12/22/2022	Letter	PA, MM, AIR, TRA
ORG-001	Wyatt Golding	Ziontz Chestnut, Communities for a Healthy Bay, WA Environmental Council	Organization	12/27/2022	Letter	SEP, PA, MM, CE, AIR, WAT, EHS, LSU, TRA
ORG-002	Erin Dilworth	Communities for a Healthy Bay	Organization	12/7/2022	Email	PA, AIR
ORG-003	Riley Lynch, Lovel Pratt, Julie Andrzejewski, Ellen Floyd, Sean Arent, Maru Mora Villalpando, Elly Claus-McGahan, Sally Keely, Barbara Church, Blair Englebrecht	WA Physicians for Social Responsibility, Friends of the San Juans, Indivisible Tacoma, Tacoma/Pierce County Democratic Socialists of America, La Resistencia, Climate Pierce County, Cascadia Climate Action Now, The Conservation 253, Puget Soundkeeper	Organization	12/23/2022	Letter	SEP, PA, AIR, EHS, TRA
ORG-004	Lovel Pratt, Marcie Keever, Blair Englebrecht, Rein Attemann, Riley Lynch, Shannon Wright, Gary Cook, Erin Dilworth, Nora Nickum, Stacy Oaks, Howard Garrett, Kathleen Callaghy, Deborah A. Giles, Sophia Ressler, Sept Gernez	Friends of the San Juans, Communities for a Healthy Bay, Friends of the Earth, Puget Soundkeeper, WA Environmental Council, WA Physicians for Social Responsibility, RE Sources, 350 Tacoma, Seattle Aquarium, Orca Network, Stand.earth, Defenders of Wildlife, Wild Orca, Center for Biological Diversity, Sierra Club WA Chapter	Organization	12/22/2022	Letter	SEP, CE, WAT, PW, EHS, TRA
ORG-005	Steven Treffers	Historic Tacoma	Organization	12/15/2022	Email	CUL
TRB-001	Jennifer Keating	Puyallup Tribe of Indians	Tribal	12/27/2022	Email	TC, CUL
TRB-002	Angela Dillon, Crystal Stone	Puyallup Tribe of Indians	Tribal	12/27/2022	Letter	TC, AIR, WAT, PW
PUB-001	AJ Hawkins		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-002	Aimee Hamilton		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-003	Alex Fay		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-004	Ally Orosco		Public	12/25/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-005	Rev. Amara Oden		Public	12/20/2022	Email	SEP, PA, AIR, EHS, TRA
PUB-006	Amber Koens		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-007	Amitav Dash		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-008	Amy Harris		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-009	Andrea Scott-Murray		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-010	Andy Motz		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-011	Anita Rose		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-012	Ann Dorsey		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-013	Anne Kroeker and Richard Leeds		Public	12/27/2022	Email	SEP, TC, PA, EAR, AIR, ENR, EHS, TRA, PSU
PUB-014	Anne Van Holde		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-015	Arthur Levine		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-016	Ashley Ouellette		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-017	Barbara Bonfield		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-018	Barbara Church		Public	12/26/2022	Email	SEP, PA, AIR, EHS, TRA
PUB-019	Barbara Keller		Public	12/20/2022	Email	PW, EHS, TRA

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
PUB-020	Barbara Stevenson		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-021	Beth Brunton		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-022	Biji Mathew		Public	12/23/2022	Email	SUP
PUB-023	Bill Phipps		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-024	Brandon Juhl		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-025	Breana Melvin		Public	12/26/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-026	Brenda Pickvance		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-027	Brian Van Keulen		Public	12/28/2022	Email	SUP
PUB-028	Carol OlivierOlivier		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-029	Carole Braaten		Public	12/27/2022	Email	SEP, CE, EAR, EHS, LSU
PUB-030	Carole Braaten		Public	12/27/2022	Email	SEP, EAR, EHS, LSU
PUB-031	Carolyn Treadway		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-032	Chelsea Vetter		Public	12/20/2022	Email	SEP, AIR
PUB-033	Chelsea Vetter		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-034	cheryl waitkevich		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-035	Christopher East		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-036	Claudia Riedener		Public	12/27/2022	Email	SEP, TC, PA, MM, AIR, WAT, PW, ENR, EHS, TRA, PSU
PUB-037	Clayton Jones		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-038	Connie Nelson		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-039	Corbin Swanlund		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-040	Courtney Davis		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-041	d robinson		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-042	Daniel Villa		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-043	Darcy Skarada		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-044	Darcy Skarada		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-045	David Mendoza		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-046	Deanna Clark		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-047	Deborah Hodack		Public	12/23/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-048	Deborah Sallee		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-049	d goldsmith		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-050	Dennis Smith		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-051	Derek Gendvil		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-052	Diane Shaughnessy		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-053	Dogan Ozkan		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-054	dorinda kelley		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-055	E. Neal		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-056	Edward Goldstein		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-057	Elizabeth Franz		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-058	Erin Gubelman		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-059	Erin Reiersen		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-060	Esther Kronenberg		Public	12/23/2022	Email	SEP, PA, AIR, PW, EHS
PUB-061	Farha Parmita		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-062	Felicity Devlin		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-063	Fern Dot		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
PUB-064	Florence and Kenneth Robinson		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-065	Geoff Cribb		Public	12/27/2022	Email	EAR, WAT, EHS
PUB-066	George Unruh		Public	12/20/2022	Email	SEP, PA, AIR, TRA
PUB-067	Gill Fahrenwald		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-068	Glen Anderson		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-069	Gloria Mead		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-070	Guila Muir		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-071	Jamie Fiano		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-072	Jamie Hill		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-073	Jane Miller		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-074	Janeen Provazek		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-075	Janet Higbee-Robinson		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-076	Janice Wilfing		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-077	Jared Howe		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-078	Jean Berolzheimer		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-079	Jean Publieee		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-080	Jean Spohn		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-081	Jeanne Deller		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-082	Jen Braveboy		Public	12/24/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-083	Jenea Wood		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-084	Jessi Presley-Grusin		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-085	Joan Torfin		Public	12/20/2022	Email	SEP, AIR, TRA
PUB-086	Joel Hildebrandt		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-087	John Carlton		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-088	John Goertzel		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-089	Jose Xavier		Public	12/21/2022	Email	SUP
PUB-090	JP Kemmick		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-091	Judy Ferguson		Public	12/27/2022	Email	SEP, AIR, EHS, TRA
PUB-092	Julie Miller		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-093	Julie Stone		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-094	Justin Maltry		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-095	Karen Salama		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-096	Katherine Giseburt		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-097	Kathy Jorgensen		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-098	Kathy lawhon		Public	12/24/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-099	Katie Gibian		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-100	Keith Dunavant		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-101	Kelly Latimer		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-102	Kenneth Zirinsky		Public	12/26/2022	Email	SEP, PA, AIR, EHS
PUB-103	Kenra Brewer		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-104	Kevin Finn		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-105	Kevin Gallagher		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-106	Kevin Hodack		Public	12/23/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-107	Kevin Jones		Public	12/23/2022	Email	SEP, AIR, WAT, PW, EHS

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
PUB-108	Kirsten Rohde		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-109	Krystal Gonzalez		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-110	Kurt Niedermeier		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-111	Laura Long		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-112	Lena Nachand		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-113	Lester Pogue		Public	12/27/2022	Email	TC, PA, EHS
PUB-114	Leslie McClure		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-115	Liisa Wale		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-116	Lisa Ann Kelly		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-117	Lisa Jefko		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-118	Lisa Key		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-119	Lissa Coleman		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-120	Lloyd Johnston		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-121	Lloyd Smouse		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-122	Lori Stefano		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-123	Lori Vest		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-124	Lorna Walker		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-125	Lorraine Johnsnon		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-126	Luann Hendricks		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-127	Lucia Faithfull		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-128	Luke Schindele		Public	12/20/2022	Email	SUP
PUB-129	Lynne Ashton		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-130	Lynne Moore		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-131	Maire Masco		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-132	Margo Rolf		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-133	Martha Bishop		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-134	Mary Rowe		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-135	Matthew Boguske		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-136	Matthew Kolata		Public	11/29/2022	Email	SUP
PUB-137	Meagan Galacgac		Public	12/22/2022	Email	AIR, EHS
PUB-138	Megan Cornish		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-139	Melissa Brechbiel		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-140	Melissa Brooks		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-141	Meryle Korn		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-142	Michael Madden		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-143	Michelle Collar		Public	12/24/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-144	Michelle Hartman		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-145	Michelle Mood		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-146	Mike Conlan		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-147	Miranda Marti		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-148	m'lou christ		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-149	Molly Frankel		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-150	Mona Lee		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-151	Morgan Rivasplata Newton		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
PUB-152	Nancy Corr		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-153	Nancy Corr		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-154	Nancy Corr		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-155	Nancy Hausauer		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-156	Natalie Franz		Public	12/16/2022	Email	SEP, AIR
PUB-157	Norma Ramirez		Public	12/23/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-158	Pat Villa		Public	12/20/2022	Email	SEP, AIR
PUB-159	Paula Smith-Vanderslice		Public	12/25/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-160	Phil Brooke		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-161	Phil Harty		Public	12/27/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-162	Phillip Hope		Public	12/26/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-163	Querido Galdo		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-164	R.L. Aseret		Public	12/20/2022	Email	SEP, AIR
PUB-165	R. Vanstrien		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-166	Rama Paruchuri		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-167	Rebecca Stith		Public	12/27/2022	Email	SEP, PA, AIR, WAT, PW, ENR, TRA
PUB-168	Riley Lynch		Public	12/22/2022	Email	AIR, EHS, TRA
PUB-169	Rita Glasscock		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-170	Robert Brown		Public	12/20/2022	Email	SEP, AIR, TRA
PUB-171	Robert Posch		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-172	Robin Evans-Agnew		Public	12/27/2022	Email	AIR, PW, EHS, TRA, PSU
PUB-173	Roger Martin		Public	12/7/2022	Email	EAR, WAT
PUB-174	Russell Burke		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-175	Ryan Sexton		Public	12/21/2022	Email	SUP
PUB-176	Sammy Low		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-177	Sara Bhakti		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-178	Sasha Funk		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-179	Shae Pyke		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-180	Sharon Knight		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-181	Shaun Hubbard		Public	12/21/2022	Email	SEP, CE, AIR, PW, EHS, TRA
PUB-182	Sheri J Tonn		Public	12/27/2022	Email	SEP, EAR, AIR, WAT, PW, EHS
PUB-183	ste ho		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-184	Stephen Williams		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-185	Steve Thompson		Public	12/24/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-186	Steven Gary		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-187	Susan DeWitt		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-188	Susan MacGregor		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-189	Tanisha Roberts		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-190	Ted Lilyblade		Public	12/21/2022	Email	SUP
PUB-191	Thomas Libbey		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-192	Thomasin Kellermann		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-193	Tika Bordelon		Public	12/22/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-194	Tom Craighead		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-195	Tracy Ouellette		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA

Unique ID	Name/Submitted By	Commenter	Commenter Type	Date Received	Submittal	Categories
PUB-196	Twylia Westling		Public	12/26/2022	Email	MM, AIR, EHS
PUB-197	Virgene Link-New		Public	12/21/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-198	Wendy Wright		Public	12/21/2022	Email	SEP, AIR, WAT, EHS, TRA
PUB-199	William Biederman		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-200	Yonit Yogev		Public	12/20/2022	Email	SEP, PA, AIR, ENR, EHS, TRA
PUB-201	Roger Martin		Public	1/8/2023	Email	WAT
PUB-202	Roger Martin		Public	1/8/2023	Email	WAT

Theme Codes	New themes	Comment Response Section
SEP	SEPA Process	2.1
TC	Tribal Coordination	2.2
PA	Proposed Action	2.3
MM	Mitigation Measures	2.4
CE	Cumulative Effects	2.5
EAR	Earth	2.6
AIR	Air	2.7
WAT	Water	2.8
PW	Plants & Wildlife	2.9
ENR	Energy & Natural Resources	2.10
CUL	Archaeological, Historical, and Cultural Resources	2.11
EHS	Environmental Health & Safety	2.12
LSU	Land & Shoreline Use	2.13
TRA	Transportation	2.14
PSU	Public Service & Utilities	2.15
EJ	Environmental Justice	2.16
SUP	Support/Opposition	2.17

Attachment 2

Compilation of Comments Received

From: [Bryan Wombles](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Seaport EIS public comment period- Commentary in Support of Conversion
Date: Wednesday, December 21, 2022 12:05:02 PM
Attachments: [image001.png](#)

Good morning,

My name is Bryan Wombles with Associated Construction and Engineering. I am writing your department today to share my commentary in favor of this project.

This project is vital in keeping fuel storage for commerce and transportation going in the Northwest region of the US. Additional fuel storage ensures resources are available to companies and eventually consumers in this specific region. In addition, this conversion will remove equipment that is not being used and can be properly decommissioned and removed from service. An expansion like this will revamp this facility to achieve proper OSHA regulations and ensure safe new protocol for the existing site operators and workers. This facility will keep hard working Americans both at the facility and Contractors alike working for years to come.

Bryan Wombles

Business Development Manager



27476 Via Industria
Temecula CA 92590
Office: 949-299-5766 X302 / Fax: 949-271-4176
Cell: 949-633-9832
E-mail: BWombles@A-C-E-INC.com

"Always remember, WWLD?"

" Do your Job"

- Bill Belicheck

NOTICE: This e-mail (including attachments or links) is covered by the Electronic Communications Privacy Act, 19 U.S.C. Sections 2510-2521. It is confidential and may be legally privileged. The information is solely intended for the use of the addressee named above. If you are not the intended recipient, any disclosure, copying, distribution, or other use of the contents of this information is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately by return e-mail and delete this message without reading, printing, saving, or distributing in any manner. Thank you.

From: [Ted Lehmann](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Public Comment for Seaport Plant Upgrade
Date: Wednesday, December 21, 2022 8:22:08 AM
Attachments: [image001.png](#)

Ms. Schultz,

Thank you for the opportunity to comment.

Seaport is a leading provider of Bio-Fuels in the region and allowing them to modernize their equipment ensures the Pacific Northwest will have a supplier capable of meeting the inevitable increased demand of greener fuel supplies. In addition, the upgraded equipment will ensure it is done safely and helps address the flexibility needed in a changing energy market. Our region needs to support investment if we want alternatives to traditional fossil fuels.

Thank you very much and feel free to reach out if you have any questions.

Regards,

Ted



TED LEHMANN
VICE PRESIDENT, SALES & REGULATORY AFFAIRS
C: 206.806.8021 • O: 206.236.8808
www.cmsenergyadvisors.com

From: [Mike Dorthalina](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Re: Seaport Sound Plant Modernization project
Date: Thursday, December 22, 2022 3:25:14 PM
Attachments: [image001.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)

The Seaport Sound Plant Modernization project is vital for the Puget Sound and Olympic Peninsula regions. Seaport is a leader in developing and providing environmentally friendly energy solutions under the Renewable Fuels Standard (RFS). The plant provides the region with biodiesel and Ultra Low Sulphur Diesel necessary for industrial, commercial and residential use.

The Olympic Peninsula, in particular, is heavily reliant on fuel oils since there is no natural gas. Seaport Sound's proposed expanded storage facility is strategically located to provide sufficient quantities of fuel oil on demand. Local sources for fuel oils is a critical need for many industrial, commercial and residential users. Nationwide Boiler has many customers on the peninsula that rely solely on fuel oils for energy.

Additionally, renewable fuels provide emergency backup source of energy in the event of natural gas curtailments for many hospitals, correctional facilities, and food processing plants throughout Northwest Washington.

New carbon reduction programs, like the Low Carbon Fuel Standard and the State's planned Clean Fuel Standard, cannot be successful without sufficient logistics and storage capacities. The Plant Modernization Project will allow the Sound Terminal to provide lower carbon intense fuels and feed stocks into the region, and support low carbon fuel initiatives."

I urge the City of Tacoma to approve the Seaport Sound Plant Modernization DEIS.

Respectfully,

Mike Dorthalina | *Sales Manager*

Nationwide Boiler Incorporated

-

Pacific Northwest Facility

3720 S. Truman St. | Washougal, WA 98671

O: 360.210.0513 | M: 360.823.7250

mdorthalina@nationwideboiler.com

www.nationwideboiler.com

[Learn More About Nationwide Boiler's Capabilities](#)



"...Integrity, Dependability, Real Customer Service."

CONFIDENTIALITY NOTICE: This e-mail and any attachments are for the exclusive and confidential use of the intended recipient. Any use by others is strictly prohibited. If you are not the intended recipient, please do not read, distribute, or take any action in reliance upon this message. If you have received this in error, please notify me immediately by return e-mail and promptly delete this message and its attachments from your computer system.

From: [Scott Best](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Seaport Sound Plant Modernization project
Date: Tuesday, December 27, 2022 10:54:28 AM
Attachments: [image001.png](#)
[image003.png](#)
[image005.png](#)
[image007.png](#)

Dear Ms. Schultz.

After a brief review of the Draft Environmental Impact Statement for the Seaport Sound Plant Modernization project, I am writing to express my support for the project.

Fuel oils, presently and for the foreseeable future, are an essential source of energy for industry and transportation. Industry and transportation are both essential to the economic vitality of the Pacific Northwest and beyond. The objective of the project is to be responsive to the need and market for Low Carbon Fuel Standard fuels and to improve the safety of storage and distribution of the same by improving processes, storage and secondary containment. It is also intended to provide flexibility to respond to changes in fuel preferences in the future.

Because this is a legacy facility already positioned near infrastructure to distribute the product, it makes sense to retain this facility while improving the safety and reducing emissions and spill potential.

Respectfully,

Scott Best | *Outside Sales Engineer*
Nationwide Boiler Incorporated

-
Pacific Northwest Facility
3720 S. Truman St. | Washougal, WA 98671

M: 206.798.2591
sbest@nationwideboiler.com
www.nationwideboiler.com

[Learn More About Nationwide Boiler's Capabilities](#)





CONFIDENTIALITY NOTICE: This e-mail and any attachments are for the exclusive and confidential use of the intended recipient. Any use by others is strictly prohibited. If you are not the intended recipient, please do not read, distribute, or take any action in reliance upon this message. If you have received this in error, please notify me immediately by return e-mail and promptly delete this message and its attachments from your computer system.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
PO Box 47775, Olympia, WA 98504-7775 • 360-407-6300

December 27, 2022

Shirley Schultz, Principal Planner
City of Tacoma
Planning and Development Services
747 Market Street, Room 345
Tacoma, WA 98402

Dear Shirley Schultz:

Thank you for the opportunity to comment on the draft environmental impact statement for the SeaPort Sound Plant Modernization Project (LU20-0107) located at 2628 Marine View Drive Northeast as proposed by Anchor QEA on behalf of Seaport Sound. Ecology acknowledges the lead agency for including the SEA Program in the initial consultation during development of the draft EIS to provide review of Greenhouse Gas emissions information. Ecology submits additional comments, from other programs in the agency that have expertise in areas outside of GHG emissions.

INDUSTRIAL SECTION: Sarah Penfield (360) 280-2325

As per General Condition G4 of National Pollutant Discharge Elimination System Permit No. WA0003204, the applicant must, as soon as possible, but no later than 180 days prior to the proposed changes, give notice to Ecology's Industrial Section of planned physical alterations or additions to the permitted facility.

The applicant should consider if the proposed project results in the construction or modification of wastewater control facilities. Prior to constructing or modifying any wastewater control facilities, including stormwater conveyance and treatment, an engineering report and detailed plans and specifications must be submitted to Ecology's Industrial Section for approval as per General Condition G5 of National Pollutant Discharge Elimination System Permit No. WA0003204.

The applicant should update the Stormwater Pollution Prevention Plan for National Pollutant Discharge Elimination System Permit No. WA0003204 if the proposed makes it so that the current plan is no longer reflective of the site.

The applicant should consider if the proposed project will require submittal of a new application or addendum under Special Condition S6 of National Pollutant Discharge Elimination System Permit No. WA0003204. The applicant must submit a new application or addendum at least one hundred eighty (180) days prior to commencement of discharges, resulting from activities which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process

modifications, in the permitted facility. A revised application would also be required if the project significantly changes the nature of pollutants discharged in stormwater from the facility or significantly increases the quantity of pollutants discharged. Special Condition S7 may also be an option for short term changes to the discharge.

The applicant should update the Spill Control Plan for National Pollutant Discharge Elimination System Permit No. WA0003204 if the proposed project makes it so that the current plan is no longer accurate.

The applicant should clarify how construction stormwater is going to be discharged from the site in the proposed project. If the applicant is planning on discharging construction stormwater from outfalls covered under their National Pollutant Discharge Elimination System Permit (No. WA0003204), they must notify the Industrial Section.

The SeaPort Sound Plant Modernization Project draft environmental impact statement (DEIS) reports that a refinery, and petroleum bulk fuel storage and handling facility operated at this location. Ecology has found contaminated soil, soil vapor and groundwater at many similar historical petroleum refinery and storage operations. Ecology is concerned that at this proposed project, petroleum fuels and related hazardous substances may have been released from the facility and may be still detectable in soil, soil vapor, or groundwater. No information has been provided to Ecology regarding the steps taken to investigate this property for petroleum fuels or other hazardous substances often present at petroleum bulk fuel storage and handling operations. Ecology recommends sufficient investigation of the SeaPort Sound project property to determine if contamination from petroleum fuels or other hazardous substances is currently detectable in soil, soil vapor, or groundwater. If any contamination is discovered, the release of hazardous substances must be reported to Ecology under WAC 173-340-300 (2). The cleanup of toxic sites is regulated under the Washington Model Toxics Control Act (MTCA), Chapter 70A.305 RCW, and implementing regulations contained in Chapter 173-340 WAC.

The DEIS also states a contaminated media management plan will be developed for use during construction. Any such plan developed must include procedures to identify contamination in site media, in addition to procedures to characterize, segregate, and dispose of site media. The plan also must include procedures to notify Ecology if contamination is encountered during construction.

The subject SeaPort property is within a quarter mile of three contaminated sites. The sites are 302 McMurray Road, Facility Site Identification (FSID) 17865, Airo Services Inc, FSID 1231, and Pump Stn 4103 ROW 2222, FSID 1806706. To search and access information concerning these sites, see <http://www.ecy.wa.gov/fs/> and <https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx>.

If contamination is suspected, discovered, or occurs during the proposed SeaPort Sound facility demolition, site preparation, or construction, testing of the potentially contaminated media must be conducted. If contamination of soil or groundwater is readily apparent, or is revealed by sampling, the Department of Ecology must be notified. To notify Ecology, contact the Environmental Report Tracking System Coordinator at the Southwest Regional Office at (360) 407-6300. For assistance and information about subsequent cleanup and to identify the type of testing that will be required, contact Sarah Penfield with the Industrial Section at (360)-280-2325.

SOLID WASTE MANAGEMENT: Derek Rockett (360) 407-6287

The applicant proposes to demolish an existing structure(s). In addition to any required asbestos abatement procedures, the applicant should ensure that any other potentially dangerous or hazardous materials present are removed prior to demolition. It is important that these materials and wastes are removed and appropriately managed prior to demolition. It is equally important that demolition debris is also safely managed, especially if it contains painted wood or concrete, treated wood, or other possibly dangerous materials. Please review the “Dangerous Waste Rules for Demolition, Construction, and Renovation Wastes,” on Ecology’s website at: [Construction & Demolition Guidance](#). All removed debris resulting from this project must be disposed of at an approved site. All grading and filling of land must utilize only clean fill. All other materials may be considered solid waste and permit approval may be required from your local jurisdictional health department prior to filling. Contact the local jurisdictional health department for proper management of these materials.

SPILL PREVENTION, PREPAREDNESS & RESPONSE: Brittany Flittner (360) 584-4490

Ecology recommends the following be included in the final Environmental Impact Statement (FEIS) to ensure the full scope of potential significant impacts from this project are accounted and mitigated for:

Vessel Traffic

Section 3.3.4.4 states the proposed project would increase storage capacity by 11 percent. This section also states the “number of trips needed to transport bulk liquid products in the future under either alternative cannot be accurately predicted...”. Previous proposals for projects at this facility have included estimates for increases in vessel traffic such as the City of Tacoma Shoreline Substantial Development Permit File No. SHR2013-40000203722. The FEIS should include information about potential changes to vessel traffic and spill risk attributable to the proposed project, including scenarios or assumptions about these potential changes.

The DEIS assumes the impacts of spills will be minor and does not differentiate between potential spill impacts due to changes in products related to the project. For example, when discussing the risk of spills from vessels, trains, and trucks, the DEIS states “Adherence to these regulations would minimize but not eliminate the risk of a large spill and associated impacts on plants and wildlife under the No Action Alternative and the Proposed Action. Impacts would be minor under any of the three market fuel mix scenarios for the No Action and Proposed Action alternatives”. The DEIS does not include data or an analysis to substantiate this claim. The FEIS should include more detailed information about the potential impacts of spills from vessels, trains, and trucks under the No Action Alternative and the Proposed Action, including potential differences in the impacts of spills due to the transport of different types and amounts of products.

Additionally, the DEIS states “SeaPort Sound operates at approximately 68 vessel calls per month as confirmed in the City of Tacoma’s 2019 shoreline permit issued for the site (City of Tacoma 2019a)”. The referenced permit decision, SeaPort Sound Terminal Shoreline Substantial Development Permit and Determination of Environmental Nonsignificance (LU

19-066), does not include vessel calls as a condition or as an advisory note. The SEPA Checklist for an earlier permit, City of Tacoma Shoreline Substantial Development Permit File No. SHR2013-40000203722, stated “Current operations of the Targa marine dock include loading/unloading of approximately 40-60 vessels per month. Targa submits form ECY 070-175 “Advance Notice of Oil Transfer” to Ecology for each transfer. With the approval of the rail car facility, tank expansion, and vapor combustion unit, the marine dock will load the equivalent of 8 additional 150,000 bbl capacity vessel per month. With this project the marine dock will be about 60% utilized”. This indicates that there are no permit restrictions on vessel traffic, and that in 2013, the facility owner estimated the physical capacity of vessel loading to be approximately 113 vessels per month. The FEIS should address the potential for additional vessel traffic.

The FEIS should also include a description of any vessel vetting SeaPort Sound Terminal conducts of vessels carrying oil to or from the terminal, such as utilizing the Oil Companies International Maritime Forum Ship Inspection Report Programme ([SIRE](#)).

Section 3.9.1.3 Marine Vessels states “Escort tugboats ensure a safe passage through the approach channel and apply steering and braking forces if needed. Rescue tugboats, also known as Emergency Response Towing Vehicles, respond to disabled ships and barges, preventing them from grounding and helping to prevent oil spills and other significant maritime incidents”. This does not clearly differentiate between the roles of the Emergency Response Towing Vessel at Neah Bay, which is required by RCW 88.46.135; escort tugs which may be required to accompany a tank vessel per RCW 88.16.190; assist tugs, which help with docking/undocking a vessel; and tugs which may be contracted to provide emergency services to a vessel in distress. The FEIS should clarify tug escort requirements and the use of tugs as they relate to vessels transiting to and from the facility.

Oil Spill Prevention Requirements

The DEIS references oil spill contingency plan requirements per Chapter 173-182 WAC but does not explicitly discuss the oil spill prevention plan requirements in Chapter 173-180 WAC and oil transfer pre-booming requirements in Chapters 173-180 and 173-184 WAC. The FEIS should reference these requirements.

While the National Fire Protection Association (NFPA) is mentioned in the DEIS, it is not listed as a design requirement. NFPA 30 – Flammable and Combustible Liquids Code (2021) includes spacing, grading, and drainage requirements that need to be followed as per WAC 173-180-320(9) and 173-180-330.

Permeability under each storage tank is discussed in MM-3. However, permeability for the entire secondary containment area is not discussed. It is also difficult to fill in a round footer with a clay liner using heavy equipment. Ecology recommends the entire secondary containment system have a clay liner, similar liner, or is constructed in such a way that could reduce hydraulic conductivity of stored oils to at least 1 ft per day. Regardless, Ecology requires the secondary containment system, as a whole, to be constructed to all requirements within WAC 173-180-320, specifically -320(1)(d), so that “...any spill onto soil...be sufficiently contained (and) readily recoverable...”. The FEIS should also review WAC 173-180-630(12)(i). In addition, the secondary containment design and construction needs to meet design requirements of WAC 173-180-320, especially hydrostatic and seismic resistance design requirements described in -320(1)(e) and -320(9)(c).

For tsunami data, the DEIS references Vancouver 2009 maps in 3.1.1.3.4. However, asce7tsunami.online provides more up-to-date information. The run-up numbers on asce7tsunami.online are a bit higher, showing 8.5 ft. The ASCE maps also show a 0.33 ft ground subsidence associated with the earthquake (that is not part of the Vancouver 2009 maps). Ecology recommends utilizing the updated map data.

The FEIS should also ensure all oil spill, prevention, preparedness, and response measures are followed during deconstruction of the existing storage tanks and associated equipment. There could be an additional risk of spills during this process and proper best management practices should be followed.

Southern Resident Killer Whales

Although Southern Resident Killer Whales (SRKWs) are not likely to be present in the Hylebos Waterway where the terminal is located, they are present in adjoining waterways and along vessel shipping routes that vessels calling to port at this terminal utilize. The DEIS does not directly mention whether there will be significant impacts to SRKWs. The DEIS states the fluctuation of vessel traffic to and from the terminal will be the same regardless of project approval, however, it is not clear that this is the case. Without including the possible range of vessel traffic under the current capacity and the possible range under the proposed project's capacity, regardless of whether the capacity and throughput is within the permitted amount, there may be an increase in vessel traffic that can only occur with the 11 percent increase in capacity. Ecology reiterates the need to include vessel traffic estimates for this project.

Section 3.4.4.1 states "...third-party vessels that access the facility are required to adhere to Washington State regulations that comprehensively regulate shipping lanes, vessel speeds, and setback zones for the protection of killer whales. These regulations are intended to reduce noise levels that are harmful to killer whales and maintain safe distances between vessels and wildlife". The FEIS needs to specify what these state regulations are and how they mitigate impacts to SRKWs, such as RCW 77.15.150. There should be a distinction in the FEIS as to what measures are state law or rule, and what are voluntary. There are multiple voluntary mitigation measures that vessels could participate in but are not required to. Ecology also recommends including the following in the FEIS:

- An analysis of the potential impacts to SRKWs from vessel traffic, including impacts from underwater noise pollution, vessel strikes, and potential oil spills.
- Actionable mitigation measures that the facility can implement and require third-party vessels to implement as well.

In section 4.3.4, it states "...the PSE Liquefied Natural Gas (LNG) Facility, may increase the amounts of fuel products being transported through the Tideflats area and could lead to an increase in the potential for spills". The FEIS should include the increase of fuel products projected under the PSE LNG Facility and the potential cumulative impacts with the approval of this project. There are no current mitigation measures in the DEIS to account for this impact, instead the DEIS states "It is anticipated that SeaPort Sound and other users of the waterway would continue to conduct activities consistent with state and federal regulations that enforce the protection of water quality and aquatic species". Ecology recommends including cumulative impacts from vessel traffic on SRKWs from this project and the PSE LNG Facility.

Tribal Resources

The DEIS does not include any mention of potential impacts to tribal resources in the project area. Section 3.6.1 discusses consultation with the Puyallup Tribe of Indians and that it is “unlikely that significant historical archeological resources would be present in the fill”. The FEIS must also consult with Tribes that have usual and accustomed areas along the vessel shipping routes utilized by this project.

The FEIS should also include:

- How the increase in vessel traffic will impact tribal fishing areas in terms of safety, access, and spill risk.
- How the increase in vessel traffic will impact availability of tribal fishing areas during fishing seasons with high trafficked navigation channels.
- What the cumulative impacts will be to tribal fishing areas with approval of this project and operation of the PSE LNG Facility.

Financial Responsibility

To help mitigate the impact of a spill, the FEIS should include demonstration of financial responsibility for the cost of a major spill at the terminal. Some ways to demonstrate this include the terminal’s insurance policy, Protection and Indemnity Club membership documents, surety bonds, guarantees, letters of credit, or qualification for self-insurance. If the terminal cannot handle the cost of a major spill that could occur at their facility, that cost is then placed on the citizens of Washington State and the surrounding community. Financial responsibility ensures a rapid response to a spill and a reduction of damages from the spill.

Environmental Justice

Section 3.8.1.4 includes a review of potential environmental justice considerations but concludes that the “area within 0.5 mile of the Project site does not have greater levels of environmental justice populations compared to the City as a whole”. Ecology recommends the scope of consideration for environmental justice impacts be expanded. A major spill from the facility or vessels transporting products to and from the facility could have impacts far outside the 0.5 mile radius included in the DEIS.

Please contact Brittany Flittner, Project Specialist with the Spills Program, at 360-584-4490 for questions.

WATER QUALITY/INDUSTRIAL OPERATIONS UNIT: Honor Carpenter (360) 485-2701

Facilities conducting certain industrial activities that discharge stormwater to a surface waterbody or storm sewer system that drains to a surface waterbody are required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for those industrial stormwater discharges under the Department of Ecology’s Industrial Stormwater General Permit (ISGP). More information about the Industrial Stormwater General Permit (ISGP) is available at the link below:

Shirley Schultz
December 27, 2022
Page 7

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Industrial-stormwater-permit>

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(GMP:202205661)

cc: Sarah Penfield, SWM IND
Brittany Flittner, SPPR
Derek Rockett, SWM
Honor Carpenter, WQ
Rich Doenges, SWRO Director

From: [John Dawson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Puget Sound Clean Air Agency comments on Draft EIS for Seaport Sound Terminal
Date: Thursday, December 22, 2022 3:46:52 PM
Attachments: [image001.png](#)
[PSCAA Comments on DEIS for Seaport Sound Plant Modernization - LU20-0107.pdf](#)

Dear Ms. Schultz:

Puget Sound Clean Air Agency's comments on the Draft EIS for the Seaport Sound Plant Modernization project are attached.

Thank you for this opportunity to comment on the Draft EIS.

Sincerely,
John Dawson



John Dawson
Engineering Manager

1904 3rd Ave #105, Seattle, WA 98101

DIRECT 206-689-4060
FAX 206-343-7522

WEBSITE pscleanair.gov

Puget Sound Clean Air Agency Comments
LU20-0107 SeaPort Sound Plant Modernization – Draft Environmental Impact Statement
Submitted to City of Tacoma December 22, 2022

Comment 1 – Inaccuracies Regarding Existing Refinery Equipment Emissions

On page 7 Section 2.1, second paragraph (and on page 41, Section 3.2.5, first paragraph), potential emission estimates are identified for the old asphalt refinery process equipment. ***These references and calculated emission estimates should be removed from the EIS documents to avoid confusion.*** The emission units for that equipment were decommissioned in 2002, according to information in the Puget Sound Clean Air Agency (“Agency”) files. Furthermore, the operation of that equipment was prohibited through enforceable permit conditions with this Agency (see Notice of Construction (NOC) Order of Approval (OA) No. 11917, Condition No. 26, approved on December 24, 2020). This prohibition on operating the refining equipment has been in place since the issuance of NOC OA No. 10325 in 2012.

Comment 2 – Clarify Scope/Description of Existing Throughput Limitations

The Agency could not find information or discussion in the DEIS regarding the capacity or throughput of diesel or fuel oil related products. We understand that the facility currently has existing throughput of these lower volatility fuel streams. However, there is no identified throughput limitation for these streams related to the proposed tanks. The statement in the DEIS that the site is not looking to increase any capacities beyond those that exist in NOC Orders of Approval issued by this Agency does not relate to this proposal, in that those limitations all relate to more volatile products which required air permits and emission controls. The proposed project is not about those more volatile products and would not create any limits for the lower volatile materials identified for the new tanks. ***Please clarify this question with statements regarding any throughput limitations for low-volatility materials (e.g. diesel, fuel oil) at the facility and identify the enforceable basis of those limitations OR state that these materials have no enforceable limitation in existing permits.***

Comment 3 – Clarify/Update the Throughput Data Summary

Please update Table 2-1 to reflect the actual throughput of all specific product streams in terms of gallons or barrels for the year. This table does not appear to directly inform the reader about actual reported annual throughputs related to any existing limitations. For example, are vessel calls all for outbound products? Is each vessel call the same volume of product? Which products and volumes are passing through the marine dock? ***A table showing the facility throughput for all product streams by year, including diesel and fuel oil (i.e. which have no air quality-based throughput limits) would be helpful to understand the proposal and should be added to the DEIS.***

Comment 4 – Implied NOC Inapplicability for Proposal is Unclear

In Section 3.2.5.2 (Long-Term and Secondary Mitigation Measures and Best Management Practices), the mitigation measure identified as MM-35 implies that no Notice of Construction (NOC) application to this Agency would be required for this project because all of the tanks proposed for installation would be for low-volatility materials. The Agency does not have enough details about the project in this DEIS document to agree with that conclusion at this time. Additionally, the DEIS in multiple places (e.g., Section 2.1, Section 3.2.5, and Section 2.5.1.5, MM-35) identifies “renewable fuel feedstock” as one of the materials to be stored, but that is not a specific term that is defined for NOC applicability. The proposed project appears to be using the same marine and truck loading apparatus on the site that is included in the existing NOC OAs, and the effects of that fact should be considered within the currently

Puget Sound Clean Air Agency Comments
LU20-0107 SeaPort Sound Plant Modernization – Draft Environmental Impact Statement
Submitted to City of Tacoma December 22, 2022

approved site operations summarized in Appendix D of the DEIS. The Agency will need more specific information to determine NOC applicability. **Please revise the language in MM-35 to clarify that the NOC applicability for this proposal is an open question and will not be determined by the EIS documents.**

Comment 5 – GHG Life Cycle Analysis (Section 3.2 & Appendix A)

Section 3.2 and Appendix A. The GHG analysis provided in the DEIS appears to quantify and identify mitigation measures for the direct onsite and construction emissions for the proposed project. The upstream and downstream GHG emissions from the fuel streams passing through the plant are referred to as “secondary” emissions and appear to be described as market based: meaning they are not a result of this project. That description and corollary scope of analysis/mitigation measures appears to be appropriate and reasonable based on the project description (i.e. this facility will not produce or refine any products, just store them for transfer). However, there are several details in that analysis (and/or its assumptions) that we would like to comment on:

- In Annex A of Appendix A, the consultant had a list of information requested from Seaport Sound Terminal to support the GHG analysis work. The information received from Seaport to the consultant is not included in the documents, nor is the calculational work by the consultant for the GHG analysis included. This leads to a summary memorandum that includes tables and figures from the consultant. However, the memorandum does not show the work or clarify many of the assumptions that went into the analysis and its conclusions. **Please provide and make available the supporting information and calculation work with the EIS to be transparent in the record.**
- The GHG analysis appears to identify some conclusions that are not intuitive. For example, in Figure 3-3 and Table 3-1 in the DEIS, the information indicates that the No Action alternative has lower secondary GHG emissions than the Proposed Action, in all scenarios. Since the project appears to be an effort to be a part of a low-carbon fuel market and those requirements are intended to reduce GHG emissions, why would the increase in renewable fuels to support that market lead to increased GHG emissions, as shown in this analysis? **Further explanation should be added to the EIS.**
- **In Figures 4a and 4b included in Appendix A, the graphs appear to show an overall projected throughput increase projected over the life of the project with the proposed action (Figure 4b). The No Action graphs show no overall growth of throughput, even though the future years show increased transfer of renewable fuels, in both the spark ignited (volatile) and diesel (low volatility) streams. The graphs in Figure 4b appear to illustrate that the volatile throughput limitations in existing NOC OA conditions do not limit the entire site throughput. If the difference shown in these two sets of figures reflect future market assumptions rather than the effects of the proposed action, then those market factors should be part of both analyses. If it is not a market assumption, then it would appear to reflect the increased throughput of liquid streams that could be processed through the site as a result of this project, recognizing that the terminal is only one site in a larger fuels market. Further explanation should be added to the EIS and the analysis should be updated depending on the answer to the questions included in this specific comment.**

Puget Sound Clean Air Agency Comments
LU20-0107 SeaPort Sound Plant Modernization – Draft Environmental Impact Statement
Submitted to City of Tacoma December 22, 2022

Comment 6 – NOC Order of Approval Details - Clarifications

Section 2.2.1 (Terminal Throughput) and Appendix D appear to contain descriptions of throughput limitations and associated operational limitations that are included in enforceable Notice of Construction Order of Approval (“OA”) conditions from this Agency. However, what is included in 2.2.1 (Terminal Throughput) and Appendix D appear to be either incomplete or inconsistent between the two document locations. For example, Appendix D identifies the throughput limits for natural gasoline, but the text in Section 2.2.1 does not. A list of the NOC throughput limits with notes is provided below for reference. The text in Section 2.2.1 regarding enforceable NOC OAs should be updated and consistent with the information included in Appendix D. As another example, the text on p. 11 in Section 2.2.1 refers to NOC 11403 but that is not the currently enforceable order for the referenced condition. NOC 11403 is listed as a “Canceled/Superseded” permit in Appendix D, indicating that it was incorporated into NOC 11917. The text p. 11 should use the enforceable permit (NOC 11917) for that reference. Similarly, in the Appendix D, the table lists NOC 10697 as an “Active” permit. It was canceled/superseded by NOC 11403, which was subsequently canceled/superseded by NOC 11917. NOC 10697 should be moved to the canceled/superseded part of that list in Appendix D. **Please review the details provided and update the Section 2.2.1 text and Appendix D information, as noted, to be consistent and complete.**

Seaport Sound Terminal – NOC Order of Approval Details – Compared to DEIS

NOC OA	Condition	Limitation	In Draft EIS?
11917	15	No gasoline or ethanol may be loaded onto rail cars	No
	16	501,870,000 gallons of gasoline throughput per any consecutive 12-month period	In Section 2.2.1 and Appendix D
	17	Gasoline throughput across the truck loading rack no more than 4,800 gal/min and no more than 40,000 gallons per 15-minutes.	No
11265	13.7	Natural gasoline, crude oil, gasoline, ethanol, and isooctane loading rates shall not exceed the MVCU processing capacity of 7,000 bbl/hr.	In Appendix D only
	13.8	Natural gasoline loading throughput shall not exceed 3,607,100 bbl/yr (151,500,000 gal/yr) in any consecutive 12-month period.	Appendix D only
	13.8	Crude oil marine loading throughput shall not exceed 14,601,600 bbl/yr (613,267,200 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D
	13.8	Gasoline and ethanol marine loading throughput shall not exceed 2,555,000 bbl/yr (107,310,000 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D
	13.8	Isooctane marine loading throughput shall not exceed 3,000,000 bbl/yr (126,000,000 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D

Puget Sound Clean Air Agency Comments
LU20-0107 SeaPort Sound Plant Modernization – Draft Environmental Impact Statement
Submitted to City of Tacoma December 22, 2022

NOC OA	Condition	Limitation	In Draft EIS?
	14	Marine loading of natural gasoline loading throughput shall not exceed 151,500,000 gal/yr in any consecutive 12-month period.	Appendix D only
11069	9	Natural gasoline, crude oil, gasoline, ethanol, and isooctane loading rates shall not exceed the MVCU processing capacity of 7,000 bbl/hr.	In Appendix D, but shown for NOC 11265
	10	Crude oil marine loading throughput shall not exceed 14,601,600 bbl/yr (613,267,200 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D
	10	Gasoline and ethanol marine loading throughput shall not exceed 2,555,000 bbl/yr (107,310,000 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D
	10	Isooctane marine loading throughput shall not exceed 3,000,000 bbl/yr (126,000,000 gal/yr) in any consecutive 12-month period.	In Section 2.2.1 and Appendix D
10582		No throughput limits.	

From: [Wyatt Golding](#)
To: [Seaport Plant Modernization DEIS](#)
Cc: [Mullaney, Patrick J.](#); [Erin Dilworth](#); [Rebecca Ponzio](#)
Subject: Communities for a Healthy Bay and Washington Environmental Council comments
Date: Tuesday, December 27, 2022 1:08:46 PM
Attachments: [CHB and WEC Comment Letter 12-27-22.pdf](#)

Dear Ms. Schultz,

Please find attached comments submitted by Communities for a Healthy Bay and Washington Environmental Council on the Seaport Sound DEIS. Please confirm receipt.

Thank you,

Wyatt Golding

Attorney for CHB and WEC

ZIONTZ CHESTNUT

ATTORNEYS AT LAW

BRIAN W. CHESTNUT
BRIAN C. GRUBER
BETH A. BALDWIN
WYATT F. GOLDING
ANNA E. BRADY
CRYSTAL A. PARDUE

OF COUNSEL
RICHARD M. BERLEY
MARC D. SLONIM

FOURTH AND BLANCHARD BUILDING
2101 FOURTH AVENUE, SUITE 1230
SEATTLE, WASHINGTON 98121-2331
TELEPHONE: (206) 448-1230
FAX: (206) 448-0962
WWW.ZIONTZCHESTNUT.COM

December 27, 2022

Submitted via Email only

Shirley Schultz
747 Market Street, Rm 345
Tacoma, WA 98402
SeaportPlantModernizationDEIS@cityoftacoma.org

RE: Comment on the Seaport Sound Plant Modernization Project

Please consider these comments on the Seaport Sound Plant Modernization Project (“Project”), submitted on behalf of Communities for a Healthy Bay (“CHB”) and Washington Environmental Council (“WEC”).

I. Background.

CHB and WEC appreciate the City of Tacoma’s determination of significance, and the requirement that Seaport Sound prepare an environmental impact statement. The Project would include extensive demolition and construction, and a significant increase in storage of fuels, with resulting increases in fuels transportation and upstream and downstream increases in greenhouse gas emissions. The draft environmental impact statement (DEIS) confirms that the Project has probable adverse environmental impacts and the determination of significance was appropriate.

However, the DEIS does not comply with the statutory and regulatory requirements of the State Environmental Policy Act, RCW 43.21C.010 *et seq.*, and fails to carry out the direction provided in the City of Tacoma’s scoping letter. As a result, the DEIS is legally inadequate. CHB and WEC request that the City direct Seaport Sound to prepare a revised DEIS (“RDEIS”).

SEPA requires that an EIS contain:

a detailed statement by the responsible official on:

- (i) the environmental impact of the proposed action;
- (ii) any adverse environmental effects which cannot be avoided should the

- proposal be implemented;
- (iii) alternatives to the proposed action;
- (iv) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

RCW 43.21C.030(c). Analysis of environmental impacts must include a hard look at all likely direct, indirect, and cumulative effects, as well as mitigation to reduce and offset those effects. *See* WAC 197-11-060(4); WAC 197-11-440(6). Greenhouse gas emissions are environmental impacts. *See* WAC 197-11-444(1)(b)(iii).

Recognizing this direction, the City of Tacoma’s scoping letter required Seaport Sound to provide “[l]ife-cycle greenhouse gas analysis of the additional products stored on site – extraction, transportation, and consumption.” The letter expressly included consideration of the complete life cycle of the fuel stored at Seaport Sound’s facility. The City’s scoping letter also specifically requested “[t]ransportation impacts of increased product storage, including vessel impacts and all risks associated with vessel traffic,” and “[c]hange in risk for spills, collisions, other hazards – both to human health and environmental health and critical habitat.”

Consideration of emissions is not simply an accounting exercise—it is essential to identifying, minimizing, and mitigating climate change impacts that are a high priority to the State of Washington and City of Tacoma. The Legislature has set ambitious but necessary goals for reduction of emissions over time, RCW 70A.45.020, and the Climate Commitment Act, Chapter 70A.65 RCW. The Department of Ecology is carrying out associated rulemaking, including Climate Commitment Act regulations and development of the Greenhouse Gas Assessment for Projects rule (GAP rule). Additionally, the City of Tacoma has developed a Climate Action Plan which includes significant reductions of emissions in Tacoma.¹

The Project causes significant impacts by building permanent and larger oil and gas infrastructure. This will run counter to State and City climate goals and requires detailed identification, analysis, and mitigation. This comment letter explains significant flaws in the analysis of emissions and shipping traffic, and then provides a bulleted list of additional concerns.

II. Discussion

The EIS emissions analysis is primarily contained within appendices, referenced below. The analysis fails to provide the underlying data, which does not provide the requisite public review and ability to comment. CHB and WEC’s comments are therefore focused on the structural aspects of the analysis. The emissions analysis is flawed because it does not account for

1

https://www.cityoftacoma.org/government/city_departments/environmentalservices/office_of_environmental_policy_and_sustainability/climate_action/greenhouse_gas_emissions

upstream and downstream emissions, which greatly underestimates the emissions directly or indirectly caused by the Project. Additionally, the measures described as mitigation both do not actually mitigate project effects and are inadequate.

The analysis similarly takes an overly narrow view of transportation impacts. Increased storage and throughput will likely lead to increased vessel, vehicular, and rail traffic. A RDEIS should consider all associated impacts, including ship strikes, emissions, and spills, impacts to marine mammal critical habitat, railcar derailments and spills, and vehicular collisions and spills.

A. The Emissions Analysis Improperly Omits Upstream and Downstream Emissions.

The Project DEIS is insufficient in that it limits analysis of GHG emissions to omit emissions from fuel extraction or generation and combustion, and improperly curtails consideration of increased vessel, truck, and rail traffic. This narrow scope does not comply with SEPA's directive to consider all direct, indirect, and cumulative effects, and fails to follow the direction in the City's scoping letter.

The limits of the emissions analysis are most clearly set forth in Appendix A, Figure 2. That figure shows the boundaries of the LCA analysis, with "feedstocks" placed outside the boundaries. A correct analysis should include the emissions associated with the generation of "feedstocks," either from production (for ethanol or similar fuels) or extraction (for fossil fuels).

The analysis must also consider all related increased transportation, whether by truck, vessel, or rail, along with the emissions and other environmental impacts. The projected 11 % increase in fuels storage combined with increased demand, is likely to result in increased throughput, and associated increases in transportation and associated emissions. The DEIS should disclose the final point of delivery of the fossil fuels, and the associated anticipated total and annual combustion.

Combustion is appropriately placed within the boundaries of the LCA. The analysis demonstrates that the Project would allow increase throughput, which leads to 15 to 24 million additional tons of CO₂ equivalent emissions over the projected life of the project. Appendix A at 27. The LCA then summarily dismisses these emissions as being based on market forces, and opines that "[q]uantifying an apparent change to global GHGs as a difference between two throughput inventories would lead to profound overestimates of real-world impact." *Id.* at 28. The EIS repeats this analysis. *See* DEIS at 45. This approach fails to comply with the City's direction and is not SEPA compliant. It is also logically flawed—an 11 percent increase in capacity, and projected increase of throughput, demonstrates that the Project makes the fuel chain of commerce more productive. It makes a limiting factor in fuel shipment less of an impediment, and thus directly or indirectly leads to increased production, transport, and combustion of fuels.

Robust consideration of all impacts, and transparent disclosure of the underlying data, is required to correctly identify GHG emissions, so that those impacts can be analyzed and mitigated.

While not binding, the draft GAP rule framework (“Framework”) is a useful reference point for SEPA analysis of GHG emissions, as it shows the Department of Ecology’s analytical framework for how analyses should be conducted. Most relevant here, the Framework clearly and repeatedly requires that SEPA analysis consider emissions from fuel extraction or generation to ultimate combustion. The portion of the Framework dedicated to lifecycle analysis provides that “[t]he purpose of a LCA is to assess the environmental aspects and impacts of a project from the extraction or acquisition of raw material inputs to the end boundary of the project as described in the environmental assessment parameters.” Framework at 22.

The Framework’s description of the Energy Analysis similarly requires that “[e]xports of raw materials for energy purposes should be qualitatively described from the point of origin to the most likely points of destination for first use and/or combustion.” Framework at 24. Indeed, pages 39-40 of the Framework provides an example of a fossil fuel export facility, which is closely analogous to the Project (“[a]n applicant proposes building a new facility to bring in fossil fuel by rail, store the fuel on site, and export the fuel by ship”). The Framework then describes the required GHG analysis as follows:

- Environmental Assessment: The applicant or lead agency assess GHG emissions.
 - a. For the Greenhouse Gas Analysis:
 - i. Facility emissions – Quantify GHG emissions for construction, operations, and decommissioning of the project.
 - ii. LCA – Use information on fossil fuel extraction and the GREET model for transportation emissions to the locations of the first potential uses. For the fossil fuel, analyze GHG emissions based on combustion.
 - b. For the Energy Analysis – The project requires energy from a third party. Quantitative analysis shows the project could increase energy supply. The analysis would quantitatively and qualitatively describe changes to U.S. and international energy use and potential changes to energy markets.
 - c. The applicant or lead agency prepares an environmental assessment report.

This example dictates a full life cycle analysis, accounting from extraction through combustion. The DEIS should have followed the GREET model and full life cycle of the fuels, but the consultant deleted certain emissions inappropriately deeming them out of scope.

The DEIS’ assertion that market forces are to blame for any increased throughput is irrelevant and faulty logic. If true, the assertion that market forces are the causal factor and thus analysis is not required, would apply to nearly all projects such that the vast majority of emissions would never be accounted for. Even a new coal fired powerplant would simply assert that it was not responsible for emissions, because it would be serving market forces’ desire for electricity. In reality, the Project would streamline and facilitate transit and export of 11 percent more fuels—which is reasonably likely to have the direct, indirect, and cumulative effects of facilitating production, shipment, and combustion of those fuels. A full SEPA analysis of each stage of this process is required, and should be included in a revised DEIS.

B. An RDEIS Should Consider a Full Range of Alternatives.

A core requirement of SEPA analysis is consideration of a full range of alternatives to accomplish the project's purpose and need. This allows the public and decision maker to evaluate whether similar objectives could be achieved with reduced environmental impacts. RCW 43.21C.030(c), (e).

The DEIS considers only Seaport Sound's desired proposal and a no-action alternative. However, Seaport Sound's repeatedly stated goals are to modernize the facility and facilitate storage of alternative fuels. These goals, if sincere, could be accomplished with a facility of equal or reduced size. That would greatly simplify GHG emissions analysis and be more consistent with State and City goals of reducing fossil fuel use and emissions over time. A revised DEIS should include alternatives with reduced storage and resulting reduced emissions and shipping impacts.

C. The Proposed "Mitigation" is Inapplicable and Inadequate.

For mitigation, the DEIS proposes two measures—a \$136,000 donation to the City of Tacoma's Urban Forestry Program and some limitations on the types of fuels that could be stored in the expansion area of the Project.

Neither of these measures has a clear relationship to mitigating Project effects and thus is not mitigation as defined in WAC 197-11-768. The measures also do not meet the criteria set forth in the Framework, which requires that GHG emissions must be "Real, Permanent, Enforceable, Verifiable, [and] Additional." Framework at 28.

The decision to limit the design of certain tanks does not appear to dictate changes in fuel mixes stored at the Project. The current market mix of fuels is at least 25% diesel fuel, which could be placed in the new tanks. The "mitigation" thus may simply result in a reordering of fuels with no underlying change. There is no clear mitigation of any effects provided by the limitation.

The proposed donation to City of Tacoma also has no clear connection to Project effects. The proposed donation has no apparent direction attached, and does not necessitate any tree planting, monitoring, or retention. It may be directed to any variety of costs, or simply result in reallocation of existing funding to other programs.

The estimation of mitigation required to offset GHG emissions is also grossly inadequate. As detailed above, the emissions analysis must include generation or extraction of fuels and combustion. This would provide for a more accurate assessment of GHG emissions, and the appropriate mitigation required. The total amount is likely in excess of 25 million tons of CO₂ equivalent.

The cost of the mitigation in the DEIS is proposed as the cost of purchase of equivalent credits. We note that the prices appear to be low—in May 2022, the price of a credit for a metric ton of

carbon on the California Air Resources Board, the most established carbon market, was \$30.85.² A more appropriate measure would be the social cost of carbon, which ranges from \$55 per ton under federal calculation to \$185 per ton according to more recent studies.³

CHB and WEC suggest that if Seaport Sound is focused on forestation in Tacoma, that funding should be provided based on a full accounting of emissions at their full price, and that the mitigation must be permanently tied to real, permanent, enforceable, verifiable, and additional afforestation in the City.

A genuine mitigation project would be dedicated funding to plant, monitor, and permanently maintain trees on land in Tacoma that currently lacks vegetation. CHB and WEC suggest targeting areas in Tacoma that have been identified as having disproportionately low tree canopy, such as the South End and Eastside, to also further environmental justice goals.

D. The DEIS Fails to Account for Increased Vessel, Truck, and Rail Traffic.

As with emissions, the DEIS improperly dismisses the likelihood that there will be increased transportation of fuels associated with increased storage and throughput. This fails to account for all direct, indirect, and cumulative effects, and fails to comply with the City's scoping directive.

A revised DEIS should fully disclose anticipated increases in vessel, truck, and rail traffic, and the associated effects. Increased traffic causes increased emissions, collisions, and likelihood of spills. Even though a vessel spill is relatively uncommon, the impacts in Puget Sound would be devastating. SEPA requires consideration of such potential severe impacts. In the similar context of a Phillips 66 export facility in the San Juan islands, the Hearing Examiner appropriately required limitations, including monitoring, to identify, minimize, and mitigate impacts associated with increased vessel traffic.⁴ Similar analysis and requirements are merited here.

E. The Proposed Use of the Project for "Renewable" Fuels, Stormwater Updates, and Refinery Demolition Does Not Mitigate Project Effects.

Throughout the DEIS, the Project is described as facilitating increased use of ethanol and other non-fossil fuels, to effectuate the low carbon fuels standards passed in HB 1091. CHB and WEC note that this Project predates HB 1091, and that the proposal does not include any actual requirements or limitations regarding fuels stored and exported. Our understanding is that while HB 1091 may drive changes in the fuels market, it does not directly impose requirements dictating the storage and sale of fuels by Seaport Sound. The descriptions of intended use of low-carbon fuels appear to be at best aspirational. Even if they come to pass, note that any beneficial aspects of the project should not be considered to render the adverse impacts non-significant. *See* WAC 197-11-330(5).

² <https://arbor-analytics.com/post/2022-06-03-price-of-carbon-hits-a-new-record-high/>

³ <https://www.rff.org/news/press-releases/social-cost-of-carbon-more-than-triple-the-current-federal-estimate-new-study-finds/>

⁴ <https://sanjuans.org/phillips-66/#:~:text=On%20February%2028th%2C%202022%20the,been%20ongoing%20for%20several%20years.>

Similarly, the proposal includes updating of a broken stormwater system and wastewater treatment. Currently, even though there is discharge of an average of 108,000 gallons of stormwater per day, Seaport Sound has a broken stormwater system with a partially blocked pipe. It is unclear what happens to the blocked stormwater. Regardless, the stormwater permit expires in 2023, and maintenance of a functional stormwater system is an independent requirement of the Clean Water Act, not a benefit of the Project. The repair of the stormwater system should be considered part of the baseline.

Finally, CHB and WEC note that the refinery has apparently not been used for decades. Demolition of the refinery should not be considered as a benefit, particularly with respect to associated reduction in emissions, as the refinery is no longer a functional part of the existing project or baseline.

F. The Proposal and DEIS Should Include Better Mitigation and Permit Conditions.

As set forth above, the proposal fails to include adequate mitigation for GHG emissions and other project impacts, particularly those impacts from increased shipping and the marine life vessel strike and other impacts caused by those increases. CHB and WEC suggest consideration and inclusion of additional enforceable mitigation measures and permit conditions, including:

- Limits such that the project will not lead to increase in the storage/transport of fossil fuels, including crude oil.
- Measures to follow through on Seaport Sound's asserted desire to shift its fuel mix to renewable fuels.
- Requirements to ensure that the project does not increase vessel traffic, and that it does not increase impacts on the Southern Resident Orcas and the Salish Sea (for example, please see the Phillips 66 facility dispute), with associated monitoring and reporting.
- Enforceable limits on number of vessel calls, rail cars, and truck traffic, with associated monitoring and reporting.

G. CHB and WEC Request that the City and Seaport Sound Address Various Technical and Other Issues in a Revised Draft EIS.

The DEIS contains other inaccuracies or issues of concern, bulleted below.

- The DEIS uses the term "renewable" frequently without definition, including reference to "renewable" paint products. *See* DEIS 3-4. Please define this term and what characteristics are necessary for Seaport Sound to consider a product renewable.
- The DEIS does not analyze the impacts of increased Toxic Air Pollutants nor Hazardous Air Pollutants as a result of the increased storage, transportation, on-site operations, and combustion of the additional 11 percent fossil fuels.
- The DEIS failed to consider the residents of the Northwest Detention Center that live within 3 miles of Seaport Sound in the Tideflats. What are the public health and safety

impacts this community will likely face due to the additional storage, transportation, and combustion of fossil fuels?

- The DEIS acknowledges that the Project site falls within the ASARCO smelter plume. All known ASARCO contaminants should be listed in the DEIS, and should be sampled for before and throughout construction. These contaminants include: arsenic, iron, calcium, and potentially significant concentrations of aluminum, antimony, barium, copper, lead, manganese, molybdenum, tin, titanium, and zinc, among other metals. Further, the Project site has been used for industrial activities including petroleum storage, vehicle scrapping, shipbuilding, and log sorting for the past century. These industrial uses have left the site contaminated with arsenic, copper, lead, petroleum, PCBs (poly-chlorinated biphenyls), and zinc, among others. Other common contaminants found at petroleum processing and storage facilities include PAHs (polycyclic aromatic hydrocarbons) and BTEX compounds (benzene, toluene, ethylbenzene and xylene). These contaminants must be sampled before and throughout construction to ensure the site meets Model Toxics Control Act standards.
- The following items were identified during Scoping, and were not addressed in the DEIS. A Revised DEIS must include:
 - Descriptions of filling and operation of new tanks
 - Description of decommissioning tanks
 - Description of vehicular traffic associated with demolition and construction, including types of vehicles and number of vehicle trips per day
 - A cumulative impacts analysis that compiles permitting and SEPA review since 2006 (or earlier) and address the impacts of the projects combined (including the mitigation measures for those projects and status of compliance
 - A review and statement of HUD criteria related to proximity to a hazardous site
 - Description of the risk of explosion
 - Description of releases or potential releases to the environment affecting public health, such as toxic or hazardous materials
- The DEIS repeatedly discusses use of a new heater that “will result in a substantial energy savings at the facility (up to 30% energy savings), reduce GHG emissions, and reduce on-site water consumption by approximately 5 million gallons annually.”
 - What is the total anticipated on-site water consumption anticipated?
 - Are there more efficient heaters available?
 - Appendix A, page 17 refers to the heater being 22 percent more efficient. If this is correct, the reference to “up to” 30 percent energy savings should disclose that it is actually 22 percent.

- The DEIS discusses wastewater management in coordination with the City of Tacoma. It appears the plan is to have primary treatment of wastewater on site, that is then discharged to the City's sewer system. Our understanding is that the City has expressed concern with wastewater treatment capacity issues with increasing population growth and more stringent permitting requirements.
 - What volume of discharge of wastewater is anticipated?
 - What impacts will continued volumes of wastewater have to the City's maintenance and operation of water treatment facilities?

Thank you for consideration of these comments. Please contact Erin Dilworth, Deputy Director of Communities for a Healthy Bay, at edilworth@healthybay.org, or me at wgolding@ziontzchestnut.com, with any questions or responses.

Sincerely,

ZIONTZ CHESTNUT

A handwritten signature in blue ink, appearing to read "Wyatt Golding".

Wyatt Golding

From: [Erin Dilworth](#)
To: [Seaport Plant Modernization DEIS](#)
Cc: [Schultz, Shirley](#)
Subject: RE: Reference request
Date: Wednesday, December 7, 2022 2:02:55 PM

Hello,

Here are additional questions I raised on Monday that I am hoping to get answers for to better inform the comment's we will submit – thank you!

1. Was the concrete used in construction accounted for in the Lifecycle Analysis (LCA)?
2. The LCA states, “Seaport Sound Terminal will remain an ethanol specialist.” → what does that mean?
3. Does SST actually have any defined limits on rail, vessel, or truck traffic? Or just capacity allowances?
4. Did/how the LCA use the inoperable refinery in any of its calculations? I ask because the demolition of the refinery is often noted as having air quality benefits, even though it hasn't been operational for decades.
5. Is SST covered under the Climate Commitment Act?
6. Did the LCA account for leakage?
7. How did the LCA account for distances traveled? The narrative implies they did not have sufficient/accurate information.
8. From the LCA: “This report presents six attributional GHG inventories, which beg comparison through computing their differences. However, great care should be taken in inferring a consequential inventory from attributional inventories. Indeed, substantial literature has been published warning specifically against this tempting exercise.²⁰”) → *What does that mean?*

Thank you,
Erin

Erin Dilworth | Deputy Director
[Communities for a Healthy Bay](#) | Tacoma, WA
253-383-2429 ext. 3
She/Her/Hers

Connect with us: [Facebook](#) | [Twitter](#) | [Instagram](#)
[LinkedIn](#) | [Subscribe to our enews](#)

From: Erin Dilworth
Sent: Sunday, December 4, 2022 5:16 PM
To: Seaport Plant Modernization DEIS <SeaportPlantModernizationDEIS@cityoftacoma.org>
Cc: Schultz, Shirley <shirley.schultz@cityoftacoma.org>
Subject: Reference request

Hello,

There are a couple references cited in the Seaport Sound DEIS and GHG analysis that I would like to review. They are:

- Hammerschlag LLC, SP-002f GHG Life Cycle Inventory.xlsb, October 2021
- “Outbound Products Registry” as referenced on p. 19 of GHG analysis
- Data tables that made Figures 2-3, 2-4, and 2-5
- Letter from the Dept of Ecology to the City referenced as *Ecology 2020c*

Thank you!

Erin

Erin Dilworth | Deputy Director
[Communities for a Healthy Bay](#) | Tacoma, WA
253-383-2429 ext. 3
She/Her/Hers

Connect with us: [Facebook](#) | [Twitter](#) | [Instagram](#)
[LinkedIn](#) | [Subscribe to our enews](#)

Shirley Schultz
City of Tacoma
Planning and Development Services
747 Market Street, 3rd Floor
Tacoma, WA 98402
Sent via email to SeaportPlantModernizationDEIS@cityoftacoma.org

December 23, 2022

Re: SeaPort Sound Terminal Plant Modernization Project Draft Environmental Impact Statement (LU20-0107)

Dear Ms. Schultz,

Thank you for providing the opportunity to review and comment on the SeaPort Sound Terminal (SST) Plant Modernization Project Draft Environmental Impact Statement (DEIS) for project number LU20-0107, hereinafter referred to as the "Project". Please accept these comments on behalf of Friends of the San Juans, Washington Physicians for Social Responsibility, Indivisible Tacoma, Tacoma/Pierce County Democratic Socialists of America, La Resistencia, Climate Pierce County, Cascadia Climate Actin Now, The Conversation 253, and Puget Soundkeeper. The undersigned organizations and individuals work to protect public safety, public health, functioning ecosystems and a stable climate. Our focuses include protecting the marine environment of the Salish Sea watershed, inland waters, lands, wildlife, the climate system, human health and public safety. Many of us operate in Tacoma and all of us have physical presence in Washington State. We also share the concerns outlined in the comment letter submitted by Wyatt Golding on behalf of Communities for a Healthy Bay and Washington Environmental Council.

SeaPort Sound did not fulfill the requirements of SEPA because they failed to show the full range of possible scenarios and likely impacts to air quality, greenhouse gasses (GHGs), and risks from likely increases in rail, vessel, and vehicular traffic. The City must require SeaPort Sound to revise and resubmit their DEIS for public review and comment. Below are our concerns in more detail.

In their analysis, SST says that *market demand* – not their increased storage capacity - will determine how much and what kind of fuels will come through their facility. They use this logic as reason to not study the impacts of reaching their full capacity. The impacts we are most concerned about are increased rail, vessel, and truck traffic and their associated risks like more chances for oil spills, worsened air quality, and more risks of harming southern resident killer whales. **This is unacceptable, and fails to meet the requirements of SEPA. SST must revise their DEIS to study the impacts of actually utilizing their newer, bigger infrastructure and throughput capacity.**

The GHG analysis that was done is incomplete and in some cases inaccurate, because:

- It did not account for leakage, meaning lost vapor emissions of product enroute;

- It did not have enough data to accurately count the GHGs that come from transporting the fuels
- It relied on data from an outdated version of the International Panel on Climate Change's climate change assessment despite the release of a new version;
- It used the 100-year Global Warming Potential (GWP) factor in its equations, rather than the 20-year GWP. This type of analysis deflates the actual increase in GHGs over the lifetime of the facility, making it appear to be not as bad as it actually is, and;
- The DEIS also makes the assumption that SeaPort Sound will be regulated by the Low Carbon Fuel Standard (LCFS) and so their emissions will go down. It is unclear if SST will actually be regulated by the LCFS since they do not own the fuels they store and move. This needs clarification.

SST must revise their DEIS to study and complete a thorough and accurate Lifecycle Analysis by addressing the concerns above.

Again, thank you for the opportunity to provide comments. If you need clarification on our comments, please contact Riley Lynch at riley@wpsr.org.

Sincerely,

Riley Lynch
Climate Program Manager
Washington Physicians for Social Responsibility

Elly Claus-McGahan, PhD
Lead Organizer
Climate Pierce County

Lovel Pratt
Marine Protection and Policy Director
Friends of the San Juans

Sally Keely
Founder
Cascadia Climate Action Now

Julie Andrzejewski and Ellen Floyd
Co-chairs
Indivisible Tacoma

Barbara Church
Planning Team
The Conversation 253

Sean Arent
Co-Chair
Tacoma/Pierce County Democratic Socialists of
America

Blair Englebrecht
Policy and Boating Programs Manager
Puget Soundkeeper

Maru Mora Villalpando
Advisor
La Resistencia

From: lovel@sanjuans.org
To: [Schultz, Shirley](#); [Seaport Plant Modernization DEIS](#)
Cc: [Erin Dilworth](#); ["Marcie Keever"](#); ["Blair Englebrecht"](#); ["Rein Attemann"](#); ["Riley Lynch"](#); ["Shannon Wright"](#); ["Nora Ferm Nickum"](#); ["Stacy Oaks"](#); ["Cindy Hansen"](#); ["Howard Garrett"](#); ["Gary Cook"](#); ["Anna Barford"](#); ["Kathleen Callaghy"](#); ["Deborah Giles"](#); ["Sophia Ressler"](#); ["Sept Gernez"](#); ["Phyllis Farrell"](#)
Subject: Comments on the SeaPort Sound Plant Modernization Project DEIS
Date: Thursday, December 22, 2022 4:58:34 PM
Attachments: [SeaPort Sound Project DEIS comments re SRKW impacts.pdf](#)

Hi Shirley,

Attached please find comments on the SeaPort Sound Plant Modernization Project DEIS from Friends of the San Juans, Communities for a Healthy Bay, Friends of the Earth, Puget Soundkeeper, Washington Environmental Council, Washington Physicians for Social Responsibility, RE Sources, 350 Tacoma, Seattle Aquarium, Orca Network, Stand.earth, Defenders of Wildlife, Wild Orca, Center for Biological Diversity, and Sierra Club Washington Chapter.

Please confirm receipt of these comments.

Thank you,

Level

Level Pratt | Marine Protection and Policy Director | Friends of the San Juans

she/her/hers | Workdays: Mon.-Thurs. | PO Box 1344 | Friday Harbor, WA 98250 | 360.298.7225

sanjuans.org | [donate](#) | [linktree](#) | [e-news](#)

**Friends of the San Juans • Communities for a Healthy Bay • Friends of the Earth
Puget Soundkeeper • Washington Environmental Council
Washington Physicians for Social Responsibility • RE Sources • 350 Tacoma
Seattle Aquarium • Orca Network • Stand.earth • Defenders of Wildlife
Wild Orca • Center for Biological Diversity • Sierra Club Washington Chapter**

December 22, 2022

Shirley Schultz, AICP
Principal Planner, Planning and Development Services
City of Tacoma
747 Market Street, Rm 345
Tacoma, WA 98402

Submitted via email: SeaportPlantModernizationDEIS@cityoftacoma.org

RE: SeaPort Sound Plant Modernization Project Draft Environmental Impact Statement

Dear Ms. Schultz,

Thank you for this opportunity to submit comments on the Draft Environmental Impact Statement (DEIS) for the proposed SeaPort Sound Plant Modernization Project (Project). The DEIS does not meet the requirements of the Washington State Environmental Policy Act (SEPA). These comments focus on the proposed Project's potential impacts to the critically endangered Southern Resident killer whales. The undersigned represent 15 organizations that work on environmental issues in Washington State which include protecting and recovering the Southern Residents and/or their critical habitat in the Salish Sea and outer coast.

The proposed Project's potential impacts to Southern Resident killer whales are significant given the critical status of this endangered species. Southern Resident killer whales are one of the most at-risk marine mammals in the world.¹ Since Governor Inslee's Executive Order established the Southern Resident Killer Whale Task Force,² Washington State has made significant investments in the protection and recovery of Southern Residents.³ Disturbance from vessels and vessel noise are identified impacts to the Southern Resident killer whale population, and the potential Project-related increases in vessel traffic would have significant adverse impacts to this critically endangered species.⁴

¹ NOAA (National Oceanic and Atmospheric Administration) Fisheries (National Marine Fisheries Service). 2021. *Species in the Spotlight, Priority Actions 2021-2025*. <https://www.fisheries.noaa.gov/resource/document/species-spotlight-priority-actions-2021-2025-southern-resident-killer-whale>.

² EXECUTIVE ORDER 18-02. SOUTHERN RESIDENT KILLER WHALE RECOVERY AND TASK FORCE. https://www.governor.wa.gov/sites/default/files/exe_order/eo_18-02_1.pdf.

³ Southern Resident Killer Whale Task Force website: <https://www.orca.wa.gov/about/> which monitors progress to date on the Task Force recommendations: <https://www.orca.wa.gov/progress/>.

⁴ NOAA Fisheries. 2022. *2021 Southern Resident Killer Whales (Orcinus orca) 5-Year Review: Summary and Evaluation*. <https://www.fisheries.noaa.gov/resource/document/2021-southern-resident-killer-whales-orcinus-orca-5-year-review-summary-and>.

The DEIS does not adequately address the proposed Project’s potential impacts to Southern Resident killer whales. To comply with SEPA and improve the adequacy of the environmental analysis, changes are needed in section 3.5.1 Affected Environment (page 76). The study area for natural resources directly related to the operation of the Proposed Action needs to be expanded from the Project site itself to include the Project-related vessel traffic route(s) within the Southern Resident killer whales’ critical habitat.⁵

Section 3.4.1.3.7 Marine Mammals (beginning on page 71) is woefully inadequate:

The southern resident killer whale (SRKW) distinct population segment is federally listed as endangered. SRKWs have rarely been sighted in Commencement Bay over the past year; transient killer whales were more commonly seen in Puget Sound south of Seattle (Orca Network 2021). Based on SRKW sightings data from 1976 to 2014, SRKWs occur in southern Puget Sound (including Commencement Bay) less commonly than in central and northern Puget Sound and around the San Juan Islands (Olson et al. 2018).

The DEIS fails to address potential impacts to Southern Residents from the proposed Project by considering Orca Network’s Southern Resident sightings for just one year and only in Commencement Bay. The fact that “from 1976 to 2014, SRKWs occur in southern Puget Sound (including Commencement Bay) less commonly than in central and northern Puget Sound and around the San Juan Islands” does not mean that the Southern Residents do not spend time in southern Puget Sound, which is in the Puget Sound Area of the Southern Resident killer whales’ critical habitat.⁶ A perusal of Facebook while drafting these comments found this Orca Network sighting of 41 Southern Residents – over half of the entire population – that were heading for Tacoma on December 9, 2022:

Today’s (Dec 9) southbound pass at Point Robinson, Vashon by endangered Southern Resident orcas J and K pods (41 orcas). Friends with big wide open hearts and arms welcomed one another and welcomed Js and Ks who passed in mixed pod groups, some super close while others streamed by short distance away offshore.

Regardless of the amount of time Southern Residents are in the vicinity of the proposed Project site, any Project-related increase in vessel traffic along the Project-related vessel traffic route(s) within the Southern Residents’ critical habitat would have probable significant adverse environmental impacts.

The DEIS does not provide decision-makers and the public with a complete and impartial discussion of the Project’s probable significant adverse environmental impacts. In particular, the Project’s potential vessel traffic increases are not included in the DEIS. The DEIS states that the proposed Project “would increase storage capacity on the Project site by 11%” (section 3.4.4.1, page 74) and that the “purpose of the Project is to provide SeaPort Sound operational flexibility

⁵ NOAA Fisheries website, Critical Habitat for Southern Resident Killer Whales. <https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/critical-habitat-southern-resident-killer-whales>.

⁶ NOAA Fisheries website, Critical Habitat for Southern Resident Killer Whales. Existing and Revised Critical Habitat for Southern Resident Killer Whales – Detail. <https://media.fisheries.noaa.gov/2021-07/map-srkw-ch-detail-fedreg-final7.pdf?null=>.

and modernized facilities to better meet increasing market demand for renewable/low-carbon fuels (section 2.1, page 7). In contrast to the Project's purpose "to better meet increasing market demand," the Executive Summary (and sections 3.9.2 and 3.9.4) states that "an increase in storage alone is not expected to increase transportation; changes in market conditions and demand for a specific fuel type are likely to be the primary drivers of increased transportation."

The DEIS does not provide a complete and impartial explanation of why the 11% increase in storage capacity would not enable a potential increase in vessel traffic. Section 3.4.4.1 (page 74) states that "the number of transport trips under both alternatives would continue to fluctuate in response to market demand and would remain within SeaPort Sound's permitted throughput limits." SeaPort Sound's permitted throughput limits are not relevant to the evaluation of environmental impacts from the proposed Project.

The DEIS further evades identifying Project-related vessel traffic increases by stating (also in section 3.4.4.1):

The number of trips needed to transport fuel products in the future under either alternative cannot be accurately predicted due to the extensive area covered by the supply chain, changes in market demand, fuel efficiency, and other factors.

To comply with SEPA and improve the adequacy of the environmental analysis, the DEIS needs to be revised to identify the potential increase in Project-related vessel traffic as compared to current conditions (which are included in Table 2-1, SeaPort Sound Terminal Actual Facility Throughput by Year [page 13]) and address the potential impacts.

Section 3.4.4.1 further states:

SeaPort Sound does not operate off-site transport vessels, trains, or trucks. Transportation of products to and from the SeaPort Sound Terminal is conducted by other parties that are subject to local, state, and federal regulations for safety and spill response measures. For water-based transport, third-party vessels that access the facility are required to adhere to Washington State regulations that comprehensively regulate shipping lanes, vessel speeds, and setback zones for the protection of killer whales. These regulations are intended to reduce noise levels that are harmful to killer whales and maintain safe distances between vessels and wildlife.

Washington State regulations do not "comprehensively regulate shipping lanes, vessel speeds, and setback zones for the protection of killer whales." Regardless of whether the Project proponent operates the vessels that transport products to and from the SeaPort Sound Terminal, and irrespective of the federal and state laws that regulate vessel traffic, the potential environmental impacts from Project-related increases in vessel traffic need to be addressed in the DEIS. Furthermore, the state and federal regulations that address shipping safety and oil spill prevention and response preparedness requirements do not eliminate all accidents. The Washington State Department of Ecology recently issued a \$38,500 fine to a barge owner for a February 2021 fuel

spill in Commencement Bay. The oil spill occurred while the barge was traveling from Vancouver BC to the SeaPort Sound terminal to deliver fuel products.⁷

The Puget Sound Energy (PSE) Liquefied Natural Gas (LNG) Facility is under construction in the Hylebos Waterway. PSE LNG will fuel marine vessels, provide bunkering barges, and will significantly increase vessel traffic in the immediate vicinity of the proposed Project. However, there is no cumulative impacts evaluation of the PSE LNG's increase in vessel traffic with that of the proposed Project. PSE LNG is the only reasonably foreseeable vessel traffic project that is considered in section 4 Cumulative Effects. To adequately address the proposed Project's potential impacts to Southern Residents, the DEIS needs to be revised to include a cumulative effects analysis of PSE LNG and all the present and reasonably foreseeable future projects along the proposed Project's vessel traffic route(s) that are within the Southern Residents' critical habitat.

The DEIS must address Project-related impacts including those impacts with a low likelihood but high consequences. WAC 197-11-794 (2) states, "An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred." Project-related vessel traffic impacts, including the increased risk of oil spills and ship strikes, could have population consequences and even cause the extinction of the Southern Residents. Ship strikes are identified as a significant cause of death for Southern Resident killer whales.⁸ Given their small population size, the death of even one Southern Resident killer whale could have significant population consequences. Project-related oil spill risk is a low probability with high consequence impacts that would be devastating to the environment, including Southern Resident killer whales. "Their small population size and social structure also put them at risk for a catastrophic event, such as an oil spill, that could affect the entire population."⁹

A decision from the Court of Appeals of the State of Washington, Division 1, confirmed that increased vessel traffic from a crude oil and fuel storage expansion project would harm the endangered Southern Resident killer whales:

Here, Phillips 66 has conceded that environmental concerns, including harm to killer whales, could arise if vessel traffic increases. Phillips 66 "does not dispute that Southern Resident Killer Whales are endangered, or that increased vessel traffic poses a threat to that species." Expert opinions corroborated that increased vessel traffic would harm the whales.¹⁰

⁷ Department of Ecology News Release. Dec. 14, 2022. Ecology penalizing barge owner \$38,500 for fuel spill into Salish Sea. <https://ecology.wa.gov/About-us/Who-we-are/News/2022/Olympia-Tug-Barge-penalty>.

⁸ CBC News. Eva Uguen-Csenge. Dec 03, 2020. *Ship strikes 'significant' cause of death for southern resident killer whales, UBC study finds.* <https://www.cbc.ca/news/canada/british-columbia/ship-strikes-significant-cause-of-death-for-southern-resident-killer-whales-ubc-study-finds-1.5826030>.

Raverty S, St. Leger J, Noren DP, Burek Huntington K, Rotstein DS, Gulland FMD, et al. (2020) Pathology findings and correlation with body condition index in stranded killer whales (*Orcinus orca*) in the northeastern Pacific and Hawaii from 2004 to 2013. *PLoS ONE* 15(12): e0242505. <https://doi.org/10.1371/journal.pone.0242505>.

⁹ NOAA Fisheries. 2022. *2021 Southern Resident Killer Whales (Orcinus orca) 5-Year Review: Summary and Evaluation.* <https://www.fisheries.noaa.gov/resource/document/2021-southern-resident-killer-whales-orcinus-orca-5-year-review-summary-and>. Page 4.

¹⁰ *Phillips 66 Company vs Whatcom County Washington and Friends of the San Juans*, Case No. 82599-2-I, page 10 (Wash. App. 2022, unpub.).

The undersigned urge the City of Tacoma to deny the SeaPort Sound Plant Modernization Project application as submitted. The errors and deficiencies in this DEIS must be addressed. The City of Tacoma should require a more thorough analysis of potential Projected-related vessel traffic impacts and specifically the impacts of this Project upon the critically endangered Southern Resident killer whales.

Thank you for your attention to these comments.

Sincerely,

Lovel Pratt
Marine Protection and Policy Director
Friends of the San Juans

Erin Dilworth
Deputy Director
Communities for a Healthy Bay

Marcie Keever
Oceans & Vessels Program Director
Friends of the Earth

Nora Nickum
Senior Ocean Policy Manager
Seattle Aquarium

Blair Englebrecht
Policy Manager
Puget Soundkeeper

Stacy Oaks
Organizer
350 Tacoma

Rein Attemann
Puget Sound Campaigns Manager
Washington Environmental Council

Howard Garrett
President
Orca Network

Riley Lynch
Climate and Health Program Manager
Washington Physicians for Social Responsibility

Kathleen Callaghy
Northwest Representative
Defenders of Wildlife

Shannon Wright
Executive Director
RE Sources

Deborah A. Giles, PhD
Science & Research Director
Wild Orca

Gary Cook
Global Climate Campaigns Director
Stand.earth

Sophia Ressler
Staff Attorney
Center for Biological Diversity

Sept Gernez
Acting Director
Sierra Club Washington Chapter

From: [Steven Treffers](#)
To: [Seaport Plant Modernization DEIS](#)
Cc: [Marshall McClintock](#)
Subject: Comments on DEIS LU20-0107
Date: Thursday, December 15, 2022 6:30:38 AM

Ms. Schultz,

On behalf of Historic Tacoma, I have reviewed the DEIS for the above referenced project and am writing to state we have no concerns regarding project-related effects to historical resources. We appreciate the analysis which was completed in support of the project and having the opportunity to comment.

All the best,
Steven Treffers
Historic Tacoma

From: [Jennifer M. Keating](#)
To: [Schultz, Shirley](#); [Brandon Reynon](#)
Cc: [SEPA Review](#)
Subject: Re: LU22-0107
Date: Tuesday, December 27, 2022 10:43:13 AM
Attachments: [PTOI Comments LU22_0107.pdf](#)

Good morning Shirley,

It should also be noted that this area has an incredibly high probability for impacting cultural resources and should require a cultural resource survey prior to ground disturbance. We noted that the application acknowledges that both neighboring parcels have had surveys for this reason but did not see if there was any intent of providing one. Surveys on nearby parcels of course does not protect the parcel in question. Please encourage the applicant's cultural resource consultant to coordinate directly with Brandon and I so that we can ensure proper methodology prior to submitting the final cultural resource report for review.

Thank you,

Jennifer Keating
Land Use Planner & Asst. Tribal Historic Preservation Officer
Puyallup Tribe of Indians
253.549.5397

On Dec 27, 2022, at 10:31 AM, Angela Dillon <Angela.Dillon@puyalluptribe-nsn.gov> wrote:

Shirley,

Thank you for meeting with the review team here at the Puyallup Tribe regarding the Seaport Terminal. Please accept the attached comment letter for the project.

Let me know if you have any questions or concerns.

Angela Dillon



PUYALLUP TRIBE OF INDIANS



December 27, 2022

Shirley Schultz, Principle Planner
City of Tacoma
Planning & Development Services
747 Market Street
Tacoma, WA 98402

RE: LU20-0107

Thank you for the opportunity to comment on the Seaport Sound Terminal project (LU20-0107) located at 2628 Marine View Drive. The Puyallup Tribe has reviewed the materials and has the following comments:

The installation of new storage tanks resulting in approximately 10% more storage capacity meets or exceeds the allowance cap for baseline standards set in 2020. Any future requests or changes to the facility should not result in additional capacity and should be installed within a similar footprint as existing equipment.

The Puyallup Tribe requests that yearly reporting requirements are met with the opportunity for consultation as needed. In addition, given the nature of the products on site and the safety concerns regarding combustion, leaking, and emissions, we would like to ensure that the facility is required to hold the most comprehensive set of bonding and insurance available.

The discharge of runoff laden with sediment or other pollutants is a violation of Water Quality Standards for Surface Waters of Washington State. The Hylebos Creek is a Type F stream and the Hylebos waterway is the only migration route for juvenile and adult salmonids who reside there. If discharge to surface waters or soil or ground water contamination occurs as a result of work under the Construction Stormwater General Permit, we are requesting immediate notification and additional information including but not limited to updated TESC and stormwater pollution prevention plans and a list of the contaminants found with concentration and depth measurements.

With regards to potential change in GHG emissions under the proposed action plan, the Puyallup Tribe has some questions and concerns regarding the total impact on the health of the people residing in and around the port area. The concern stems from the accumulative total of GHG emissions being produced collectively from the port and what the impacts of the increase in construction would look like in the area over a longer period of time. Furthermore, the Puyallup Tribe is requesting additional information regarding the dust mitigation measurements under the Proposed Action Plan, with the effects of this on our local population within the port area and health of our water ways being our main concern. The City of Tacoma has a history of falling in and out of compliance with certain air quality emissions, especially that of the ground level ozone accumulation. The Tribe feels that even with a minor increase in CO₂ and N₂O, it can drastically affect the compliance and environmental health of the Port and immediate



PUYALLUP TRIBE OF INDIANS



surrounding areas. The DEIS states that with the expected increase in population to the Port of Tacoma area, it is expected for the Action Plan to have minimal impact regarding the long term accumulation of GHG emissions versus what an increase in the population would do to the numbers. While it is certain that there will be an increase in the overall population, the data necessary may be grossly underestimated, which prevents us from giving an accurate estimate within the 40 year estimation window. The Puyallup Tribe is requesting that the above mentioned comments on GHG emissions be taken into consideration before moving forward with the Proposed Action Plan.

Thank you for your time and consideration in this matter.

Angela Dillon
SEPA Reviewer
Fisheries Department
Puyallup Tribe of Indians

Crystal Stone
Air Quality Program Manager
Fisheries Department
Puyallup Tribe of Indians

From: [A J Hawkins](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 3:03:29 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

A J Hawkins
rwc19@gmail.com
2515 W Tremont Ct
Richmond , Virginia 23225

From: [Aimee Hamilton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Thursday, December 22, 2022 8:07:32 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Aimee Hamilton
hamilton.aimee@gmail.com
2508 S Sheridan Avenue
Tacoma, Washington 98405

From: [Alex Fay](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 3:34:54 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Alex Fay
alexafpay@gmail.com
1819 23rd Ave Apt E220
Seattle, Washington 98122

Doll, Christine

From: Ally Orosco <info@email.actionnetwork.org>
Sent: Sunday, December 25, 2022 2:42 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Ally Orosco

aorosco000@gmail.com

4515 S G St

Tacoma, Washington 98418

From: pastor@everyactioncustom.com on behalf of [Amara Oden](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Require Revised SeaPort Sound EIS
Date: Tuesday, December 20, 2022 12:47:10 PM

Dear Shirley Schultz, AICP,

I'm concerned that SeaPort Sound Terminal's draft environmental impact statement does not meet the requirements of the State Environmental Policy Act (SEPA), nor does it adequately study the environmental effects of the proposed increase of fossil fuel storage capacity by 11%. As the community overwhelmingly requested in the EIS scoping period, potential effects or increases in vessel, train, or truck traffic must be thoroughly studied. Additionally, the greenhouse gas analysis is insufficient as it does not account for leaks and needs to use the most up to date IPCC data.

As a Tacoma Resident, one who values the natural environment and beauty, I ask that you ensure this study is complete before consideration. As a person of faith, it is a moral imperative to take care of the place in which we live, and we need to have all the information upon which to make wise decisions. As a citizen, I am concerned that the city has made this determination of significance and it has not been adequately completed. In this time of climate crisis, fossil fuel expansion in our community is a profound moral issue, and we must have all the facts available to consider this proposed project.

I am grateful that the City made a Determination of Significance to study the environmental impacts of this proposed expansion. Now, please require SeaPort Sound Terminal to revise their EIS to meet the requirements of SEPA and fully study the impacts of this expansion. Especially given that our city has declared a climate emergency, your role of accountability and oversight is more important than ever.

Sincerely,
Rev. Amara Oden
1530 S 41st St S. 41st St Tacoma, WA 98418-2514
pastor@suquamishucc.org

From: [Amber Koens](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:44:51 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

I live in NE Tacoma, very close to the port. As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!
Thank you for reading my comment.

Amber Koens
akoens@gmail.com
2520 54th Ave NE

Tacoma, Washington 98422

Doll, Christine

From: Amitav Dash <adash@dubsanddash.com>
Sent: Thursday, December 22, 2022 12:35 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Amitav Dash

adash@dubsanddash.com

406-171 Kortright Road West

Guelph, Saint Croix Island N1G 0G4

From: [Amy Harris](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 5:27:02 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Amy Harris
amykatharris@gmail.com
3810 52nd St NE
Tacoma, Washington 98422

Doll, Christine

From: Andrea Scott-Murray <info@email.actionnetwork.org>
Sent: Tuesday, December 27, 2022 11:48 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

Increasing capacity for outdated fossil fuel infrastructure is a bad investment. The project cost will not be recouped in the lifetime of the project payback: the near future of marine shipping is electric!

<https://pv-magazine-usa.com/2022/08/22/ev-shipping-is-set-to-blow-internal-combustion-engines-out-of-the-water/>

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could

create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city’s One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Andrea Scott-Murray
andreascottmurray55@gmail.com
2311 - 167th Ave NE
Bellevue, Washington 98008

From: [Andy Motz](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:50:57 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Best,
Andy

Andy Motz
andy.motz26@gmail.com

1012 n 8th st, Apt 3
Tacoma, Washington 98403

From: [Anita Rose](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:23:45 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

The EIS is the only way that all potential impacts of development projects are uncovered. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight.

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Anita Rose
ineedarose2@gmail.com
1020 MortonSt
Port Orchard , Washington 98366

From: [Ann Dorsey](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 3:58:54 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Ann Dorsey
aedorsey@hotmail.com
18042 Schoenborn St
Northridge, California 91325

From: [Richard Leeds](#)
To: [Seaport Plant Modernization DEIS](#)
Cc: [Anne Kroeker](#)
Subject: SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107
Date: Tuesday, December 27, 2022 7:55:27 PM

Regarding DEIS:

https://cityoftacoma.org/UserFiles/Servers/Server_6/File/cms/PDS/Seaport%20Plant%20Modernization%20Project/SeaPort_EIS_DRAFT_EIS_11042022_web.pdf

Dear City of Tacoma Department of Planning and Development Services,

Thank you for the opportunity to continue to submit public comments to these next steps with the Proposal to Expand Seaport Sound's fuel terminals. As we wrote to the City of Tacoma almost 2 years ago now, with the proposed expansion of Seaport Sound Terminal adding more fuel terminals in an age of decreasing fossil fuel usage, not only are our local communities put at risk for increased air pollution, spill risks and safety concerns, but also the global community in the face of the ever-growing dire outcomes of the climate crisis. The statement by the company whose storage will be increased to accommodate low-carbon fuels is misleading and is an excuse to expand storage capacity for more toxic liquid fuels, with a short-term life of 20 years as the market dies, and placed in an area that is susceptible to severe damage from sea level rise, as well as earthquakes and tsunamis.

The current draft Environmental Impact Statement does not fully comply with the legal requirements of the SEPA. The Greenhouse Gas study uses outdated data and doesn't include the emissions that would come from leakage and transportation in a full capacity and lifecycle study. There is no comprehensive overview of the potential impacts to air quality and the current and increased risks associated with all vessel and vehicle traffic.

This is falsely called a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%.

We would like to expand on the points already raised being considered for increased analysis: (1) public safety and emergency response, (2) oil spill risk and safety, (3) air quality impacts and (4) greenhouse gas impacts from the extra fossil fuel storage.

Evaluation must include the full production, transportation, storage, distribution, and downstream effects of the expansion, beyond just the actual use of the terminal storage, in determining impacts of the whole project cycle and use.

Further, critical attention needs to be placed on this project meeting both the goals of the Shoreline Management Act, and in addressing the impacts to local indigenous communities

like the Puyallup Tribe, who depend on salmonids and other first foods as a cultural and subsistence resource, in perpetuity.

Still further, since this project is a deflection from Washington State creating planned sustainable clean electrical infrastructure, how much will this project add to Washington State's short and long term ghg emissions? Given that the UN IPCC has determined that substantial reduction of all ghg emissions needs to be accomplished within 9 years to limit our planet's temperature rise to 1.5 degree Centigrade, if that is even still a doable goal, we cannot allow projects like this to prevent us from reaching our State's emission reduction goals.

Finally, to achieve sustainable public health in our communities, we must reduce emissions and increase mitigations, starting first with our surrounding local communities in mind, and the downstream and downwind communities, all along the route of the fossil fuel path, from the source, to the transport, to the terminal site, and to the exhausts and poisons leaving it. The impact analysis must include the negative health impacts of fossil fuel that are felt in communities not only at this storage site, but also at the extraction sites, along the transportation corridors, and at all points of distribution.

If Seaport Sound were to instead to pivot to creating and using clean truly renewable energy businesses, including requiring electric ships, the immediate health benefits would include the reduction of asthma and exposure to heavy metal poisoning and other polluting chemicals in the air and ground, for our communities.

Tacoma's legacy in fossil fuels can be altered to a healthier future of clean, renewable energy, with up to 4 times more clean family wage local jobs, and the restoration of the Tacoma Tidelands for people and our Puget Sound environment.

Sincerely,
Anne Kroeker and Richard Leeds
Residents of Des Moines, WA

From: [Anne Van Holde](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 4:18:47 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Anne Van Holde
anne.vanholde@gmail.com
10002 SW 204th St.
Vashon, Washington 98070

Doll, Christine

From: Arthur Levine <soundhypno@gmail.COM>
Sent: Thursday, December 22, 2022 1:36 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Arthur Levine

soundhypno@gmail.COM

26231 188TH AVE. SE

COVINGTON, Washington 98042

From: [Ashley Ouellette](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 3:17:50 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Ashley Ouellette
agirl1018@gmail.com
311 Granite St
Biddeford, Maine 04005

From: [Barbara Bonfield](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:47:37 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Barbara Bonfield
bgbonfield@gmail.com
5702 N 33rd St Unit 4D
Tacoma, Washington 98407

Doll, Christine

From: Barbara Church <info@email.actionnetwork.org>
Sent: Monday, December 26, 2022 11:05 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

Since I live within a 2 mile radius of the Port of Tacoma, I received notice that Seaport Sound Terminal wants to expand. As part of the BIPOC community living near heavy industrial zoning, I am currently impacted by traffic and air quality from polluting industries there. I am asking that the City of Tacoma, as the lead SEPA agency, require Seaport Sound Terminal (SST) the do a more thorough analysis and revise their DEIS.

Please have SST show the full range of possible impacts including air quality green house gas emissions, risks from increased rail, vessel and vehicular traffic. I'd also like to see an analysis of the risks if SST reaches full capacity.

If we are to meet our Climate Action Policy goals, Climate Emergency Declaration, Equity goals, it is imperative that you use current science—especially in this time of accelerated climate change. With these considerations, no industry should be allowed to use 100 year global warming potential as SST is trying to do. Please require SST to revise their DEIS to study impacts stated above.

The City of Tacoma is known for fast tracking their permitting process. City council members have stated so themselves. This fast tracking process has often been at the expense of the health and safety of its residents. Take time to protect our neighborhoods and climate.

Thank you, Barbara Church, NE Tacoma resident

Barbara Church
jbchurch2@gmail.com
6402 1st St Crt NE
Tacoma, Washington 98422

From: [BA Keller](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort expansion
Date: Tuesday, December 20, 2022 6:12:16 AM

While others will cover more of my concerns about the proposed SeaPort expansion, but as a resident of the San Juan Islands I want to underline the most important concerns of this island county: increased vessel traffic (and too, of the most environmentally risky kind). Large vessel traffic noise already has a severe impact on orca feeding and pod activities. This increase will do even more damage in this critical area. From all the scenarios run on oil spills in the islands we know that, with our weather and tidal currents any spill end up mostly uncontained. Increasing tanker traffic simply makes the next Exxon Valdez more inevitable. Your DEIS is highly inadequate in this regard.

--

Barbara A. Keller

130 Aleck Bay Rd. Lopez Island, WA 98261

*Every morning I awake torn between a desire to save the world and an inclination to savor it.
This makes it hard to plan the day.
~ E.B. White*

From: [Barbara Stevenson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:55:10 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Barbara Stevenson
bbstvnsn15@gmail.com
23851 SE 98th PL
Issaquah, Washington 98027

From: [Beth Brunton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 6:50:28 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Beth Brunton
bebrunton@hotmail.com
1900 28th ave s
Seattle, WA 98144, Washington 98144

From: [Biji Mathew](#)
To: [SeaPort Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal - Plant Modernization Project
Date: Friday, December 23, 2022 6:29:39 PM

I am writing this comment to affirm support of the Sound Terminal's Plant Modernization Project.

I am deeply concerned about the future of my husband's job at the Seaport Sound Terminal. As an employee, working in the Seaport Sound Terminal, his job is directly affected by future projects being done.

Making it more difficult or uncertain for the project puts my husband's job at risk. Uncertainty could hurt our future, the future of my family and the futures of fifty others like my husband who rely on the Seaport Sound Terminal. to earn a living.

Tacoma needs the jobs, taxes and economic stability provided by companies like SeapSound Terminal. Tacoma's reputation as being unfriendly for industry already keeps companies from moving here.

Please guide this process with workers like my husband in mind and pause any new restrictions that would compromise their ability to continue working in the Seaport Sound Terminal.

My family is proud to be part of Tacoma's economic engine. I am depending on you to bring certainty to my family's future.

Please contact me if I can answer any questions.

Thank you.

Biji M. Mathew



Thank You,
Biji M Mathew

From: [Bill Phipps](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:35:47 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Bill Phipps
bebopbill@yahoo.com
7916 189 pl sw
Edmonds, Washington 98026-6027

From: [Brandon Juhl](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:43:17 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Brandon Juhl
brandon.juhl@gmail.com
14416 N. Creek Drive, Apt. 1616
Mill Creek, Washington 98012

Doll, Christine

From: Breana Melvin <info@email.actionnetwork.org>
Sent: Monday, December 26, 2022 2:36 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Breana Melvin

bre.melvin@gmail.com

1427 E Morton St

Tacoma, Washington 98404

From: [Brenda Pickvance](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 7:45:09 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Brenda Pickvance
b.b.pickvance@gmail.com
9250 conc. 3rd road
West Lincoln, Ontario L0R 1E0

From: [Van Keulen, Brian](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort approval request
Date: Wednesday, December 28, 2022 11:26:14 AM

Good morning,

I maybe a day late to write this, but I hope not.

I have reviewed the proposal on your web site for Seaport's request for the Modernization Project. This would be a win, win project. Anytime you can remove old, outdated equipment and replace with new modern equipment is a win. Tanks, piping, pumps all wear out from being used and sitting in our environment.

New storage tanks and new containment system will be a big improvement for the area. New safety devises for the operations and the environment are very important.

From what I read this project is a start for others to follow. As we all know, this area of our waterfront needs a lot of work.

I have been in the refinery business for 35 years up and down the west coast. I have seen many changes to what this business does. This is a good project to support, and I hope Seaport receives the permits need to move forward with this project.

Thanks for reading this.

Brian Van Keulen

Brianvank@yahoo.com

From: [Carol OlivierOlivier](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 5:04:53 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Carol OlivierOlivier
sagefemmes@yahoo.com
2825 Sw 170
Burien , Washington 98166

From: [Carole Braaten](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Plant Modernization DEIS Inadequate and is missing information extension is needed
Date: Tuesday, December 27, 2022 8:32:32 PM

Carole Sue Braaten
2410 Berry Ln. E.
Fife, Washington,
98424

City of Tacoma
Planning Dept.
Attention :Shirley Schultz

Dear City of Tacoma Planning Dept., Shirley Schultz and others,

In Regard to the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107 Public Comments:**

1. The **First Draft Environmental Impact Statement/DEIS Seaport Sound Plant Modernization Project LU20-0107** is **Inadequate** according to the Washington state laws critical information was intentionally left out or information was minimized to make things much less dangerous and impact then is actually true. R.C.W. 43.21C, W.A.C. 356-195, **W.A.C 365-195-905 (5) (a) 5 Context** and other laws. Even though in the writers and authors of DEIS professional opinion say they have met and meet Washington state laws SEPA that is Not true. But the DEIS for SeaPort Sound is not the only Environmental Impact Statement/EIS or Final Environmental Impact Statement/FEIS that is Inadequate it is one of many going back years and over a decade. I will give just some of the examples here:
 - A. In the SeaPort Sound DEIS What is, has been and can be the Affect, effect and Significant Impacts on the Surrounding Environment, people, death, injury, salmon, Puyallup Tribal land, contamination of air, water and soil, wildlife worker injuries? These are all avoided and none existent in the DEIS. This needs to be added to a Second DEIS.
 - B. Release of contents of any of the tanks from damage or Catastrophic failure, decades of possible soil contamination.
 - C. Soil samples of at least a mile of surrounding land and water etc.needs to be added.
 - D. Missing Past pollution on/in the soil and water areas from the Asphalt facility operation . Soil Contamination from Asphalt...Environmental Impacts was there more cancer in the population in the Browns Point area and other diseases, asthma, other lung disease to the people compared to general population?...This needs to be added to a Second DEIS ...Air quality was never monitored 24 hours a day 7 days a week only when complaints were filed by people...Resident would find black particles coating on the porches and decks of their homes?
 - E. Asbestos is a dangerous and deadly contaminate causing death from Mesophilyoma cancer from asbestos how many people in the Browns point area and past employees have had this disease. How much contamination is in the surrounding soil and waterway off the SeaPort sound site?
 - F. Why havn't the preparers of SeaPort Sound DEIS in the DEIS Not written a statement to SeaPort Sound/ TARGA, the City of Tacoma Planning and Development and All people reading **the SeaPort DEIS fully disclosed and stated that the land site location is not usable, unsuitable and incompatible for any development what so**

ever according to R.C.W. 36.70 A, W.A.C. 365-190,195, Stafford Act of 1974. Seismic hazard laws prohibiting any development of any petroleum products in these areas, and other state and federal laws? Some of the laws stated in the very SeaPort Sound DEIS.

- G. **Why have the preparers of the SeaPort Sound DEIS not disclosed the is zoning is NOT correct for the land site location and the entire Port of Tacoma and surrounding areas By State Laws R.C.W. 36.70 A, W.A.C. 365-190,195, 196, Fire codes and other laws?** Why have the prepares not disclosed how dangerous this area is for industrial or commercial or Residential ? These DEIS preparers are not the first to Not disclose the full dangers of the areas and state the zoning is Wrong they are one of many who have mislead People reading the Environmental Impact Statements and Final Environmental Impact Statements by leaving this out including extensive amounts of information in the PSE LNG FEIS...All past permits in the Port of Tacoma and surrounding areas need to be reopened as Inadequate and incomplete for Public Safety R.C.W. 43.21C...*******NOTE ******the Asarco Smelter land site mention in the SeaPort Sound DEIS owner Asarco did not do that. **Asarco gave a FULL and COMPLETE disclosure** when they sold the Asarco Smelter Land (got rid of and off loaded the unusable land) to the Ruston Point development that the land was unusable for development. Asarco released All liability and responsibility upon the date of the sale of the Asarco Smelter Land . Asarco will have no liability or responsibility for any deaths/loss of life, injury, loss of belongs, damage and destruction to home. I personally looked up the sales agreement between Asarco and the Ruston Point Land developer years ago. Asarco fully disclosed to the Ruston Point Land developer **that the Asarco Smelter land was undevelopable and was not usable for any land development**. The land could be only used zoned as Open Space. Open Space zoning was Not because of the Arsenic but do to the **Geological Hazards and danger** of the site location by state and federal laws R.C.W. 43.21C, R.C.W. 36.70A, W.A.C. 365-190,195, 196, ...other paperwork disclosed the fact of **2 earthquake Fault lines and a fold line** just off of the shore of the land. **Tsunami Hazard/floodwater inundation, Erosion hazard**/washing out by the tidal waters. **Landslide hazard/Seiche** area which there is Not insurable for because it has been illegal by federal laws to build in any Landslide hazard for over 40 years. **Liquefaction soil** which is prohibited to build in by the International Building Code/IBC. The Asarco Smelter land which Asarco sold had absolutely no value except for Open space Any single one of these **Geological Hazards** makes the Land unusable for any **residential, commercial or industrial Development at all R.C.W. 36.70A , W.A.C. 365-190,195, 196, R.C.W. 43.21C, International Building code, Fire Codes and more let alone multiple hazards making the area extraordinarily dangerous. Geological Hazard areas are unsafe for human habitation** by federal law. But the City of Tacoma Planning Dept has taken on the extraordinary liability of Ruston Point if the City of Tacoma Planning Dept. does not Reopen the E.I.S. and FEIS for Ruston Point, the PSE LNG FEIS and other for being Inadequate....Since the
- H. SeaPort Sound, Puget Sound Energy/PSE Liquefied Natural Gas Facility and other EIS and FEIS the Geological hazards which include but are not limited to Landslid hazard, Seismic Hazard, Liquefaction, Tsunami and others are mentioned but the true and real impacts to the structures, humans and environment are not even describe in detail. Example
1. *******NOTE****3 days after the 1949 Tacoma Earthquake** that struck the Port of Tacoma a Landslide happened on the Gig Harbor Side of Puget Sound caused by the earthquake creating a Seiche Tsunami which stuck Salmon Beach residents where my grandparents friends home was located. The Tsunami flooded the home with water and destroying their home they

never moved back to Salmon Beach they lost almost everything. The same earthquake stuck the Port of Tacoma causing massive Liquefaction were my grandfather and uncles were Longshoreman areas of the Port dropped over 6 ft and cracks appeared. The Landslid hazard/Seiche area right by the SeaPort Sound and PSE LNG needs to be considered as a extraor.dinary hazard

2. **Liquefaction Soil** causes the soil to turn to liquid during a major earthquake become unstable causing building and structures to sink, topple and collapse. Liquefaction Soil is considered the worlds most dangerous soil so dangerous building and structures including petroleum tanks of any sort are not to be built on the soil or in that area. Retrofitting can not hold the tanks once the soil becomes liquid any of the current tanks located at the SeaPort Sound could Catastrophically fail crack, sink topple explode and collapse. A Catastrophic failure required by the Fire Code was not shown nor that the tanks can fail. R.C.W. 43.21C the area is to dangerous to locate the present tanks and no petroleum products can be located in this area of the Port of Tacoma and zoning is wrong. In the 1949 earthquake that impacted the Port of Tacoma areas of the port sunk and cracked over 6 ft. deep causing sand boils and sand volcanoes in the port to appear. This alone makes the SeaPort Sound location to dangerous to build**But it is also far to dangerous for the current PSE LNG which has a deadly explosion range of 12.6 miles and an Exclusion Zone of thermal radiation that would kill and seriously injury anyone within 3 miles of the location including kill all the workers at SeaPort Sound ...** That is why the area is called and **exclusion zone** no humans in the area they are Exclude from the dangerous area.... Missing and Misleading in the PSE FEIS The REQUIRED setback area is Called the **EXCLUSION Zone** the Exclusion Zone is not the property Boundary Line stops. That is Because the PSE LNG FEIS purposely does not show the Required and mandated Catastrophic Failure event but only minor line breaks in the system that will all go off the property site location if you run the entire program and do not stop the program at the property boundary line. Which then heads toward both the TOTE Area and SeaPort Sound that is why 190 scenarios are missing and left out of the PSE LNG FEIS and one of may things. The Exclusion Zone is where Catastrophic Failure event thermal radiation and Asphyxiation is just about out of the KILL ZONE. Also Pool Fires can form on the ground or water and burn for days or weeks not completely mentioning and explaining the total dangers. **From the center of the PSE LNG Federal Laws Required and Mandate fencing the can be no closer then the 3 mile range done by the Tacoma Fire Dept. That means immediately until the PSE LNG can be decommissioned All the Port of Tacoma is Shut down Everything within 3 miles is moved out of the area including SeaPort Sound, All Port work stops, Port of Tacoma is no longer a Maritime Port for shipping, humans and business in and around Browns Point, Tacoma, Fife, Fife Heights, Tacoma Municipal Building, the County City Building all human lives are moved out of the area and housed and located somewhere elsewhere and Puget Sound Energy pays for the relocation of everyone.** Then the buffer zone of another mile or more...So all of these dislocated people now need to be housed some where all of the workers who have lost their income compensated . .This is All need be done due to Emergency Public Safety and a misleading PSE LNG FEIS because if just one of the Geological Hazard events happens thousands of people can die and be injured by the PSE LNG in the Port of TacomaBut the PSE LNG is PROHIBITED by Federal LAWS to be in ANY Seismic Hazard Area at all because of the massive danger this information was hidden in the PSE LNG FEIS if

Anyone looked up all the laws and codes the information was hidden on purpose just like other documents hide critical information.... Tanks Catastrophic failures can be run free of charge on the National Oceanic and Atmospheric/NOAA website created for Fire Departments around the USA and elsewhere ALOHA Camo Suite and then cross it with Environmental Protection Agency/EPA MapPlot that will give the explosion range map of not only the PSE LNG but the SeaPort Sound when Correctly done...

3.So my question is if the Liquefaction causes all the SeaPort Sound Petroleum Product Tanks to Catastrophic Fail and the PSE LNG at the same time Show me the Catastrophic failure of all the tanks at once since one will set the others off and how far the explosion will travel....show the maps and the thermal radiation and asphyxiation using zones , blast zone ALOHA Camo Suite and EPA MapPlot put the map and information in. Also estimate how may people will die and be injured...when the tanks fail they can catch fire causing pool fires also killing the Fire Dept personal located across from the LNG. How far all the Petroleum Chemicals when spilled, dumped,explosed will travel in land at high tide in a Tsunami off the Seattle Fault putting out 42 feet of Tsunami Water and if 4 Tsunami Wave Trains hit the Port as in the Japan quake of 2011.
4. **Tsunami usin**g the exact information given in the documents referred to by T. Walsh/aka Tim Walsh the Tsunami at a high tide will go all the way inland to the south side of I-5 in Fife and would be at least 2 ft high. That is what Tim Walsh personally told me when he worked at the State of Washington Division of Geology as Assistant .Geologist. The Tsunami waters coming in would be caring debris, shipping cargo containers, boats, ships, building debris, striking and hitting the tanks anyone one of the Tanks at SeaPort Sound could crack, fail, and start to leak into the waters causing great environmental damage carried by seawater and tsunami wave all the way into Fife. The Natural Gas Pipeline running to the SeaPort Sound old TARGA and other petroleum products pipeline can not be located in any Liquefaction soil also known as Dynamic Soil which runs throught the Port of Tacoma into Fife **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21**C Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws
5. Seismic Hazards are caused by earthquakes the damage is done by the magnitude and shake time of the earthquake this can cause all sorts of catastrophic damage to structures, killing humans, destroying the environment that surrounds buildings. Building and Structures and structures are not to be built in Seismic hazard areas which is different then Seismic design which is built to be outside the Seismic hazard area...Why weren't the 2 earthquake fault lines in the Port of Tacom mentioned in the DEIS? on Which the Old TARGA in 2008...mentioned in the DEIS illegal put a Natural Gas Pipeline right on top of earthquake fault line not to mention the ...2003 Washington state law for Petroleum Product Pipelines that Require a over 600 foot setback each way and fenced off area with warning signs that is missing currently from the Pipeline that was also put illegally against state laws site location that Natural Gas and other petroleum products pipeline can not be located in any Liquefaction soil also known as Dynamic Soil. **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21**C Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws
- l. Both in the DEIS of SeaPort Sound and the Puget Sound Energy/PSE Liquefied Natural Gas/LNG Facility Final Environmental Impact Statement/FEIS ... In SeaPort Sound the individual who wrote each section their name is left out of the section they contributed to and personally wrote...I see no professional

qualification that Qualify the people to do almost all of the DEIS.... Petroleum Engineer is needed **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21C** Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws

- J. NO Petroleum Engineering Expert in either the DEIS of SeaPort Sound or the PSE LNG FEIS Alan Hatfield was not even a Licensed civil engineer at the time of the PSE LNG FEIS.
 - K. Poor maps of the Geological hazards and other danger.
 - L. The Geologist and Geological Engineers Seal is missing in both SeaPort Sound and the PSE LNG FEIS stating that the site location is SAFE to USE as a Building site ...not how the site can be engineered or the design but is the site location outside of and safe from any Geological Hazards and Seismic hazards like Seiches and Dam Break Area
 - M. The Dam Break Area from Mud Mountain Dam is missing which is a known Seismic hazard...What will happen in a Seismic Dam Break if Mud Mountain breaks all the Water come rushing out of the reservoir down the Puyallup River carrying debris, timber, houses, shipping containers, semi trucke from the port and building and all of those hit and strike both the SeaPort Sound Tanks and the PSE LNG and the Tacoma Waste Water Treatment Facility? What if the Tanks fail crack and start to leak into the waterway how far can the petroleum products travel with the tide both out going and coming inAll of this plus much more is missing making the SeaPort Sound DESI and the PSE LNG FEIS Inadequate I could go on for pages ...SeaPort Sound must have a Second Draft Environmental Impact Statement it has to include much of what is left out but so does PSE LNG FEIS. **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21C** Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws
 - N. An **Accumulative Environmental Impact Statement is Required for the Entire Area of the Port of Tacoma, Ruston Way area, Foss Water Way adding all of the** Impacts from the PSE LNG FEIS 190 missing scenarios including the 10 that go off site toward SeaPort Sound if you let the entire computer scenario running to the end instead of stopping at the PSE LNG property boundary. Tacoma Fire Dept explosion range map included that shows the explosion from the PSE LNG catching fire and catastrophically failing killing all the workers at the PSE LNG and SeaPort Sound and the Tacoma Fire Dept and TOTE , SeaPort Sound Tanks expoding , SeaPort Sound Pipe all the hundreds of railroad car tanks full of oil petroleum on the port being stored, the U. S. Oil, Tacoma Waste Water Treatment Facility and more the great damage and the massive loss of human life if nothing is done to change the area as zoned. The City of Tacoma Planning Dept need to take immediate action contacting the State Emergency Management Maximilian Dixon and the Division of Geology and the Federal Energy Regulatory Commission Experts...and more all the Chemical damage to all of the Commencement Bay including killing fish Salmon, Damage to Puyallup Tribal Lands and surroungin homes buildings how many people die? And more. **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21C** Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws
2. A Determination of Significance, Incompatible Land Use, Unsuitable Land site location for **Seaport Sound Plant Modernization Project LU20-0107**, ..but not just for SeaPort Sound...the Puget Sound Energy/PSE Liquid Natural Gas/LNG Facility across the water way from SeaPort Sound but puts SeaPort Sound in imminent threat of extraordinary danger endangers workers at SeaPort and the tank yard and at least 3 miles from the PSE LNG. Which opens up the Puget Sound Energy/PSE Liquid Natural Gas/LNG Facility Final Environmental Impact Statement/ FEIS for being **R.C.W.**

36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21C Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws

3. City of Tacoma **Comprehensive Land Use Zoning is wrong** and long out dated for the Port of Tacoma and Areas Surrounding Commencement Bay by well over 30 years.
4. City of Tacoma **Comprehensive Land Use Zoning** currently Endangers thousands of human lives and the Environment **R.C.W. 36.70A, W.A.C. 365-190,195,196, W.A.C 365-195-905 (5) (a) 5 Context** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge. ... etc.. **R.C.W. 43.21C, the federal EPA, Stafford Act 1974 hazard mitigation prohibiting human habitation in dangerous areas,** Pipeline Safety law, Code of Federal Regulation/CFR and other laws and codes ...**NOTE **these same areas Prohibit any petroleum products or storage in hazardous locations****, ..**International Building Code/IBC** including the part which has stated for decades no building in ANY Liquefaction Soil or on the Fringe of Liquefaction/ Edge of Liquefaction soil. Now the IBC clearly states the Soil Particle density soil type but no soil test is needed in areas Already identify by the United States Geologically Survey/USGS or state Geology Depts.. Now the IBC clearly states that NO Engineering can ever make Liquefaction Soil especial for Commercial and Industrial development. Tacoma Municipal Code?TMC is out dated and not in Context with State and federal laws governing land use, petroleum product. **R.C.W. 36.70A, W.A.C. 365-190,195,196, R.C.W. 43.21C** Public Safety the SeaPort Sound can not be built at this site location and must be relocated. Pipeline safety laws
5. City of Tacoma's **liability and responsibility for incorrect land use zoning will easily be in the Billions of dollars in any law suit** should any if any of the geological hazards, seismic hazards, volcano eruption Lahar, flooding, petroleum or chemical storage events happen or if one event triggers other events to happen which is possible. **The City of Tacoma is not carrying Sufficient Liability Bonds to cover death, injury, building damage reckless endangerment and more.A immediate decommission shutdown of the PSE LNG is needed and national Federal Energy Regulatory Commission people brought in along with State and Federal Emergency Management Experts brought in .**
 - A. **Worst Case Scenario Example** January 26,2023 anniversary of the Great Cascadia Subduction Earthquake after a week of heavy rains hydrology Landslide Warnings has been put out by National Oceanic and Atmospheric/NOAA. The normal part of Marine View Dr. has been closed off by City of Tacoma Public Works due to slide hazards warning. A burn spot from a summer wildfire has left part of the hillside which raise over 400ft behind SeaPort Sound and across from the Puget Sound Energy/PSE Liquefied Natural Gas/LNG burned. It is the second day of a full moon with High tide known as a King tide coming in and has not yet reached its peak much different then the out going low tide mentioned in the DEIS for SeaPort Sound. Possible River flooding warnings have been put out for the Puyallup River. The Port of Tacoma has several ships in the harbor waiting to come in and off load. Semi trucks line up waiting. The Port of Tacoma A massive 9 magnitude 5 minute shake major earthquake hits of the Seattle Fault causing a 42 foot tsunami wall of Water into Seattle and 25- 30 feet inundating the Port of Tacoma causes the Port of Tacoma soil to liquefy/ turn to liquid causing the LNG tank to fail as stated in PSE LNG FEIS the tank can only move about 26 inches the Port of Tacoma sank more then 6 feet in that area in 1949 quake , The tanks at SeaPort Sound come off their foundation at the same time the PSE LNG starts to crack exploding causing , Landslides start to happen at both side of the port going into the Water the Tsunami Wave hits and the wind is blowing at 45 miles per hour in gust.combine all the hazards in the Port of Tacoma while a ship hits the Apartments at Ruston Point where the Apartments on both Ruston Point and foss Waterway have fallen into the Water Show a

combination of all the Events with ALOHA Camo Suit and EPA MapPlot and calculate how many people would be injuries and die also do not forget the Polar Bears and other animals are now loose from the Point Defiance Zoo (that part Pierce County Emergency Management always likes to include.

6.

7. By **R.C.W. 43.21C Public Safety and Welfare and environmental safety** a moratorium needs to be put on the Port of Tacoma until state and national experts from various agencies using **Best Available Science** according to **W.A.C. 365-195** determine that any part of the Port of Tacoma can be used for any Industrial or Commercial or residential zoning at all.

8. All documentations, references and foot notes and laws when read completely in full context instead of being taking out of context in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** provided all the evidence and information need using **Best Available Science** and Scientific experts that the Port of Tacoma **can not be zoned Industrial or commercial or residential no matter the financial income tax benefits to the City of Tacoma.** R.C.W. 36.70 The Change of Zoning is because as stated the imminent threat of great danger and hazards that can change in just minutes causing human injury, death, environment destruction, pose a threat to workers.....Just as did the Puget Sound Energy Liquefied Natural Gas

9.

10. The City of Tacoma Planning Dept. has long been misled on the Port of Tacoma zoning and other areas zoning for the City of Tacoma to believe that the Port of Tacoma is correctly zoned. Which **according to Washington state laws the Port of Tacoma is Not Correctly Zoned neither are some other areas of city of Tacoma.**

A. Under the Washington state Criminal Code it is a Crime to deceive a city or county local jurisdictions into believing something that is untrue and that causes the local jurisdiction to rely on and act upon that information to the local jurisdictions detriment. Thus causing the imminent threat of hazard and danger to human beings, human life, Public welfare and safety, the surrounding environment air, water, earth, habitat, wildlife, salmon, and more. The massive Catastrophic Failure due to Geological hazards, Seismic hazards and other dangerous events of petroleum products, chemicals release, debris and more in which hundreds can die and thousands can be injured has purposely and intentionally left out of documents minimized or intentionally provided diversions of information provided to the City of Tacoma. Personal, to citizens, people and others for public comments. Full disclosure of actual Best Available Science BAS and Best Available Technology has been intentionally left out of document.

B. On all the Environmental Checklist, **Environmental Impact Statements/EIS and Final Environmental Impact Statements done** on that I have seen and reviewed NOT one The SeaPort Sound, Puget Sound Energy/PSE Liquefied Natural Gas/LNG, Port of Tacoma Methanol Facility, Ruston Point development, TARGA natural gas pipeline have shown the liability and cost to the City of Tacoma. At this time because all of these Companies are Limited Liability Corporation means that The City of Tacoma Planning Department is Assuming All the Liability.

C. In law, liable means "responsible or answerable in law; legally obligated".^[1] Legal liability concerns both civil law and criminal law and can arise from various areas of law, such as contracts, torts, taxes, or fines given by government agencies.Claimants can prove liability through a myriad of different theories, known as theories of liability. The Claimants will have no problem showing liability just like in the Oso, Landslide case

- D.
 - E. this Must be Shown in SeaPort Sound in a
 - F. The SeaPort Sound, Puget Sound Energy/PSE Liquefied Natural Gas/LNG, Port of Tacoma Methanol Facility, Ruston Point development, TARGA natural gas pipeline, **Environmental Impact** that has never been shown
11. Also there are a number of **errors and mistakes** in the City of Tacoma Municipal Code/a.k.a T.M.C. that are not in compliance with the state and federal laws in the LAND USE 13 section and elsewhere. Numerous examples I stated at the various Tacoma Council meetings prior to the Covid -19 shut downs, so both the City of Tacoma Attorneys, City Manager who was the City of Tacoma Attorney could call the State of Washington Attorney Generals Office and obtain the Correct interruption of the laws from the A.G.s office and responsible departments. I had and have already contacted the State of Washington Attorney Generals Office and responsible Departments and Division prior to any Public comments reading off written statements I submitted for Public Record at the Tacoma Council meetings well over a 2 year period of time. Some of which I am stating here.
- A. The TMC 13 states there are no Tsunami hazard areas in Tacoma that includes the Port of Tacoma that is false all of the Port of Tacoma and parts of Tacoma waterfront are in great danger from a Tsunami. That is according to the State of Washington, Dept of Natural Resources, Division of Geology Dept.
 - B. TMC states that Seismic hazards are determined by the State of Washington Ecology dept. that is incorrect the State of Washington, Dept of Natural Resources, Division of Geology determines ALL seismic and Geological hazards for all State of Washington departments and all local jurisdiction in the
 - C.
12. That the City of Tacoma did not follow the Washington state law that City of Tacoma no matter the Dept. that would included the attorneys did not seek out the State of Washington, Dept. of Natural Resources, **Division of Geology** personal for correct and accurate interpretation of maps, documents and information sent to the City of Tacoma Planning.
13. Also the City of Tacoma has not sought out for correct interruption of R.C.W. 36.70A, W.A.C. 365-190,195,196, other laws other State of Washington Departments.....NOTE
14. The **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107 Public Comment time needs to be extended to include Critical, essential, necessary, and needed State of Washington and National /federal experts:** There is a lot more but the Entire SeaPort Sound DEIS needs and Extension and State of Washington and Pierce County Emergenyc Management need to be invited to comment on all the real and true dangers of the Port of Tacoma and surrounding area, So does the State Divison of Geology and what the Port and surrounding areas should be Zoned. Talk to Maximilian Dixion in Emergency Management and how we can repair and fix this development mess while making the Maritime port of Tacoma Profitable. But Right Now we need to get everyone out of harms way and have real true experts come in and do an Accumulative Environmental Impact Assessment with people that truly and Really do care about the Public Safety of the People of Washington State.

Yours Truly,
Carole Sue Braaten

From: [Carole Braaten](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Plant Modernization Project Land site location zoned wrong
Date: Tuesday, December 27, 2022 8:18:32 PM

Carole Sue Braaten
 2410 Berry Ln. E.
 Fife, Washington,
 98424

City of Tacoma

Planning Dept.

Attention :Shirley Schultz

Dear City of Tacoma Planning Dept., Shirley Schultz and others,

In Regard to the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107 Public Comments:**

1. I believe the City of Tacoma Planning Dept. has long been misled on the Port of Tacoma zoning and other areas zoning for the City of Tacoma to believe that the Port of Tacoma is correctly zoned Which according to state laws the Port of is Not Correctly Zoned R.C.W. 36.70A, W.A.C. 365-190,195,196, Fire code s for LNG and Petroleum Products, Pipeline safety code, Stafford Act 1974 Mitigation of hazardous areasetc. Also there are a number of errors in the City of Tacoma Municipal Code/a.k.a TMC that are not in compliance with the state and federal laws in the LAND USE 13 section and elsewhere. Numerous examples I stated at the various Tacoma Council meetings prior to the Covid -19 shut downs.
2. That the City of Tacoma did not follow the Washington state law that City of Tacoma no matter the Dept. that would included the attorneys did not seek out the State of Washington, Dept. of Natural Resources, **Division of Geology** personal for correct and accurate interpretation of maps, documents and information sent to the City of Tacoma Planning. Whic is mentioned in a number of EIS laws that are sited in document that the City personal are to seek states help.
3. Also the City of Tacoma has not sought out for correct interruption of R.C.W. 36.70A, W.A.C. 365-190,195,196, other laws other State of Washington Departments.....and has been misled by documents that leave out critical context purposely.
4. The **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107 Public Comment time needs to be extended to include Critical, essential, necessary, and needed State of Washington and National /federal experts.** Those experts need to be asked if the city of Tacoma Planning Dept has Correctly zoned the Port of Tacoma and other dangerous areas around the Port of Tacom Correctly and What the City of Tacoma needs to do to Correct and solve the danger areas. **Experts from the State of Washington and Pierce County Emergency Management, State of Washington Division of Geology, National Oceanic and Atmospheric/NOAA, Federal Energy Regulatory Commission/ FERC** and others but those people need to be given All the EIS and other documents for the last few decades to review just how the City of Tacoma Planning has been misled by the documents.
 - A. The Reason for the extension is Because the State of Washington, Dept. of Natural Resources, **Division of Geology** personal and need to be invited to Publicly comment on the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107.** State of Washington, Dept. of Natural Resources, **Division of Geology** has not been asked or invited to Publicly Comment to the City of Tacoma Planning Dept. if the City of Tacoma Planning Dept. has correctly interrupted the Geologically Hazards maps sent to them by Division of Geology and what the zoning should be for each Geological Hazard Area for Public safety.
 - B. City of Tacoma Planning Dept needs to invite and ask the State of Washington, Dept. of Natural Resources, **Division of Geology** personal and retired personal Tim Walsh former Assistant State Geologist, Licensed Geologist and Geological Engineer, Expert Court Witness who was called to testify on the Oso, Landslide which killed 43 people in the court liability case. Tim held extra endorsements on his License. Tim was also the

national Tsunami Expert mentioned in documents given reference in the DEIS, who was the Expert who did the 2009 Tsunami hazard maps and wrote the information referenced to in the DEIS. Tim Walsh needs to be asked to be asked or his current equal in the Division of Geology:

- C. If the Port of Tacoma is Correctly Zoned as Industrial Commercial or if the Zoning needs to be corrected...
5. Also the **State of Washington Emergency Management and Maximilian Dixon** who is one of the well known State Emergency Management Experts and presenters for Tsunami Areas in the state Also needs to be Invited and allowed to Comment on **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107.**
6. These 2 State Agency's assist in the correct zoning and how mass evacuation of human beings should be handled.
7. I have for over 10 years had personal contact with the State of Washington, Dept. of Natural Resources, **Division of Geology** and their personal and other state and federal agencies, departments and the personal who are state and national experts. I have done some of this through Public Request of Information which not only resulted in the documents I wanted and needed but state and known nation experts calling me back. These experts spoke with me talking with me for extended periods of have detailed conversation and providing me with extensive amounts of free to the Public documents and information. This includes the now retired and formally second in command Assistant State Geologist Tim Walsh who personally spoke with me extensively about Geological Hazard areas, Soils (which is some of my personal background), Engineering, Tsunami hazards and dangers how much incoming tsunami Water will or could inundate the South side of Fife over 2 ft.. Tim said the State of Washington, Dept. of Natural Resources, **Division of Geology** have and has already Predetermined that **ALL Geological Hazard Areas Mapped areas by the State of Washington, Dept. of Natural Resources, Division of Geology** are not suitable according to State of Washington Geologist and Geological Engineers and can **Not be Sufficiently engineered by engineering or geoen지니어ing to make the areas safe for human habitation. Geological Hazard Areas are not to be Zone residential, commercial or industrial stated in R.C.W. 36.70A DefinitionW.A.C 365-190,195,196,R.C.W. 43.21.C Public Safety.....Stafford Act 1974 FEMA mitigation....., Washington state 2003 Pipeline Safety**

Public Comment

1. According to Washington state laws, federal laws, National Fire Code Laws and other applicable laws and codes for land use Is the land site location of SeaPort Sound to dangerous or hazardous to be Zoned Industrial? Yes or No. If yes explain why in detail.
 - A. If Yes then by R.C.W, 43.21.C Public Safety and welfare of human beings the Tank storage area can not be Replaced but must be relocated. So must the Puget Sound Energy Liquefied Natural Gas Facility.
2. According to Washington state laws, federal laws, National Fire Code Laws and other applicable laws and codes for land use Is the land site location of SeaPort Sound to dangerous or hazardous to be Zoned Commercial ? Yes or No If yes explain why in detail.
3. According to Washington state laws, federal laws, National Fire Code Laws and other applicable laws and codes for land use Is the land site location of SeaPort Sound to dangerous or hazardous to be Zoned Residential? Yes or No If yes explain why.
4. According to Washington state laws, federal laws, National Fire Code Laws and other applicable laws and codes for land use Is the land site location of SeaPort Sound Incompatible or Compatible Land Use as currently Zoned once the known Geological Hazards and other hazards such as flooding have been identified in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107**? State Incompatible or Compatible
5. According to Washington state laws, federal laws, National Fire Code Laws and other applicable laws and codes for land use Is the land site location of SeaPort Sound Suitable or Unsuitable Land use as currently Zoned due to the known and identified hazards in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107**? State Suitable or Unsuitable

6. Is the Puget Sound Energy/PSE Liquefied Natural Gas/LNG mentioned in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** which is across the waterway from SeaPort Sound in the same Identifiable dangers and hazards Yes or No?
7. Are Geological Hazards mentioned in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** Significant or Non Significant? If Significant then by R.C.W, 43.21.C Public Safety and welfare of human beings the Tank storage area can not be Replaced but must be relocated.
8. Is the correct Mitigation for the Geological Hazards mentioned in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** either or Agriculture or Open Space ? Yes or No
9. Was the SeaPort Sound/old TARGA Plant built before September 1990? Yes or No
 - A. What year was it started?
 - B. R.C.W. 36.70A Growth Management Act/GMA started Sept 1990 all zoning changes for properties due to Critical areas, Geological Hazards, Flood Areas, etc Allows for transfer of All Development Rights to a Suitable location when just one of the hazard areas is identified and is found on the property site location to be used. So long as the owner had the land prior to Sept. 1990 legislation and map notifications that were sent out to the local jurisdictions by State of Washington Geology Dept just after the 1990 September Legislative session.
 - C. Was SeaPort Sound Notified by the City of Tacoma or Port of Tacoma of any hazards? Yes or No or sent any maps? Yes or No. If yes which maps and information.
10. Was the SeaPort Sound built before September 1980 legislation on Volcano Eruption areas and Lahar areas after the Mt. St. Helens Volcano Eruption May 18, 1980? Yes or No
11. In 1917 the Puyallup River topped and flooded the brand new River Levy built by U.S. Army Corps of Engineers and flooded the entire Port of Tacoma Tideflats Area the highest recorded flood.
 - A. In the 1930's the entire Port of Tacoma was again flooded by the Puyallup River the second highest flooding of the Port of Tacoma Tideflats both by eye witness reports (including my personal family members), pictures and National Oceanic and Atmospheric/NOAA website flood. Down the Puyallup River, through the Tideflats were floating and crashing into things buildings, houses, cars and other objects carrying everything out to Commencement Bay....as my family members watched including my grandfather who was a Longshoreman on the Port of Tacoma, my mom now 97 ½ years .
 - B. Scenario If the same 2 events were to happen today and the petroleum storage and other SeaPort Sound tanks were hit, struck, damaged Catastrophically by floating shipping containers, debris, buildings submersing the SeaPort Sound storage tanks in flood waters. The wastewater Treatment areas to release the wastewater into the waterway and Commencement Bay. At the Same time Flooding the Puget Sound Energy/PSE Liquefied Natural Gas/LNG 8 million gallon LNG tank = 4,800,000,000 billion gallons of natural gas causing the cooling failure of the PSE LNG to rise to above -194 below
 - C. As of 2007 the Puyallup River Levy has been DeCertified and May not hold during a major flooding because of over building in the Puyallup Valley According to the U. S. Army Corps of Engineers I was at one of their meeting in Jan. 2006. In Jan 2009 an Area Wide Flood Evacuation of Fife and other areas along the river and the Port of Tacoma happened because of a major Flooding Event. Is the SeaPort Sound located in that 500 year Flood Plain that historically flooded the Tideflats ? Yes or No ... The debris field of flood *****8
12. Is the Port of Tacoma Correctly Zoned by the City of Tacoma as Industrial according to state law R.C.W. 36.70A , R.C.W. 43.21C with the information contained in the Draft Environmental Impact statement Yes or No?Use laws below include the Stafford Act of 1974 Hazard Mitigation and all other state and federal codes and Fire laws and regulations.

RCW **36.70A.030**

- A. Definitions. (14) **"Geologically hazardous areas" means areas that**

because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

W.A.C. 365-190-110

Frequently flooded areas.

Frequently flooded areas. Flood plains and other areas subject to flooding perform important hydrologic functions and may present a risk to persons and property.

(1) Classifications of frequently flooded areas should include, at a minimum, the 100-year flood plain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

(2) **Counties and cities should consider the following when designating and classifying frequently flooded areas:**

(a) **Effects of flooding on human health and safety, and to public facilities and services;**

(b) **Available documentation including federal, state, and local laws, regulations, and programs, local studies and maps, and federal flood insurance programs, including the provisions for urban growth areas in RCW 36.70A.110;**

(c) The future flow flood plain, defined as the channel of the stream and that portion of the adjoining flood plain that is necessary to contain and discharge the base flood flow at build out;

(d) **The potential effects of tsunami, high tides with strong winds, sea level rise, and extreme weather events, including those potentially resulting from global climate change;**

(e) Greater surface runoff caused by increasing impervious surfaces.

W.A.C. 365-190-120

Geologically hazardous areas.

(1) Geologically hazardous areas. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard.

(2) Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to public health and safety are minimized. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas must be avoided. The distinction between avoidance and compensatory mitigation should be considered by counties and cities that do not currently classify geological hazards, as they develop their classification scheme.

(3) Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area:

(a) Erosion hazard;

(b) Landslide hazard;

(c) Seismic hazard; or

(d) Areas subject to other geological events such as coal mine hazards and volcanic hazards including: Mass wasting, debris flows, rock falls, and differential settlement.

(4) Counties and cities should assess the risks and classify geologically hazardous areas as either:

- (a) Known or suspected risk;
- (b) No known risk; or
- (c) Risk unknown - data are not available to determine the presence or absence of

risk.

(5) Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. Erosion hazard areas may also include coastal erosion areas: This information can be found in the Washington state coastal atlas available from the department of ecology. Counties and cities may consult with the United States Department of Agriculture Natural Resources Conservation Service for data to help identify erosion hazard areas.

(6) Landslide hazard areas include areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors, and include, at a minimum, the following:

(a) Areas of historic failures, such as:

(i) Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;

(ii) Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology Washington coastal atlas; or

(iii) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.

(b) Areas with all three of the following characteristics:

(i) Slopes steeper than fifteen percent;

(ii) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(iii) Springs or groundwater seepage.

(c) Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;

(d) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

(e) Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;

(f) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;

(g) Areas that show evidence of, or are at risk from snow avalanches;

(h) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

(i) Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

(7) Seismic hazard areas must include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:

- (a) The magnitude of an earthquake;
- (b) The distance from the source of an earthquake;
- (c) The type or thickness of geologic materials at the surface; and
- (d) The type of subsurface geologic structure.

(8) Other geological hazard areas:

(a) Volcanic hazard areas must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

(b) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.

13. What Should the Port of Tacoma be ReZoned to because of all the Geological hazards dangers and imminent threats according to the state laws Yes or NO? If yes should the Port of Tacoma be either rezoned Port Maritime Agricultural meaning a function Maritime port with off loading and on loading of shipping but surrounding properties for safety can only be in the Port of Tacoma? Yes or No
14. Is SeaPort Sound site location in the Draft Environment Impact Statement to dangerous to zone industrial? Yes or no
15. The first thing in Any **Environment Checklist/EC or Environment Impact Statement** is to determine if the **Zoning for the area is correct or out dated or incorrect.** Currently the Port of Tacoma is **Zoned Industrial** which according to Washington state laws is the **WRONG Zoning**, because of the extreme dangers does not allow for zoning of residential, Commercial or Industrial of this area since September 1990 by Washington state legislature Growth Management Act/ GMA . The Zoning hazards, imminent threats and Dangers need accessed by state and federal experts they are available free to local governments and just need to be asked and to be invited by writing to commented on by the State of Washington Dept of Natural Resource Division of Geology and State of Washington Emergency Management and if the zoning is in fact Wrong, According to the Washington state laws. The City of Tacoma Planning and City of Tacoma has no reason to seek out others in the field of Geology and other fields since both the state of Washington and the federal government have national known experts many who are listed in the SeaPort Sound DEIS 5 References pages 134-143, also the complete and full documents are available on the various departments websites..Also the Attorney Generals Office needs to be contacted about the different laws and correct interpretations of those laws. Washington state is a **“Home Rule” state meaning the local jurisdictions have the Rule. The state must be Asked for information by the local jurisdiction unless state laws state otherwise. The state agencies must be asked to help and to assure correct interruption of information given by the state’s different agencies to the local jurisdictions. The state also Provides All Indian Tribes full and correct information counseling and assistance for Correct and accurate interpretations of All laws and information given to Tribes. Tribes far more then most local jurisdiction request and ask for help in writing or personal contact with local state and national experts. Because Misleading information could be given by people, companies and others verification of information is necessary and needed for accuracy.** An Example of this is the T. Walsh/a.k.a. Tim Walsh retired State of Washington Geologist and Geological Engineer. The information about an incoming Tsunami to the Port of Tacoma is mentioned on a outgoing very low tide instead of a normal tide or a worst case scenario with a incoming high tide. How far will a high tide with a full moon take the Tsunami inundation inland show the Tsunami State Map mentioned in the Washington state laws under Tsunami the Numbers and letters for the Tacoma zone ...Then Show the New up dated map of the Tsunami inundation using the Seattle Fault with a 42 ft. wave also show Tsunami Wave Train Damage. Name All of the tanks in SeaPort Sound Petroleum Products that could be released and what could catch fire or explode , have pool fires, and how far they can be carried inland, also how far and what environmental damage would happen to the surrounding water and land and animals, and humans? How far would the Pipeline come out of the ground during a liqfaction event if the Pipeline breaks the injuries?

How far the railroad tanker cars would be carried inland then taken out into the Bay how far will the Petroleum products travel with the Out going and incoming tides?

- A. *****NOTE ***Washington state laws use the word Suitable and Unsuitable/ or Not Suited for building on or zoning***. Is the**
- B. **.NOTE*** highlights are mine....Laws are Copied directly from the State of Washington website.** Under Federal Laws FEMA Hazards etc Prohibits building in certain areas Tsunami areas, Volcano eruption, Lahar, Earthquake faults, Seismic hazards, Erosion hazards, Landslide areas, Seiche areas, Storm Surge areas, Dam Break areas, Liquefaction soil areas, natural hazards, etc.... Washington state laws incorporate federal information. *****Note*****some of the laws are more then 30 and 40 years old I had to have them in my Agricultural Science Classes over 40 years ago EPA, SEPA, FEMA and Stafford Act of 1974 hazard mitigation is open space or agricultural land. Agriculture is the only way to make some
- C. *****NOTE ***Tacoma Municipal Code/TMC Land Use Regulations Critical Areas Geological Hazard Areas TMC 13.11.700-13.11.**
- D. Federal and Federal Fire Safety codes also state that Petroleum products facility's, tanks, and others can not be in Any Seismic hazard areas at all, let alone multiple seismic/earthquake caused hazard areas and a Volcano Eruption/Lahar which is prohibited building areas. State laws Also prohibit the location of Any Waste Water Treatment Facility to be located in a Geological Hazard areas also thw Waste Water Treatment Facility is not to be located in a known Flood area such as a River 500 year Flood Way/ the Puyallup river , any Tsunami area, any storm surge. The PSE LNG mentioned in **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** Also States in the Puget Sound Energy/ PSE Liquefied Natural Gas/LNG Facility Final Environmental Statement/ FEIS if you look up each and everyone of the laws **That a Liquifid Natural Gas Facility or Any tanks Can Not be built in ANY Seismic Hazard Area AT ALL. Which that information was totally left out intentional from the PSE LNG FEIS The law number is given but never stated in the document that the land site location is illegal and prohibited by federal laws. If a person does not look up each and every law in the PSE LNG FEIS that person would not know these facts about prohibited Seismic Location. This should be sufficient information under the Washington state laws , the Growth Management Act, federal laws and other laws to Call The PSE LNG FEIS Inadequate and reopen the PSE LNG FEIS or have a New PSE LNG FEIS done.** The PSE LNG Port of Tacoma location according to the Federal CFR and National Fire and Safety codes **PSE LNG is prohibited from being built and located at the site location in Port of Tacoma due to Seismic Hazards.** The PSE LNG Facility is located directly across the Waterway from Seaport Sound/the old TARGA Facility poses an extraordinary risk of explosion when a Catastrophic Failure of the 8 million gallon LNG Tank/ 4,800,000,000 of Natural gas is done the LNG appears to have a greater risk to the entire area then all the SeaPort Sound Tanks combined failing when using the National Oceanic and Atmospheric/ NOAA ALOHA Camo Suite which is setup for normal citizens to use and down load on to any home computer or flash drive and then cross referencing the Explosion range to the Environmental Protections Agencys/EPA MapPlot that map shows the explosion range of the petroleum products and other things.... You can use the BLEVE to get the full range, drift, etc. . Also missing from the PSE LNG FEIS is a total tank Catastrophic Failure of the LNG Tank must be done by federal law and Shown. Tacoma Fire run the Required test but the Catastrophic Failure Test was not put into the PSE LNG FEIS which is Required and mandated by the Same laws that Required the PSE LNG Facility not to be located at the site in the Port of Tacoma seismic hazard areas....the Catastrophic Failure Test from PSE LNG Tacoma Fire dept. running National Oceanic and Atmospheric ALHOA shows that. I talked to the Fire Cheif before he retired. I ran the same modeling and came up with the same 12.6 miles for a blast Catastrophic Failure as the Tacoma Fire Did and the Exclusion from the thermal radiation and asphyxiation Exclusion Zone is 3 miles **Exclusion zones are only for the workers working at the PSE LNG Facility no other human being can be located in the Thermal Radiation and Asphyxiation zone that is and has been federal law for decades.** That means the Tacoma Fire station across from the LNG would be instantly killed during a catastrophic failure of the LNG, but so would a lot of other workers in a

seismic disaster from the petroleum explosions and chemicals on the Port of Tacoma ... I did the modeling with the LNG striking and heating up the SeaPort Sound Tanks which would then Explode the Catastrophic failure would kill and injury hundreds if not thousands of people in the Surrounding areas as shown on the ALOHA Camo Suite Program crossed over on the The EPA's Map Plot.. Both the NOAA Camo Suite and EPA Map Plot were created for local jurisdiction to run Petroleum products and they have one for chemicals also the programs are both nationally and international used. None of this included the hole in the Ground and blast that would cause its own tsunami and possible landslide from the hill by Marine View Drive if saturated from rain water...I did take a Soils and Hydrology Classes at the university...

- E. **Seismic Design is not Designed for a Seismic hazard location. Seismic design is meant to withstand a certain magnitude of earthquake and shake time located outside of the location of a Seismic hazard area.** Both the Magnitude of the earthquake and the amount of time earthquake is shaking must be stated otherwise a person reading the documents would not know this information is critical because that is what Changes the Soil in Liquefaction changing Soil form a solid soil to a liquid soil causing building, structures, tanks and other things to sink, topple, collapse and fail Catastrophically... In Agricultural Science Liquefaction is know as the worlds most dangerous soil to build on because of the high water table but the same soil is good agricultural growing soil. Liquefaction soil poses a big problem for contain tanks with liquid. Liquid Natural Gas/ LNG is every dangerous hazard during an earthquake even outside of a Seismic hazard area because of What is Called Slosh the liquid going back and forth in the contained tank with LNG the pressure builds up inside of the tank because it is shaken 1 gallon of LNG stored at below a -260 = 600 gallons of nature gas the gas wants to expand during shaking a Chinese Expert on LNG Tanks effected by the China earthquake spoke at an International Convention before Covid on the extreme dangers of locating Any LNG even close to an earthquake area after one of Chinas LNG massive Tanks Exploded during an earthquake.....the Port of Tank has 2 earthquake fault lines and a fold line the one fault line heads directly toward the LNG and aline with the old historic creek bed that is covered but runs underground on the Port of Tacoma.
- F. ..
- G. It should be **NOTED** not mentioned in the **Draft Environmental Impact Statement Seaport Sound Plant Modernization Project LU20-0107** the property and the entire Port of Tacoma, Fife, Pacific, Auburn are in the **Dam Break** area from Mud Mountain Dam which if the Dam is broken during a major earthquake /seismic event or Breached the Dam breaking or cracking the entire water behind the dam can come down the Puyallup River all the way to Commencement Bay. The Lahar type mud flow would create the same catastrophic disaster destroying buildings, railroad cars, storage tanks and everything in the Lahar's path a dam break Lahar is different from the Hot Lahar from a Volcanic Explosion from Mt. Rainer which could cause anything flammable to catch fire or explode.
- H. Here are just Some of the State of Washington's laws which must be included in the SeaPort sound Environmental Impact Statement not limited to the federal codes that are missing that state that the land site location can not be used:

RCW [36.70A.030](#)

Definitions.

(6) "**Critical areas**" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; **(d) frequently flooded areas; and (e) geologically hazardous areas.** "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

(8) "Development regulations" or "regulation" means the controls placed on development or land use activities by a county or city, including, but not limited

to, zoning ordinances, critical areas ordinances, shoreline master programs, official controls, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto. A development regulation does not include a decision to approve a project permit application, as defined in RCW 36.70B.020, even though the decision may be expressed in a resolution or ordinance of the legislative body of the county or city.

(14) **"Geologically hazardous areas" means areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.**

Chapter 365-190 WAC

Last Update: 1/27/15

MINIMUM GUIDELINES TO CLASSIFY AGRICULTURE, FOREST, MINERAL LANDS AND CRITICAL AREAS

W.A.C. 365-190-020

Purpose.

(1) The intent of this chapter is to establish minimum guidelines to assist all counties and cities in classifying and designating agricultural lands, forest lands, mineral resource lands, and critical areas.

(2) Growth management, natural resource land conservation, and critical areas protection share problems related to governmental costs and efficiency. The unwise development of natural resource lands or areas susceptible to natural hazards may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, subject persons and property to unsafe conditions, and affect the perceived quality of life. It is more costly to remedy the loss of natural resource lands or critical areas than to conserve and protect them from loss or degradation. The inherent economic, ecological, social, and cultural values of natural resource lands and **critical areas should be considered in the development of strategies designed to conserve and protect these lands.**

W.A.C. 365-190-030

Definitions.

4) "Critical areas" include the following:

(a) Wetlands;

(b) Areas with a critical recharging effect on aquifers used for potable water, referred to in this chapter as critical aquifer recharge areas;

(c) Fish and wildlife habitat conservation areas;

(d) Frequently flooded areas; and

(e) Geologically hazardous areas.

(5) **"Erosion hazard areas" are those areas containing soils which, according to the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones.**

(6)(a) "Fish and wildlife habitat conservation areas" are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species.

(b) "Habitats of local importance" designated as fish and wildlife habitat conservation

areas include those areas found to be locally important by counties and cities.

(c) "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

(8) "Frequently flooded areas" are lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface.

(9) "Geologically hazardous areas" are areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential, or industrial development consistent with public health or safety concerns.

(10) "Landslide hazard areas" are areas at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.

(18) "Seismic hazard areas" are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, debris flows, lahars, or tsunamis.

(21) "Volcanic hazard areas" shall include areas subject to pyroclastic flows, lava flows, and inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

365-190-120

Geologically hazardous areas.

(1) Geologically hazardous areas. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard.

(2) Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to public health and safety are minimized. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas must be avoided. The distinction between avoidance and compensatory mitigation should be considered by counties and cities that do not currently classify geological hazards, as they develop their classification scheme.

(3) Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area:

(a) Erosion hazard;

(b) Landslide hazard;

(c) Seismic hazard; or

(d) Areas subject to other geological events such as coal mine hazards and volcanic hazards including: Mass wasting, debris flows, rock falls, and differential settlement.

(4) Counties and cities should assess the risks and classify geologically hazardous areas as either:

(a) Known or suspected risk;

(b) No known risk; or

(c) Risk unknown - data are not available to determine the presence or absence of risk.

(5) Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. Erosion hazard areas may also include coastal erosion areas. This information can be found in the Washington state coastal atlas available from the department of ecology.

Counties and cities may consult with the United States Department of Agriculture Natural Resources Conservation Service for data to help identify erosion hazard areas.

(6) Landslide hazard areas include areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors, and include, at a minimum, the following:

(a) Areas of historic failures, such as:

(i) Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;

(ii) Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology Washington coastal atlas; or

(iii) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.

(b) Areas with all three of the following characteristics:

(i) Slopes steeper than fifteen percent;

(ii) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(iii) Springs or groundwater seepage.

(c) Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;

(d) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

(e) Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;

(f) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;

(g) Areas that show evidence of, or are at risk from snow avalanches;

(h) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

(i) Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

(7) Seismic hazard areas must include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:

(a) The magnitude of an earthquake;

(b) The distance from the source of an earthquake;

(c) The type or thickness of geologic materials at the surface; and

(d) The type of subsurface geologic structure.

(8) Other geological hazard areas:

(a) Volcanic hazard areas must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

(b) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.

[Statutory Authority: RCW 36.70A.050 and 36.70A.190. WSR 10-03-085, § 365-190-120, filed 1/19/10, effective 2/19/10.]

RCW 43.92.025

Seismic, landslide, and tsunami hazards—Assessment—Technical assistance.

(1) In addition to the objectives stated in RCW 43.92.020, the geological survey must conduct and maintain an assessment of seismic, landslide, and tsunami hazards in Washington. This assessment must apply the best practicable technology, including light detection and ranging (lidar) mapping, to identify and map volcanic, seismic, landslide, and tsunami hazards, and estimate potential hazard consequences and the likelihood of a hazard occurring.

(2) The geological survey must:

(a) Coordinate with state and local government agencies to compile existing data, including geological hazard maps and geotechnical reports, tending to inform geological hazard planning decisions;

(b) Acquire and process new data or update deficient data using the best practicable technology, including lidar;

(c) Create and maintain an efficient, publicly available database of lidar and geological hazard maps and geotechnical reports collected under (a) and (b) of this subsection; and

(d) Provide technical assistance to state and local government agencies on the proper interpretation and application of the results of the geological hazards assessment.

WAC 463-60-265

Proposal—Protection from natural hazards.

The application shall describe the means to be employed for protection of the facility from earthquakes, volcanic eruption, flood, tsunami, storms, avalanche or landslides, and other major natural disruptive occurrences.

[Statutory Authority: RCW 80.50.040 (1) and (12). WSR 04-21-013, amended and recodified as § 463-60-265, filed 10/11/04, effective 11/11/04. Statutory Authority: RCW 80.50.040(1). WSR 92-09-013, § 463-42-265, filed 4/2/92, effective 5/3/92. Statutory Authority: RCW 80.50.040(1) and chapter 80.50 RCW. WSR 81-21-006 (Order 81-5), § 463-42-265, filed 10/8/81. Formerly WAC 463-42-290.]

*******NOTE***** Tsunami Risk Category's are how many people are in imminent threat of grave danger from a incoming Tsunami wave flooding inundation. ****Buildings and structures that where built prior to knowing about the Tsunami hazards and prior to the State of Washington Dept. of Natural Resources, Division of Geology and the United States Geological Survey also providing maps to the local jurisdiction which happens as soon as the state has their tsunami maps maps.....The maps spoken about below are the ones that have been provided to each local jurisdiction so all people and business can be informed of the danger the people are in and the local jurisdiction can work with State Emergency Management to determine what should be moved out of risk zones. The local planning dept . can contact both state Emergency Management and Divison of Geology for help planning.....*****The Tacoma Tsunami Map OER 2009 -9 is done by Tim Walsh form Assistant Geologist for the State of Washington Division**

Geology and national Tsunami Expert ... Tim Walsh has retired since I personally spoke with him extensively over 4 years ago. Tim personally sent me one of the 54 inch by 36 inch **ORF 2009-9 Tsunami Hazard maps** with Fife, Port of Tacoma and Tacoma tsunami flooding inundation area of danger.

Tacoma, Port of Tacoma and Fife are also from the Seattle Fault and new maps are

WAC 51-50-1615

Tsunami loads.

1615.1 General. The design and construction of Risk Category III and IV buildings and structures located in the Tsunami Design Zones shall be in accordance with Chapter 6 of ASCE 7, except as modified by this code.

USER NOTE: The intent of the Washington state amendments to ASCE 7 Chapter 6 (Tsunami Loads and Tsunami Design maps to determine inundation limits, i.e., when a site is within a tsunami are not available for a given site, ASCE 7 maps are to be used. For sites where the Washir

1615.2 Modifications to ASCE 7. The text of Chapter 6 of ASCE 7 shall be modified as indicated in this section.

1615.2.1 ASCE 7 Section 6.1.1. Modify the third paragraph and its exception in ASCE 7 Section 6.1.1 to read as follows:

The Tsunami Design Zone shall be determined using the Washington Tsunami Design Zone maps (WA-TDZ). The WA-TDZ maps are available at <https://www.dnr.wa.gov/wa-tdz>. For areas not covered by the extent of the WA-TDZ maps, the Tsunami Design Zone shall be determined using the ASCE Tsunami Design Geodatabase of geocoded reference points shown in Fig. 6.1-1. The ASCE Tsunami Design Geodatabase of geocoded reference points of runup and associated inundation Limits of the Tsunami Design Zone is available at <http://asce7tsunami.online>.

For coastal regions subject to tsunami inundation and not covered by WA-TDZ

1615.2.2 ASCE 7 Section 6.1.1. Add new fifth paragraph and user note to ASCE 7 Section 6.1.1 to read as follows:

Whenever a Tsunami Design Zone or Fig. 6.1-1 is referenced in ASCE 7 Chapter 6, it shall include the WA-TDZ maps, within the extent of those maps.

Tsunami inundation depths and flow velocities may be obtained from the Washington

1615.2.3 ASCE 7 Section 6.2. Modify ASCE 7 Section 6.2 definitions to read as follows:

MAXIMUM CONSIDERED TSUNAMI: A probabilistic tsunami having a 2% probability of being exceeded in a 50-year period or a 2,475-year mean recurrence, or a deterministic assessment considering the maximum tsunami that can reasonably be expected to affect a site.

TSUNAMI DESIGN ZONE MAP: The Washington Tsunami Design Zone maps (WA-TDZ) designating the potential horizontal inundation limit of the Maximum Considered Tsunami, or outside of the extent of WA-TDZ maps, the map given in Fig. 6.1-1.

1615.2.4 ASCE 7 Section 6.2. Add new definitions to ASCE 7 Section 6.2 to read as follows:

SHORELINE AMPLITUDE: The Maximum Considered Tsunami amplitude at the shoreline, where the shoreline is determined by vertical datum in North American Vertical Datum (NAVD 88).

WASHINGTON TSUNAMI DESIGN ZONE MAP (WA-TDZ): The Washington department of natural resources maps of potential tsunami inundation limits for the Maximum Considered Tsunami, designated as follows:

Anacortes Bellingham area	MS 2018-02 Anacortes Bellingham
Elliott Bay Seattle	OFR 2003-14
Everett area	OFR 2014-03
Port Angeles and Port Townsend area	MS 2018-03 Port Angeles and Port Townsend
San Juan Islands	MS 2016-01
Southern Washington Coast	MS 2018-01
Tacoma area	OFR 2009-9

1615.2.5 ASCE 7 Section 6.5.1. Add new second paragraph to ASCE 7 Section 6.5.1 to read as follows:

6.5.1 Tsunami Risk Category II and III buildings and other structures. The Maximum Considered Tsunami inundation depth and tsunami flow velocity characteristics at a Tsunami Risk Category II or III building or other structure shall be determined by using the Energy Grade Line Analysis of Section 6.6 using the inundation limit and runup elevation of the Maximum Considered Tsunami given in Fig. 6.1-1.

Where tsunami inundation depth and flow velocity characteristics are available from the Washington state department of natural resources, those parameters shall be used to determine design forces in the Energy Grade Line Analysis in Section 6.6.

1615.2.6 ASCE 7 Section 6.5.1.1. Modify the first paragraph of ASCE 7 Section 6.5.1.1 to read as follows:

6.5.1.1 Runup evaluation for areas where no map values are given. For Tsunami Risk Category II and III buildings and other structures where no mapped inundation limit is shown in the Tsunami Design Zone map, the ratio of tsunami runup elevation above Mean High Water Level to Offshore Tsunami Amplitude, R/HT , shall be permitted to be determined using the surf similarity parameter ξ_{100} , according to Eqs. (6.5-2a, b, c, d, or e) and Fig. 6.5-1.

1615.2.7 ASCE 7 Section 6.5.2. Add new second paragraph to ASCE 7 Section 6.5.2 to read as follows:

6.5.2 Tsunami Risk Category IV buildings and other structures. The Energy Grade Line Analysis of Section 6.6 shall be performed for Tsunami Risk Category IV buildings and other structures, and the site-specific Probabilistic Tsunami Hazard Analysis (PTHA) of Section 6.7 shall also be performed. Site-specific velocities determined by site-specific PTHA determined to be less than the Energy Grade Line Analysis shall be subject to the limitation in Section 6.7.6.8. Site-specific velocities determined to be greater than the Energy Grade Line Analysis shall be used.

EXCEPTIONS: For structures other than Tsunami Vertical Evacuation Refuge Structures, a sit need not be performed where the inundation depth resulting from the Energy (ft (3.66 m) at any point within the location of the Tsunami Risk Category IV s

Where tsunami inundation depths and flow velocities are available for a site fr
1615.2.8 ASCE 7 Section 6.6.1. Add new third paragraph to ASCE 7 Section 6.6.1 to read

as follows:

6.6.1 Maximum inundation depth and flow velocities based on runup. The maximum inundation depths and flow velocities associated with the stages of tsunami flooding shall be determined in accordance with Section 6.6.2. Calculated flow velocity shall not be taken as less than 10 ft/s (3.0 m/s) and need not be taken as greater than the lesser of $1.5(gh_{max})^{1/2}$ and 50 ft/s (15.2 m/s).

Where the maximum topographic elevation along the topographic transect between the shoreline and the inundation limit is greater than the runup elevation, one of the following methods shall be used:

1. The site-specific procedure of Section 6.7.6 shall be used to determine inundation depth and flow velocities at the site, subject to the above range of calculated velocities.

2. For determination of the inundation depth and flow velocity at the site, the procedure of Section 6.6.2, Energy Grade Line Analysis, shall be used, assuming a runup elevation and horizontal inundation limit that has at least 100% of the maximum topographic elevation along the topographic transect.

Where tsunami inundation depths and flow velocities are available from Washington state department of natural resources, those parameters shall be used to determine design forces in the Energy Grade Line Analysis in Section 6.6.2.

1615.2.9 ASCE 7 Section 6.7. Modify ASCE 7 Section 6.7 and add a user note to read as follows:

When required by Section 6.5, the inundation depths and flow velocities shall be determined by site-specific inundation studies complying with the requirements of this section. Site-specific analyses shall use an integrated generation, propagation, and inundation model that replicates the given offshore tsunami waveform amplitude and period from the seismic sources given in Section 6.7.2.

Washington Tsunami Design Zone maps and inundation depths and flow velocities from

1615.2.10 ASCE 7 Section 6.7.5.1, Item 4. Modify ASCE 7 Section 6.7.5.1, Item 4 to read as follows:

6.7.5.1 Offshore tsunami amplitude for distant seismic sources. Offshore tsunami amplitude shall be probabilistically determined in accordance with the following:

4. The value of tsunami wave amplitude shall be not less than 80% of the shoreline amplitude value associated with the Washington state inundation models as measured in the direction of the incoming wave propagation.

1615.2.11 ASCE 7 Table 6.7-2. Modify ASCE 7 Table 6.7-2 to read as follows:

Table 6.7-2

Maximum Moment Magnitude

Subduction Zone	Moment Magnitude M_{Wmax}
Alaskan-Aleutian	9.2
Cascadia	9.0
Chile-Peru	9.5

Izu-Bonin-Mariana	9.0
Kamchatka-Kurile and Japan Trench	9.4

1615.2.12 ASCE 7 Section 6.7.5.2. Modify ASCE 7 Section 6.7.5.2 to read as follows:

6.7.5.2 Direct computation of probabilistic inundation and runup. It shall be permitted to compute probabilistic inundation and runup directly from a probabilistic set of sources, source characterizations, and uncertainties consistent with Section 6.7.2, Section 6.7.4, and the computing conditions set out in Section 6.7.6. The shoreline amplitude values computed shall not be lower than 80% of the shoreline amplitude value associated with the Washington state inundation models as measured in the direction of the incoming wave propagation.

1615.2.13 ASCE 7 Section 6.7.6.2. Modify ASCE 7 Section 6.7.6.2 and add a user note to read as follows:

6.7.6.2 Seismic subsidence before tsunami arrival. Where the seismic source is a local earthquake event, the Maximum Considered Tsunami inundation shall be determined for an overall elevation subsidence value shown in Fig. 6.7-3(a) and 6.7-3(b) or shall be directly computed for the seismic source mechanism. The GIS digital map layers of subsidence are available in the ASCE Tsunami Design Geodatabase at <http://asce7tsunami.online>.

1615.2.14 ASCE 7 Section 6.8.9. Modify the first sentence of ASCE 7 Section 6.8.9 to read as follows:

6.8.9 Seismic effects on the foundations preceding maximum considered tsunami. Where designated in the Tsunami Design Zone map as a site subject to a tsunami from a local earthquake, the structure shall be designed for the preceding coseismic effects.

[Statutory Authority: RCW [19.27.031](#) and [19.27.074](#). WSR 21-12-075, § 51-50-1615, filed 5/28/21, effective 6/28/21.]

WAC 463-60-302

Natural environment—Earth.

(1) The applicant shall provide detailed descriptions of the existing environment, project impacts, and mitigation measures for the following:

(a) Geology. The application shall include the results of a comprehensive geologic survey showing conditions at the site, the nature of foundation materials, and potential **seismic** activities.

(b) Soils. The application shall describe all procedures to be utilized to minimize erosion and other adverse consequences during the removal of vegetation, excavation of borrow pits, foundations and trenches, disposal of surplus materials, and construction of earth fills. The location of such activities shall be described and the quantities of material shall be indicated.

(c) Topography. The application shall include contour maps showing the original topography and any changes likely to occur as a result of energy facility construction and related activities. Contour maps showing proposed shoreline or channel changes shall also be furnished.

(d) Unique physical features. The application shall list any unusual or unique

geologic or physical features in the project area or areas potentially affected by the project.

(e) Erosion/enlargement of land area (accretion). The application shall identify any potential for erosion, deposition, or change of any land surface, shoreline, beach, or submarine area due to construction activities, placement of permanent or temporary structures, or changes in drainage resulting from construction or placement of facilities associated with construction or operation of the proposed energy project.

(2) The application shall show that the proposed energy facility will comply with the state building code provisions for seismic hazards applicable at the proposed location. [Statutory Authority: RCW [80.50.040](#) (1) and (12). WSR 04-21-013, amended and recodified as § 463-60-302, filed 10/11/04, effective 11/11/04. Statutory Authority: RCW [80.50.040](#). WSR 92-23-012, § 463-42-302, filed 11/6/92, effective 12/7/92.]

WAC 480-75-310

Geological considerations.

When a pipeline company is planning to build a new pipeline, the design of the new pipeline must reflect consideration of the potential impacts from seismic activity and earth movement.

Yours Truly
Carole sue Braaten

From: [Carolyn Treadway](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:51:16 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Carolyn Treadway
Cwt2014@PlanetCare.us
1951 Circle Lane SE
Lacey, Washington 98503

From: [Chelsea Vetter](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Seaport #LU20-0107
Date: Tuesday, December 20, 2022 9:49:07 AM

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

Once again I feel the city of Tacoma is all talk and no action in regard to the health of this city.

Allowing the expansion of SeaPort Sound without a proper check into the environmental reactions and consequences it will have for the health of the people and creatures who live here is beyond ridiculous. As the group 350 Tacoma has stated "In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA)."

Please stop looking at the money and instead look at the actions of businesses like this in Tacoma. You have a plan for "Greening" the city through the One Tacoma Plan and the Climate Action Plan and yet this is what is constantly proposed for the future of this city. Why bother having the plan at all if this is what gets attention!? Stop engaging with companies that do not have the best interest at heart of residents of the city. Stop allowing companies like this to have free reign. Please do not approve this expansion! Can we please start focusing on companies that actually care about the people who live here, the planet we all reside on, and the future of it!

Thank you

Chelsea

From: [chelsea vetter](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:27:05 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

chelsea vetter
chelsea.m.vetter@gmail.com
6440 s junett st
tacoma, Washington 98409

From: [cheryl waitkevich](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:55:01 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

cheryl waitkevich
cwaitkevich@gmail.com
2027 Bethel St Ne
Olympia, Washington 98506

From: [Christopher East](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:52:59 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Christopher East
me@cgeast.com
3410 North 8th Street
Tacoma, Washington 98406

From: [Claudia Biedener](#)
 To: [Seaport Plant Modernization DEIS](#)
 Cc: [Ushka, Catherine](#); [Hines, John](#); [Blocker, Keith](#); [Bumbaugh, Sarah](#); [Bushnell, Joe](#); [Daniels, Kiara](#); [Diaz, Olyv](#); [Walker, Kristina](#); [Woodards, Victoria](#)
 Subject: SeaPort Sound Terminal Monetization Project
 Date: Tuesday, December 27, 2022 3:33:44 PM

Definition of E M E R G E N C Y: an unexpected situation that calls for immediate action

SeaPort Sound Terminal Monetization Project

After years of participating in public comment periods like this one for yet another fossil fuel expansion project, I have long lost hope that city would actually act on its fanfarious **Climate Emergency** declaration. I am making these comments here not with any expectations that city would attempt to curb climate devastation, but for documentation that residents are fully aware of the wool being pulled over our eyes, the outright deception of climate youth, who will experience the brunt of devastating environmental degradation actions like this one, and the continued and willful violation of the Medicine Creek Treaty.

- This EIS is insufficient it does not meet legal requirements of the State Environmental Policy Act because *the full range* of impacts from the proposed fossil fuel project has not been taken into account.
- DEIS is very unclear as what types of fuels, what quantities, how they would be moved and for how long they would be stored.
- Increases in truck and ship traffic is very vague. Ship noise reduction to protect orcas is not addressed at all.
- The coming of king tides, with increased flooding along port of Tacoma shore lines has not been appropriately addressed. Is city this unaware of near-future flooding that most certainly would affect project location, potentially flush toxic petrochemicals into Hylebos and Commencement Bay? Here flooding that happened just last Sunday at Brown's Point: <https://www.youtube.com/watch?v=BsyY-a73vc>
- Climate emergency does not make any appearance in the entire document. The DEIS for SeaPort toxic fossil fuels EXPANSION simply ignores city of **Tacoma Climate Emergency Declaration**, which passed before this expansion application.
- The Tacoma Fire Department already declared it can NOT meet overall performance goals with the current level of resources. This unjustly hurt community needs, takes resources away from the public, endangers lives and draws resources from our general fund, which are not supposed to prop-up rich private fossil business interests.
- The Project vicinity is not currently served by regular public transit routes. It further deepens dependency on private vehicles, which in turn forces more fuels to be pumped and barged here, creating a vicious cycle of fossil fuel dependency, a need for more paved parking and ever widening roads along with a cycle of guaranteed industry profits and expansion of said harmful industry.
- The Monetization Project is estimated to consume an additional *8.1 million kilowatt hours of TPU power*. Power rates keep rising steeper and faster for residents than industry, again forcing the public to unjustly subsidize very profitable polluters who in turn harm our environment.
- *135.4 million cubic feet of (natural) fracked, imported methane-gas* annually are projected to be consumed by this project. As the entire state of Washington is working hard to wean itself of climate killing methane, the city of Tacoma continues to promote and permit more methane gas, not only for industry, but also their own facilities. This is a violation of climate action, climate policies at city level. The Washington State Building Code Council (SBCC) voted on November 4, 2022, to require heat pumps for all space heating/cooling and water heating in new construction by June 2023. This rule should be applied to industrial expansion, as the consumption of large quantities of dirty fuels only to pump/store other dirty fuels is avoidable climate harm.
- DEIS states that: "The Proposed Action *may reduce* secondary off-site emissions associated with the transport of fuel products, if it is providing more efficient pathways between manufacturers and consumers". This makes zero actual sense - the fuels *have* to be transported to the site, they don't *magically* appear from the fossil fuel fracking locations far far away. Much of the nastiest stuff like *tar sands* come in via barge. Toxic *crude oil* via train, exposing community and environment all along the route. We actually can see the ever increasing lines of fuel tanker trucks at Sound terminal, the many oil barges and mile-long oil trains rattling along the shores of our Sound. It's quite something to see city argue that more fuels = less pollution. It's deceptive pro-industry mind gymnastics we have long experienced with city planning.
- Under "No Action Alternative: DEIS states: "The No Action Alternative could lead to a scenario where the wastewater treatment system equipment is no longer sufficient to meet on-site wastewater permit requirements". This is insinuating that major polluters can simply let waste water treatment go into disrepair unless we allow them to pollute and expand ever more. Again, city uses contorted, deceptive language to support industrial applicant. It also raises real concerns that city is fully aware that industry simply allows water systems to be insufficient and fall into disrepair, regardless of "requirements".
- DEIS further claims that even though this proposal increases risks of spills during transport of fuel products off site, it would be "similar to the No Action Alternative since transportation throughput is driven by market demand". Is the city claiming that sound terminal stores/throughputs whatever the market demands regardless of what is permitted? Or is city simply making clear that anything goes and more toxic fuels are a better "alternative", and expansions are automatically deemed non-significant, pre-approved and approved, after a bit of meaningless pesky "public input"? That is very much the experience many of us have had over the years. It is the fossil fuel market that controls city hall and 'writes' policies, as we have witnessed with PSE. It also contributes handsomely to many political campaigns. City surely won't bite any industrial hand that feeds it, but at least every now and then we get to read some honesty between the lines.
- Further the SEIS states: "SeaPort Sound will contribute an equivalent amount of money to the City's Urban Forestry Program as would be required to purchase third-party-verified GHG. However, SeaPort Sound Terminal LLC (SeaPort Sound) wishes to offer a financial contribution to the City of Tacoma that supports the City of Tacoma Climate Action Plan, 1 and supports urban or watershed forestry in particular. SeaPort Sound would like to know the dollar size of such a contribution that would make it commensurate with the purchase of equivalent GHG offsets." Is this a new practice to allow industrial polluter stuff a bit of money in city coffers and we're all good? Have you paid attention to how our Tacoma tree canopy has been decimated continually, not to mention to nearly complected denuding of trees in the entire port? Anyone can simply cut down trees, top them and butcher them with zero consequences. Even city trees along Pacific in city right-of-way are long suffering from neglect and dying of slow girdling. City forest department appears non-existent as they do not reply to any inquiries about tree ordinance violations, and the same is true for code enforcement. Lots of lofty words about city trees? Yes. Actual proactive tree protection? No.

Any and all of these fossil fuels expansions on the Puyallup Reservation are a violation of the constitutionally enshrined Medicine Creek Treaty.

These expansions are a direct violation of city's own Climate Emergency Declaration, which predates the Seaport Terminal application.

I urge the city to stop harming itself, directly harming all of us and willfully destroying the future of the next generations with extremely short sighted permitting of any and all toxic industries.

Why city and port refuse to honor Tribal leadership, curb fuels NOW, refuse to do anything to build resiliency NOW and refuse to support climate youth can only be explained by money getting in the way, political power being much weaker than industrial-fossilfuel might, staff that is trained by the very industry it is supposed to regulate - paired with blissfully ignoring even the most conservative climate and environmental science and abdicating all responsibility.

Best

Claudia Riedener

From: [Clayton Jones](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 5:27:06 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Clayton Jones
seajay21649@gmail.com
4246 S 148th St
Tukwila, Washington 98168

From: [Connie Nelson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:26:42 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Connie Nelson
nelson8908@yahoo.com
16914 NE 20th St
Vancouver, Washington 98684

From: [Corbin Swanlund](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:49:41 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Corbin Swanlund
corbin.swanlund@gmail.com
1321 1/2 Bates Ave
Los Angeles, California 90027

From: [Courtney Davis](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:40:09 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Courtney Davis
cdavis622@gmail.com
1232 S State Street
Tacoma, Washington 98405

Doll, Christine

From: d robinson <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 11:54 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

d robinson

dlrobinson66@yahoo.com

PO Box 151

Curlew, Washington 99118-0151

From: [Daniel Villa](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:37:04 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Daniel Villa
darovi2003@yahoo.com
1217 S 9th St
Tacoma, Washington 98405-4014

From: [Darcy Skarada](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 1:30:11 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Darcy Skarada
dskarada@gmail.com
10976 Rosa Trail
Kelseyville, California 95451

From: [Darcy Skarada](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 1:21:59 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Darcy Skarada
dskarada@gmail.com
10976 Rosa Trail
Kelseyville, California 95451

From: [David Mendoza](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:47:27 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

David Mendoza
dabashi2017@gmail.com
5830 S Montgomery St
Tacoma, Washington 98409

From: [Deanna Clark](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:37:51 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Deanna Clark
revdeanna2@gmail.com
2215 Merchant Way
Everett, Washington 98208

Doll, Christine

From: Deborah Hodack <info@email.actionnetwork.org>
Sent: Friday, December 23, 2022 1:49 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Deborah Hodack

dchristian999@yahoo.com

11760 Gable Ave SW

PORT ORCHARD, Washington 98367

From: [Deborah Sallee](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 6:49:30 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Deborah Sallee
deborah.sallee@gmail.com
5706 225th st sw
mountlake terrace, Washington 98043

From: [d_goldsmith](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Warning! SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 9:18:39 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

d goldsmith
dell.goldsmith@gmail.com
7150 sw newton pl
Portland, Oregon 97225

From: [Dennis Smith](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:45:42 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Dennis Smith
safetywork46@gmail.com
5723 Schornbush Rd.
Deming, Washington 98244

From: [Derek Gendvil](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:17:51 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Derek Gendvil
dgendvil@gmail.com
9030 W Sahara Ave # 360
Las Vegas, Nevada 89117-5744

From: [Diane Shaughnessy](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:37:15 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Diane Shaughnessy
dshau1@aol.com
7308 N Skyview PL A208
Tacoma, Washington 98406

From: [Dogan Ozkan](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:56:35 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Dogan Ozkan
barisicindogan@gmail.com
318 nobel street 3
Fairbanks, Alaska 99701

From: [dorinda kelley](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:42:26 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

dorinda kelley
dorindask@gmail.com
314 ne. 53rd
portland, Oregon 97213

From: [E. Neal](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:41:07 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

E. Neal
endant@yahoo.com
56 Alexandra Way
CMCH , New Jersey 08210

From: [EDWARD GOLDSTEIN](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:35:33 PM

Principal_Planner Shirley Schultz,

i have read the following statement and am in full agreement with it. thank you for your attention. i hope you will consider the concerns raised, make choices in favor of an environment that will be healthier than the one this project will create. Edward Goldstein, MD, Tacoma

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!
Thank you for reading my comment.

EDWARD GOLDSTEIN
elmerofness@hotmail.com
1217 S 9th St
Tacoma, Washington 98405

From: [Elizabeth Franz](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 7:56:38 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Elizabeth Franz
lizzfranz@gmail.com
5024 S M St
Tacoma, Washington 98408

From: [ERIN GUBELMAN](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:33:57 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As a mother and an educator, I am deeply shocked by decisions being made by elected leaders that will impact future generations in dire ways. I am concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

ERIN GUBELMAN
kasadreams@gmail.com

6505 4th Ave NW
Seattle, Washington 98117

Doll, Christine

From: Erin Reiersen <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 10:56 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

New fossil fuel infrastructure will do nothing to make our communities more resilient to the climate change that is already happening all around us. Adding more pollution, traffic, and environmental degradation to our already overburdened local ecology will only increase the harm that fossil fuels have caused to all of us. Please stop this development and imagine better ways to use our shared resources.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city’s One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Erin Reiersen

reiersen.erin@gmail.com

510 S 36th ST

Tacoma, Washington 98418

From: [Esther Grace Kronenberg](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal DEIS for permit #LU20-0107
Date: Friday, December 23, 2022 10:21:27 AM

I am writing to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement for permit# LU20-0107. I am very concerned about climate change and Tacoma's fossil fuel industry. The DEIS did not do enough to fully analyze all the impacts that could come from this project, and does not follow the law of SEPA. This is unacceptable.

SeaPort Sound did not show us what the impacts could be if they used their new storage to its full capacity. So we don't know what the risks could be from more vessels and railcars, the risks of spills, and the impacts to our air, water, and marine wildlife.

The greenhouse gas study that was done is also completely flawed. It uses outdated data, doesn't include the GHGs we would see from leakage and transportation, and because they didn't study the impacts of operating at full capacity, we don't know what the actual GHG pollution will be. This must be redone, using the most up-to-date data, and use the 20-year GWP since it most closely matches with the life of the project.

Lastly, Seaport Sound has completely greenwashed this project. They are not actually changing their fuel mix, and should not be allowed to call this a "clean fuels" project.

If the Governor is serious about transitioning to clean energy, this project must be re-evaluated.

Thank you for this opportunity to comment. Please protect this community by requiring SeaPort Sound to follow the law.

Esther Kronenberg
Olympia WA

Sent from cyberheaven

From: [Farha Parmita](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Please stop harming the environment, please stop polluting SeaPort Sound
Date: Tuesday, December 20, 2022 9:08:26 AM

Principal_Planner Shirley Schultz,

As a resident of the City of Tacoma, I take great pride on the beauty and natural environment of our city. And I intend to preserve that natural beauty and our environment. It is also your responsibility not to pollute and harm our environment. I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law.

Thank you for reading my comment and I truly hope that you will take a serious look at this matter and choose to protect the environment.

Farha Parmita

farha.parmita@gmail.com

57th Avenue Ct W

Tacoma, Saint Croix Island 98467

From: [Felicity Devlin](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed and Inadequate
Date: Tuesday, December 20, 2022 12:45:16 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As a resident of Tacoma, I am very aware of our history of industrial pollution and contamination. I'm concerned that the proposed expansion by Seaport Sound Terminal is going to repeat the past by severely impacting air quality and increasing greenhouse gas emissions. I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Felicity Devlin
felicitydevlin@yahoo.com

2417 N Washington
Tacoma, Washington 98406

From: [Fern Dot](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:17:29 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Fern Dot
thewanuki+action@gmail.com
209 I St SE
Auburn, Washington 98002

From: [Florence and Kenneth Robinson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 11:47:06 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Florence and Kenneth Robinson
flokentr@gmail.com
1103 2951 Riverside Dr
Ottawa, Ontario K1V 8W6

From: [Geoff Cribb](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Plant Modernization
Date: Tuesday, December 27, 2022 2:50:34 PM

Dear Shirley Schultz

From "Public Meeting Notice - LU20-0107" page on CityofTacoma.org

"The current storage capacity in the refinery area is approximately 15,000 barrels; the new tanks would have a capacity of about 181,000 barrels of diesel, bio-diesel, and other fuel oils."

I am writing to express concerns over the huge expansion of the SeaPort Sound Terminal storage. The risks / concerns should be (need to be) factor in when approving any expansion of the Terminal.

1. With the significant shift away from fossil fuels that needs to take place will the city, state and / or federal government be left with a huge cleanup bill when the storage tanks are at their end of life or if the company goes bankrupt
2. The impact of the facilities being vandalized. The more fuel being stored the bigger potential impact
3. The environment impact of a natural disaster including earthquakes and raising tides. Again, with additional storage there is bigger potential impact

Yours Truly
Geoff Cribb
NE Tacoma WA

From: gnu4158@everyactioncustom.com on behalf of [George Unruh](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Require Revised SeaPort Sound EIS
Date: Tuesday, December 20, 2022 10:32:04 AM

Dear Shirley Schultz, AICP,

I'm concerned that SeaPort Sound Terminal's draft environmental impact statement does not meet the requirements of the State Environmental Policy Act (SEPA), nor does it adequately study the environmental effects of the proposed increase of fossil fuel storage capacity by 11%. As the community overwhelmingly requested in the EIS scoping period, potential effects or increases in vessel, train, or truck traffic must be thoroughly studied. Additionally, the greenhouse gas analysis is insufficient as it does not account for leaks and needs to use the most up to date IPCC data.

In this time of climate crisis, fossil fuel expansion in our community is a profound moral issue, and we must have all the facts available to consider this proposed project.

I am grateful that the City made a Determination of Significance to study the environmental impacts of this proposed expansion. Now, please require SeaPort Sound Terminal to revise their EIS to meet the requirements of SEPA and fully study the impacts of this expansion. Especially given that our city has declared a climate emergency, your role of accountability and oversight is more important than ever.

Sincerely,
George Unruh
13904 115th Ave NW Gig Harbor, WA 98329-7217
gnu4158@gmail.com

From: [Gill Fahrenwald](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:16:25 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Gill Fahrenwald
anvilman@orcalink.com
PO Box 2323
Olympia, Washington 98507-2323

From: [Glen Anderson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: STOP THIS STUPID, CORRUPT PROJECT!!! The DEIS for SeaPort Sound is BOGUS!!!
Date: Tuesday, December 20, 2022 11:00:39 AM

Principal_Planner Shirley Schultz,

Here is my comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

VOTERS HATE THE KIND OF STUPIDITY AND CORRUPTION that are obvious in this project!!!!!!!!!!!!!!!!!!!!!!

VOTERS ARE ANGRY at the DEIS's disregard for honest science!!!!!!!!!!!!!!!!!!!!!!

VOTERS DEMAND OUR LOCAL GOVERNMENTS PROTECT THE ENVIRONMENT AND CLIMATE!!!!!!!!!!!!!!!!!!!!!!

Tacoma's subservience to the fossil fuel industry is ANTAGONIZING VOTERS and HURTING OUR ENVIRONMENT AND CLIMATE!!!!!!!!!!!!!!!!!!!!!!

The EIS process MUST IDENTIFY ALL potential impacts of development projects!!!!!!!!!!!!!!!!!!!!!!

This DEIS is HORRIBLY NEGLIGENT!!!!!!!!!!!!!!!!!!!!!!

It fails to comply t with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in

projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Glen Anderson

glenanderson@integra.net

5015 15th Ave SE

Lacey, Washington 98503

From: [Gloria Mead](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 5:11:27 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Although I am not a resident of Tacoma, I am still quite concerned for all my neighbors and friends who will be impacted by this proposed action.

Thank you for your attention.

Gloria Mead

serenity0156@gmail.com
24801 11th AVE S
Des Moines, Washington 98198

From: [Guila Muir](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 4:43:14 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Guila Muir
guila@guilamuir.com
3724 38th Ave S
Seattle, Washington 98144

From: [Jamie Fiano](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:31:35 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jamie Fiano
jamie.lefiano@gmail.com
7015 S J st
Tacoma, Washington 98408

From: [Jamie Hill](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 2:12:01 PM

Principal_Planner Shirley Schultz,

Hi, friends! I'm sending you this as part of a group effort — I imagine you'll see multiple copies of the assessment below. I want you to know that I've read it thoroughly and genuinely share these concerns; I'm not just haphazardly clicking Send on something. I am deeply concerned about the environmental ramifications of this project, and it's important to me that my representatives in local government do their due diligence and hold Seaport Sound to their legally-mandated SEPA-compliant EIS, as part of a thorough discovery process that centers environmental safety and the city's CAP. Thank you — jamie

////

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-

compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!
Thank you for reading my comment.

Jamie Hill

list@secretagentaudio.com

2930 S 18TH ST

Tacoma, Washington 98405

From: [Jane Miller](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 8:51:16 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jane Miller
mannclanjj@gmail.com
465 Sandburn Ln
Vienna, Illinois 62995-2026

Doll, Christine

From: Janeen Provazek <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 12:38 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

Dear Shirley.

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG

reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Most of this letter is using CHB's great talking points, researched deeply by Erin Dilworth. My concern, Shirley, is that much of the time Our City Council and Planning Department turn deaf ears to the urgency of reducing fossil fuels, continuing to support even expansion!

I feel like there is a level of significant denial and or ignorance of what our community must do to maintain some level of health for our residents, land, air and water. NONE OF THE CLIMATE SCIENTISTS WOULD AGREE TO ANY EXPANSION LIKE WHAT SeaPort Sound is proposing.

PLEASE encourage your fellow city officials to do the right thing! Time is running out.

With Great Concern
Janeen Provazek

Janeen Provazek
provaj@hotmail.com
1117 N 7 St
Tacoma, Washington 98403

From: [Janet Higbee-Robinson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:33:47 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Janet Higbee-Robinson
jhhigbeerobinson@gmail.com
2078 Wildflower Way
Bellingham, Washington 98229

From: [Janice Wilfing](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:27:20 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Janice Wilfing
jwilfing12@gmail.com
167 Sunset Place
Sequim, Washington 98382

From: [Jared Howe](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:41:10 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jared Howe
jaredchowe@gmail.com
4107 MLK Jr Way S
Seattle, Washington 98108

From: [Jean Berolzheimer](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 4:23:13 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jean Berolzheimer
jeanberolz@gmail.com
21421 Monument Rd SW
Vashon , Washington 98070

From: [jean_publieee](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:20:46 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

jean publieee
jeanpublic1@gmail.com
2 mains t
flemington, New Jersey 08822

Doll, Christine

From: Jean Spohn <jeanspohn@centurylink.net>
Sent: Tuesday, December 27, 2022 2:04 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jean Spohn

jeanspohn@centurylink.net

11925 Marine View Dr SW

Burien, Washington 98146

From: [Jeanne Deller](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:01:15 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

These kinds of screw-ups are forever destruction. As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jeanne Deller
jkdeller@gmail.com
4235 164 ave se

Bellevue, Washington 98006

Doll, Christine

From: Jen Braveboy <info@email.actionnetwork.org>
Sent: Saturday, December 24, 2022 9:07 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jen Braveboy

jenniferabrave@gmail.com

744 Market Street unit 201

Tacoma, Washington 98402

From: [Jennea Wood](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 6:32:46 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Jennea Wood
jennea.wood@gmail.com
505 Central St NE
Olympia, Washington 98506

From: [Jessi Presley-Grusin](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Flawed
Date: Tuesday, December 20, 2022 1:14:13 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107 because it is deeply flawed and therefore should not be approved.

As someone concerned about the environment, the climate crisis, and the role of Tacoma's fossil fuel industry in these matters, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity. In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Secondly, since SeaPort Sound did no work modeling the impacts of the new storage at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist this greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for your time.

Jessi Presley-Grusin
jessipresleygrusin@gmail.com
2615 NE Clackamas St

Portland, Oregon 97232

From: hanke_torfin@everyactioncustom.com on behalf of [Joan Torfin](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Require Revised SeaPort Sound EIS
Date: Tuesday, December 20, 2022 7:37:48 AM

Dear Shirley Schultz, AICP,

I'm concerned that SeaPort Sound Terminal's draft environmental impact statement does not meet the requirements of the State Environmental Policy Act (SEPA), nor does it adequately study the environmental effects of the proposed increase of fossil fuel storage capacity by 11%. As the community overwhelmingly requested in the EIS scoping period, potential effects or increases in vessel, train, or truck traffic must be thoroughly studied. Additionally, the greenhouse gas analysis is insufficient as it does not account for leaks and needs to use the most up to date IPCC data.

In this time of climate crisis, fossil fuel expansion in our community is a profound moral issue, and we must have all the facts available to consider this proposed project.

I am grateful that the City made a Determination of Significance to study the environmental impacts of this proposed expansion. Now, please require SeaPort Sound Terminal to revise their EIS to meet the requirements of SEPA and fully study the impacts of this expansion. Especially given that our city has declared a climate emergency, your role of accountability and oversight is more important than ever.

Sincerely,
Joan Torfin
1513 S Sunset Dr Tacoma, WA 98465-1236
hanke_torfin@aol.com

From: [Joel Hildebrandt](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:00:54 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Joel Hildebrandt
senorjoel@gmail.com
3044 Halcyon Ct., unit A
Berkeley, California 94705

From: [John Carlton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: The SeaPort Sound DEIS is inadequate.
Date: Tuesday, December 20, 2022 10:27:17 AM

Principal_Planner Shirley Schultz,

As the the planet is going up in smoke due to fossil fuels, I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As Tacoma has declared a "climate emergency" we know we need to be more concerned about the intended expansion of Tacoma's fossil fuel industry, and the EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity. In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law.

Thank you for reading my comment.

John Carlton

John Carlton
ixora@harboret.com

1004 S. Steele
Tacoma, Washington 98405

From: [John Goertzel](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:04:34 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

John Goertzel
threshold@whidbey.com
5223 Watauga Beach Dr E
Port Orchard , Washington 98366

From: [Jose Xavier](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal Project
Date: Wednesday, December 21, 2022 12:16:11 PM

I am writing this comment to affirm support of the Sound Terminal's Plant Modernization Project. The facility has been providing jobs for many families and should be supported as they provide the much necessary employment and livelihood through the transition from fossil fuels to clean renewable fuels.

SeaPort Sound had been a leader in the community under the Renewable Fuels Standard (RFS) by bringing biodiesel and ethanol into the Pacific Northwest region.

New carbon reduction programs, like the Low Carbon Fuel Standard and the State's planned Clean Fuel Standard, cannot be successful without sufficient logistics and storage capacities. The Plant Modernization Project will allow the Sound Terminal to compete in these markets, provide lower carbon intense fuels and feed stocks into the region, and support low carbon fuel initiatives.

Regards

Jose

From: [JP Kemmick](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 12:41:16 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

JP Kemmick
jpkemmick@gmail.com
1029 NE 91st St
Seattle, Washington 98115

From: [me](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: LU20-0107 - SeaPort Sound Terminal - 2638 Marine View Drive
Date: Tuesday, December 27, 2022 3:50:58 PM

Ms. Schultz -

Here I am once again sharing my concerns regarding SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107. Emails were sent on this same permit in September 2020 and February 2021. FYI that I have read through the DEIS document, although thoroughness and detail ultimately took a back seat to sensory overload.

I, along with others, do request that this SeaPort project need to have a SEPA-compliant EIS in keeping with both the One Tacoma Comprehensive Plan and the 2030 Climate Action Plan. The last several summers and winters, both locally, regionally and globally, have undeniably shown the effects of rapid and dynamic climate change. The DEIS for this project falls short in the use of outdated data, as well as the failure to model the impacts of operation at full capacity. At this point in time, the actual GHG pollution from this expansion remains unknown and requires that a thorough EIS be issued using the most current, up to date data and the 20 year global warming projections (GWP), given the projected life of the project.

As SeaPort Sound did not provide a modeling of the full capacity impact of the project, the full environmental risks remain completely unknown, putting the DEIS in violation of SEPA. As stored product will be distributed by rail, vessel and semi truck, it is imperative that a greenhouse gas study include GHG leakage and transportation. SeaPort Sound Terminal at full capacity will be an even more active site with the potential for more spills that will impact not only the air, but also residents' health.

I live in Browns Point and the most direct route into Tacoma is on 509, passing the Terminal on my way. I appreciate that the DEIS enlightened me on the throughputs for vessels, rail and truck. I read and understand that the throughputs are determined by permit capacities that are already in place. However, it is stunning to view how the current throughputs of all three transportation modes don't come close to reaching the annual permitted amounts. That, to me is very worrisome, as I consider the potential truck and rail safety issues that will exist as the millions of gallons of product stored is sold and transported on our local highways and through our rail corridors upon its completion. It's hard to imagine how our transportation infrastructure can possibly keep up with both this industrial growth and the always growing gridlock on roadways as the area's population continues to increase.

The boondoggle of the Methanol plants in Tacoma and Kalama were prime examples of the need for thoroughly vetted EIS'. Those projects show how important a SEPA-compliant EIS is. It appears that although SeaPort's plan is to expand storage, there is no plan to change the fuel mix. The modernization of the heating units at the facility, which will have a positive effect on GHG reduction, can go forward and be completed without the need for increasing the site's storage capacity. A SEPA-compliant EIS will be able to factually provide the information needed to know what the impacts of a full capacity facility are and whether an 11% increase in capacity is acceptable or not, based on all known operational factors from demolition and rebuild to storage, sale and transfer.

Much has changed globally over the last 3 years. Many workplace operations have changed dramatically. Workforce and supply chain depletions are real. Weather patterns are reflecting alarming seasonal climate changes and it is imperative to do 'due diligence' to ensure that all issues are thoroughly reviewed. The condo buildings in Florida that are collapsing due to water seepage and corrosion are a reminder of what can happen 'down the road' when thorough studies aren't taken and corners are cut. Keep in mind that the water lapping against pilings in the Port's waterways is a toxic, corrosive soup of contaminated sediment plumes that turn solid matter to toxic goo over time.

This expansion does have significance for residents of NE Tacoma, Browns Point and Dash Point. Thank you for reading once again and for your consideration of my concerns.

Judy Ferguson
7219 East Side Dr NE
Tacoma, WA 98422

From: [Julie Miller](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:15:59 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Julie Miller
jumill038@gmail.com
11021 Park Ave S
Tacoma, Washington 98444

From: [Julie Stone](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:35:37 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Julie Stone
juliestone20@gmail.com
8642 SOBEK LANE
CONCRETE, Washington 98237

From: [Justin Maltry](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:42:33 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Justin Maltry
jmaltry@gmail.com
2529 S Grant Ave,
Tacoma, Washington 98405

From: [Karen Salama](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:36:31 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Karen Salama
karen.f.salama@gmail.com
222 east 80 st
Ny, New York 10075

From: [Katherine Giseburt](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:38:40 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Katherine Giseburt
katiemgiseburt@gmail.com
647 West Lake Sammamish Pkwy NE
Bellevue , Washington 98008

From: [Kathy Jorgensen](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:19:37 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kathy Jorgensen
kathyjorgensen57@gmail.com
28525 39th Avenue South
Auburn, Washington 98001

Doll, Christine

From: Kathy IAWHON <info@email.actionnetwork.org>
Sent: Saturday, December 24, 2022 10:49 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kathy IAWHON

klawhon0715@gmail.com

1114 S. 11th St. #417

Tacoma, Washington WA

From: [Katie Gibian](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:37:37 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Katie Gibian
katiegibian@gmail.com
2150 6th Ave N
Seattle, Washington 98006

From: [Keith Dunavant](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:02:01 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Keith Dunavant
kd46379@gmail.com
2102 Yakima
Tacoma, Washington 98405

Doll, Christine

From: Kelly Latimer <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 10:47 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kelly Latimer

kfaerie40@gmail.com

823 East 35th Street

Tacoma, Washington 98404

From: [Kenneth Zirinsky](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Permit# LU20-0107
Date: Monday, December 26, 2022 9:37:05 PM

Planner Shirley Schultz,

Dear Planner Schultz,

I would like to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement for permit# LU20-0107. In my opinion, SeaPort Sound's DEIS has not adequately analyzed the environmental impacts that could potentially result from this project, and does not follow the law of SEPA. This is unacceptable.

SeaPort Sound did not show us what the impacts could be if they used their new storage to its full capacity. So we don't know what the risks could be from more ships and railcars, the risks of spills, and the impacts to our air.

The greenhouse gas study that was done is also completely flawed. It uses outdated data, doesn't include the GHGs we would see from leakage and transportation, and because they didn't study the impacts of operating at full capacity, we don't know what the actual GHG pollution will be. This must be redone, using the most up-to-date data, and use the 20-year GWP since it most closely matches with the life of the project.

Lastly, Seaport Sound has completely greenwashed this project. They are not actually changing their fuel mix, and should not be allowed to call this a "clean fuels" project.

Thank you for this opportunity to comment. Please protect this community by requiring SeaPort Sound to follow the law.

Kenneth Zirinsky
ellenkenab@yahoo.com
3612 N 33rd St.
Tacoma, Washington 98407

From: [Kenra Brewer](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:32:27 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kenra Brewer
kenrabrewer@gmail.com
815 E 46th St
Tacoma, Washington 98404

From: [Kevin Finn](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:23:30 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kevin Finn
vessels2006@gmail.com
525 Larimer Ave Apt. 11
Pittsburgh, Pennsylvania 15206

From: [Kevin Gallagher](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:10:06 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown, and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, and more activity which could create more spills, and a greater impact on our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law.

Thank you.

Kevin Gallagher
kevingal@uw.edu
15866 36th Avenue NE
Seattle, Washington 98155-6620

Doll, Christine

From: Kevin Hodack <info@email.actionnetwork.org>
Sent: Friday, December 23, 2022 2:01 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kevin Hodack

kjhodack@gmail.com

11760 GABLE AVE SW

PORT ORCHARD, Washington 98367

From: kevinjonvash@gmail.com
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal DEIS for permit #LU20-0107
Date: Friday, December 23, 2022 9:32:43 AM

Please include my comments on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

Fossil fuel industry expansion must be carefully evaluated and monitored. The SeaPort Sound expansion proposal promises neither. Accounting for all greenhouse gas emissions, from exploration, extraction, transportation and end use must be accurately determined and included in the DEIS. Governments and agencies have routinely underestimated or have completely failed to consider these emission sources. The SeaPort Sound Terminal DEIS follows this same pattern, and therefore must be rejected.

Calculation of end use emissions must include impacts on water quality, air quality, terrestrial and marine life not to mention impacts due to spills.

An insufficient DEIS is grounds for project dismissal. Only those projects which are fully compliant with SEPA law, and only after careful evaluation, should be considered for inclusion in our neighborhoods and regions.

Thank you for considering my comments.

Kevin Jones

PO Box 2607, Vashon, Wa 98070

206-463-1766

From: [Kirsten Rohde](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:03:07 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kirsten Rohde
krohde14@outlook.com
2865 NE Tahuya River Rd
Tahuya, Washington 98588

From: [Krystal Gonzalez](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 11:19:26 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Krystal Gonzalez
krystalgonzalez93@gmail.com
7810 S Yakima Ave
Tacoma, Washington 98408

From: [Kurt Niedermeier](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed — STOP IMMEDIATELY!
Date: Tuesday, December 20, 2022 9:31:42 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Kurt Niedermeier
kurt@kngraphicdesign.com
719 South Mason Avenue
Tacoma, Washington 98405

From: [Laura Long](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:33:27 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Laura Long
lauralynn7@gmail.com
317 Shady Oaks Loop
Cedar Creek, Texas 78612

From: [Lena Nachand](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 1:43:33 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lena Nachand
lenarosebud@gmail.com
905 N Mullen St
Tacoma, Washington 98406

From: [Lester Pogue](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Objection to expansion
Date: Tuesday, December 27, 2022 4:29:49 PM

Hello Mrs. Schultz, I am writing to further clarify my objection to the expansion of the former TARGA fuel fields, now the Seaport Plant. Tacoma does not need any further expansion of any fossil fuels industries at the port of Tacoma or anywhere in the confines of the City of Tacoma! Honor your commitment to the Climate Emergency legislation the city governance claimed years ago. Clean up that area and create a true safety buffer for the residents of the Northeast Tacoma neighborhoods in that area and honor the Medicine Creek Treaty for the safety and health of the Peoples of the Puyallup Tribe!

I have testified at city council in regards to this subject and am hoping that that testimony will be part of the input, public testimony regarding this project? The City of Tacoma must act to benefit the health and safety of the People of Tacoma and not to profit the fossil fuels industry or the Seaport expansion, please deny this expansion effort! For the sake of future generations and the beings that live in the Salish Sea.

I second the writings and efforts of Claudia Reidner, Tacoma 350 and Communities for a Healthy Bay.

Please let me know if this is sufficient to be included in this effort of letter writing?

Sincerely,

Les Pogue Jr.
253-302-6290

Sent from my iPhone

From: [Leslie McClure](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 6:30:19 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Leslie McClure
lespetmcc@gmail.com
8537 Anderson Ct. NE
Lacey, Washington 98516

From: [Liisa Wale](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:42:18 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Liisa Wale
liisawale@gmail.com
1608 E Street #108
Bellingham, Washington 98225

From: [Lisa Ann Kelly & Family](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:58:37 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lisa Ann Kelly & Family
bluesunflowersb@gmail.com
1724 Olive Avenue
Santa Barbara, California 93101

From: [Lisa Jefko](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:09:15 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lisa Jefko
jzoo@charter.net
7506 Stacy Court
ROSCOE, Illinois 61073

From: [Lisa Key](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:42:09 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lisa Key
Mother of 2 boys

Lisa Key
lunderhi@gmail.com

17424 SE 288th St.
Kent, Washington 98042

From: [Lissa Coleman](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:56:54 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lissa Coleman
lcol1950@gmail.com
3051 Glendale Ave.
Redwood City, California 94063

From: [Lloyd Johnston](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:59:29 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lloyd Johnston
lajceigthi@gmail.com
13421 26th Ave NE
Seattle, Washington 98125

From: [Lloyd Smouse](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:28:33 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lloyd Smouse
lasmouseiv@gmail.com
6440 s junett st
tacoma, Washington 98409

From: [Lori Stefano](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 1:25:49 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lori Stefano
lorilstefano@gmail.com
22440 Vale Court SE
Yelm, Washington 98597

From: [Lori Vest](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Not Compliant with
Date: Tuesday, December 20, 2022 9:41:02 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lori Vest
gglagdmt@gmail.com
11501 Mid Mountain Road
Potter Valley, California 95469

From: [Lorna Walker](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:09:10 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lorna Walker
lorniewalker@gmail.com
28203 137th Ave. SW
Vashon, Washington 98070

From: [Lorraine Johnson](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 1:40:51 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lorraine Johnson
lorraine.d.johnson@gmail.com
13716 Lake City Way NE
Seattle, Washington 98125

From: [Luann Hendricks](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:18:50 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Luann Hendricks
lkphnbc@yahoo.com
2108 N 26th St
Tacoma, Washington 98403

From: [Lucia Faithfull](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:45:06 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107. Also I write as a resident of Federal Way impacted by environmental issues expressed in this letter.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!
Thank you for reading my comment.

Lucia Faithfull
lfaithfull@comcast.net
1232 SW 296th St

Federal Way, Washington 98023

From: [Luke Schindele](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: To whom it may concern
Date: Tuesday, December 20, 2022 3:56:21 PM

To whom it may concern,

As a resident of Tacoma, I do support our industrial core. You can throw a rock and find someone who's family has been supported by the jobs in our Port. With that said, I firmly believe we are at a tipping point when it comes to the climate. So, what do we do? Do we not allow our facilities to modernize or replace half century old wastewater and stormwater infrastructure? Do we not want an old refinery to come down? I understand tanks will be constructed but it only accounts for 10% of the facility's overall storage. We don't know what will be in those tanks but by the time they go up there will be a much higher demand for renewables resulting from regulation and organically, and many more available to be blended or used on their own. The alternative is even higher gas prices on families already feeling too much of a pinch, significant amount of fuel trucks on the road, and barges on our waterways. It is simple supply and demand and unfortunately for some, it is pretty difficult to refute. The demand is here so it actually is much better for the environment to have the supply here. Those tanks will be able to take in, hold, and distribute renewables on day one so it should be all of our responsibility to make sure the market is there for it.

Regards,

Luke Schindele

From: [Lynne Ashton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:52:51 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Lynne Ashton
lynnewashton@gmail.com
PO Box 138
Indianola, Washington 98342

From: [LYNNE MOORE](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:13:12 AM

Principal_Planner Shirley Schultz,

I want to comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

The Climate Crisis is having increasingly devastating effects. We need clean air to breathe, clean water to drink, safety from wildfires & environmental catastrophes, and livable weather. We need to cut down and cease using fossil fuels ASAP, NOT increase capacity.

An EIS is the only way to reveal potential impacts of development projects. Due to rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

The greenhouse gas (GHG) study uses outdated data and does not model the impacts of operating at full capacity! This GHG study did not include the GHG from leakage and transportation. The actual GHG pollution is still unknown, which is unacceptable. A thorough EIS must use the most up-to-date data with the 20-year global warming projections (GWP), given the projected life span of the project.

This DEIS violates SEPA. Since SeaPort Sound did not model the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown. Larger capacity means more ships and railcars, more activity that risks more spills, and worse air quality and health impacts. A legally compliant EIS must address these basic facts.

Not a "clean fuels" project, SeaPort Sound plans to use an unchanged fuel mix. The modernization of the heating units, which will likely reduce GHG, can be completed without increasing fossil fuel storage capacity by 11%. Resist greenwashing!

We need our leaders to guide SeaPort Sound to a SEPA-compliant EIS. Enforcing the One Tacoma and Climate Action Plans needs step by step care. Please ensure adherence to the plans to protect our families' air, water, and health. We need you to secure all our future by enforcing the law!

Thank you for your time and attention to this crucially important matter. Our health and safety--and that of our children and grandchildren--depends on you acting responsibly and enforcing the law. Please respond and let me know how you will act to protect our health and environment and address the Climate Crisis.

LYNNE MOORE
lrmmmn@gmail.com
822 SW 313th Court

FEDERAL WAY, Washington 98023

From: [Maire Masco](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:01:07 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

I am troubled by the DEIS for this project. As in previous development projects at the Port of Tacoma, environmental standards have been ignored and data ignored or misused. My impression is the value of immediate business growth is placed over long-term environmental and social goals. For example, there is no encompassing statement of addressing the Climate Crisis, and this ought to be a mandatory requirement for any projects at the Port.

Specifically to the (DEIS) for permit# LU20-0107:

1. The DEIS does not appear to comply with the State Environmental Policy Act (SEPA).
2. The greenhouse gas (GHG) study uses outdated data. The modeling does not show the impact of increase capacity. I am particularly concerned about issues with leakages. The DEIS does not appear to access the actual pollution of the project.
3. The DEIS does not address/include data on the environmental impact of more ships and railcars and the risk of additional spills and leakage. This lack is in violation of EPA and state standards. In this view, the DEIS is incomplete and void as presented.
4. Any marketing or promotion of the project as "clean fuels" is egregiously wrong. Any project that use petroleum products is by definition "dirty" and saying otherwise is blatant propaganda by the petroleum industry, the involved corporations and makes the government agencies complicit in misleading the public. Please be honest.

I sincerely wish that the DEIS be rewritten to fully document and explain the environmental risks, and to describe the project in light of the global climate crisis. The DEIS must also address Federal and State goals for meeting a carbon-neutral future.

Thank you for reading my comments.

Best regards,

Maire M. Masco
6918 East I Street, Tacoma, WA 98404
maire@tarabala.com

Maire Masco
maire@tarabala.com

6918 East I Street
Tacoma, Washington

Doll, Christine

From: Margo Rolf <info@email.actionnetwork.org>
Sent: Tuesday, December 27, 2022 6:16 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Follow Up Flag: Follow up
Flag Status: Flagged

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG

reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Margo Rolf

margorolf@aol.com

29610 2nd. Pl. SW

FEDERAL WAY, Washington 98023

From: [Martha Bishop](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:55:27 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

I am very concerned about the stability of our climate. I do not want expanded fossil fuel use. Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Martha Bishop
martyl.bishop@gmail.com
1867 Miracle Mile Dr E
Port Orchard, Washington 98366

From: [Mary Rowe](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:21:22 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Mary Rowe
mary.ann.rowe@gmail.com
1602 Main Steet
Sandpoint, Idaho 83864

From: [Matthew Boguske](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:40:13 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown, and mark this DEIS is violating SEPA. Larger capacity will mean more ships and railcars, and more activity which could create more spills, and a greater impact on our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by carefully step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Matthew Boguske
matthew.boguske@gmail.com
8500 148 Ave NE #B1005
Redmond, Washington 98052

From: [Matthew Kolata](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal - Plant Modernization Project
Date: Tuesday, November 29, 2022 10:24:16 AM

I am writing this comment to affirm support of the Sound Terminal's Plant Modernization Project.

Sound had been a trailblazer under the Renewable Fuels Standard (RFS) by bringing biodiesel and ethanol into the region. Programs like the Low Carbon Fuel Standard and the State's plan for a Clean Fuel Standard cannot be successful without sufficient logistics and storage capacities. The plant modernization project will allow Sound to compete in these markets, provide lower carbon intense fuels or fuel feedstocks into the region.

Thank you,

Matthew Kolata

From: [Meagan Galacgac](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Permit #LU20-0107
Date: Thursday, December 22, 2022 1:18:32 PM
Attachments: [Tacoma CAP.pdf](#)

Hi,

I am writing to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit #LU20-0107. I am a resident at 4561 44th St. NE in Tacoma WA 98422.

The DEIS needs to be more comprehensive. It needs to consider the risk that might come to Tacoma's land and air when the fossil fuels spill. Spills and leakage are inevitable, and the DEIS needs to have a plan on what to do if it happens. The DEIS also needs to consider the greenhouse gas (GHG) emissions that come from transporting the product via railways and ships. The DEIS needs to align with Tacoma's Climate Action Plan, which works to "get as close to zero emissions as possible and to offset any emissions that are left with an equivalent amount of carbon removals". This plan has a list of 46 High Impact Actions to implement by 2024, some of which include...

- 6. Support development of a collaborative workgroup to help industries decarbonize through efficiency, electricity, and clean fuels.
- 14. Improve energy codes to make commercial buildings efficient, low carbon, and healthy.
- 28. Reduce construction and demolition waste through permit requirements.
- 33. Build GHG Impact analysis into City budgets, projects, and plans.

I ask that you revise the DEI to plan for the worst case scenarios, for full capacity work, and with the 2030 Tacoma Climate Action Plan. For your convenience, I have attached part of the Tacoma Climate Action Plan that I used to base my information on.

Sincerely,
Meagan Galacgac



2030 TACOMA CLIMATE ACTION PLAN

Actions for a Better & More Just
Tacoma 2021-2024



This Plan describes a pathway for Tacoma to reach its target of net-zero emissions by 2050. It describes the importance of taking transformative climate action now, our people-first approach centering equity and anti-racism, Tacoma’s climate action progress, climate strategies to guide us through 2030, and critical actions for 2024 to start us on our path.

Table of Contents

Land Acknowledgment 3

Letter from Mayor, City Manager, & Utility Director 5

Why Tacoma Needs a Climate Action Plan..... 7

The Opportunity - A Sustainable, Equitable, and Prosperous Tacoma ... 20

The Work We Need to Do to Achieve a Better Tacoma by 2030..... 24

Holding Ourselves Accountable – Tracking Our Progress..... 34

- Section 1, Energy and Emissions Modeling Results
- Section 2, Next Moves Implementation Actions
- Section 3, 2030 Indicator Targets
- Section 4, Financial Analysis
- Section 5, Funding Options
- Section 6, Plan Contributors
- Section 7, Community Engagement Summary
- Section 8, Environmental Justice Leaders Workgroup
- Section 9, Municipal Carbon Neutrality Strategy



Land Acknowledgment

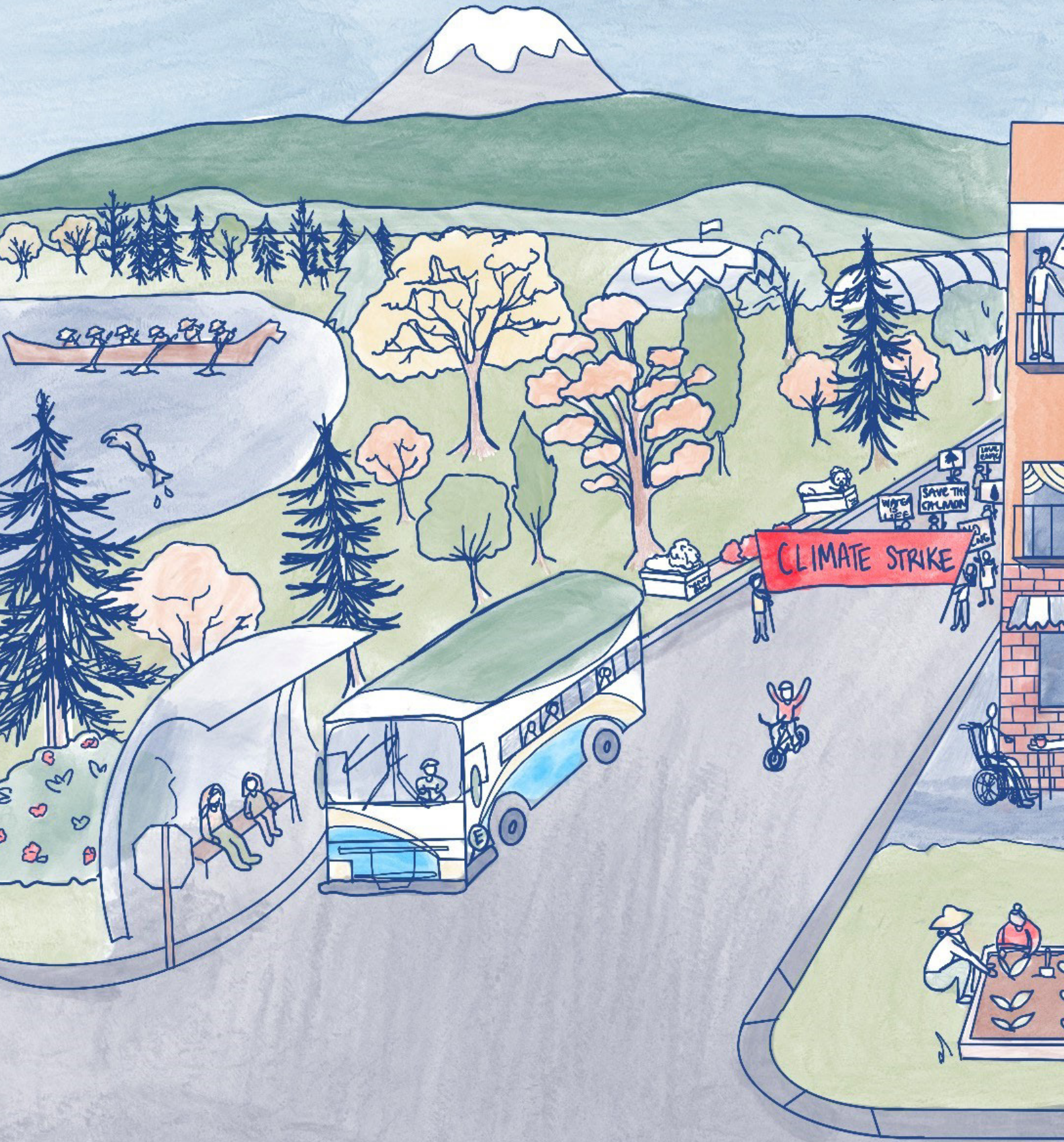
ʔukʷədiid čəł ʔuhigʷəd txʷəl tiit ʔa čəł ʔal tə swatxʷixʷtxʷəd ʔə tiit ʔuyaləpabš. ʔa ti dxʷʔa ti swatxʷixʷtxʷəd ʔə tiit ʔuyaləpabš ʔəstəfəłil tulʼal tudiʔ tuhaʔkʷ. didiʔt ʔa həlgʷəʔ ʔal ti sləxʷil. dxʷəstəfəłils həlgʷəʔ gʷəl ʔuyayus həlgʷəʔ gʷəl ʔuxʷaxʷad həlgʷəʔ tiit hədədəʔs gʷəl tičdxʷ həlgʷəʔ tiit ʔiisəds həlgʷəʔ gʷəl ʔuʔalalus həlgʷəʔ gʷəl ʔutxʷəlšucidəb. xʷəla...b ʔə tiit tuyəlyəlabs.

We gratefully honor and acknowledge that we rest on the traditional lands of the Puyallup People. The Puyallup people have lived on this land since the beginning of time. They are still here today. They live, work, raise their children, take care of their community, practice their traditional ways and speak the Twulshootseed language – just as their ancestors did.

We recognize that this land acknowledgement is one small step toward true allyship and we commit to uplifting the voices, experiences, and histories of the Indigenous people of this land and beyond.

Source: [Puyallup Tribe of Indians, Land Acknowledgment](#)

See the Puyallup Tribe’s land acknowledgment spoken by Tribal members in their native Twulshootseed language: <https://youtu.be/KGnac8x-SIM>



Illustrations by community artist Saiyare Refaei:

(Pages 1, 4-6, 9, 11, 21, 29-33)

Letter from the Mayor

My fellow Tacomans,

Our community is at an important crossroads.

In front of us we have a window of opportunity: we have strong new resources to build back better from the COVID-19 pandemic-recession and repair a legacy of pollution and socio-economic inequality. It's up to us to decide how we rebuild Tacoma – a community we all love and depend on. Together we can rewrite outdated rules and make bold investments for a better way of life. We can begin this work with our new Climate Action Plan.

With this Plan, we will make a significant down-payment on our children and grandchildren's future. We must both reduce climate-warming emissions and adapt to a changing climate. We also know climate action must hold our community at its core. By putting people first, particularly those historically overburdened and underrepresented, we can work together to meet the needs of all Tacomans. This Plan presents us with the opportunity to advance social justice rather than reinforce past inequities – especially when it comes to healthy, affordable housing, our transportation system, and economy.

Together, we must choose our path. Tacoma's future should be bright. Let's make good on our commitment to each other and our planet. Climate action brings many benefits, and the price of in-action is high both in economic and human terms. Future generations will judge our actions, and we speak to them now: the challenges are clear. We must transform our systems at great pace and scale to be carbon-neutral and socially just by major climate deadlines in 2030 and 2050 – or risk catastrophe.

This is our turning point. We are committed to action for climate justice. When we succeed, Tacoma will truly become the City of Destiny. We hope you will join us – and our companions and allies across the country and around the world – in this shared work.

Yours in service,

Victoria R. Woodards



Letter from the City Manager & Tacoma Public Utilities Director

My fellow Tacomans,

We – City of Tacoma and Tacoma Public Utilities staff – recognize the climate emergency and other crises that confront us. We hear clearly Tacoma City Council’s call to action. And, we hear our community’s voices echo throughout this Plan.

As Tacoma’s public servants, you can measure our integrity and effectiveness by our keeping with Tacoma’s democratic policy commitments. We are committed to Tacoma’s climate goals and policies, including our 2050 net zero greenhouse gas emissions goal (Climate Action Plan, 2021), the 2021 Decarbonization Resolutions ([Res. 40776](#), [U-11193](#)), 2019 Climate Emergency Resolution ([Res. 40509](#)), as well as the 2020 Anti-Racist Systems Transformation Resolution ([Res. 40622](#)), which governs everything we do. These policies embody much of our vision for our shared future. With this Plan, you can track our work as we build a Better Tacoma.

As two of Tacoma’s principal public organizations, it is our purpose to plan and act in the long-term vision of this community. The welfare of our community, across generations, is our main concern. As directors of the City and Tacoma Public Utilities, we are committed to ensuring department directors and managers embed climate and equity in every service, policy, program, project, and contract. We will continue to work with Tacoma City Council and the Public Utility Board to direct and authorize our work, including through regular funding requests that empower us to be successful. While adoption is the first step, only implementation of this Plan brings us the progress we need. Indeed, our Earth and everything that calls our planet home depend on the leadership of Tacoma and cities like ours.

Elizabeth Pauli
City Manager

Jackie Flowers
Tacoma Public Utilities Director



Why Tacoma Needs a Climate Action Plan

Our climate has reached a point of crisis. Here we are living through unprecedented heat, extreme downpours, wildfire smoke, and other impacts, with their severity increasing year-by-year. In 2019, Indigenous and youth climate strikes demanded more City climate action. In response to community concerns, the Tacoma City Council declared a climate emergency. This Plan sets climate strategies and actions that get us on track to address the climate emergency by 2030. The science is clear - we need to act urgently.

Climate change is not the only crisis our community is facing. Therefore, City Council asked staff for climate solutions that advance other community priorities – like public health, economic opportunities, social justice, and recovery from the COVID-19 pandemic. On top of these needs, our community is growing – we need to accommodate more people and offer more services. This is the context we are living in, and so it is the context we are planning in.

WHAT DO WE MEAN BY NET ZERO EMISSIONS?

Net zero emissions are achieved by eliminating GHG (greenhouse gas) emissions from activities carried out within the city. The goal is to first get as close to zero emissions as possible, and then to offset any emissions that are left with an equivalent amount of carbon removals. Carbon can be removed from the atmosphere through direct capture and storage technologies, or from reclaiming and restoring natural lands.

In Tacoma, net zero emissions will be achieved by improving the systems and technologies for moving people around, building and operating buildings, producing and manufacturing goods, and disposing of waste.

Working toward a better Tacoma in 2030 and net-zero emissions in 2050, we plan to do our part to solve the climate crisis with strong investments in the immediate and long-term future while improving community health, safety, job opportunities, and equity. That's news we're happy to share: climate action can have many different benefits.

WHAT DO WE MEAN BY EQUITY?

Equity is when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being, and achieve their full potential. ([Racial Equity Alliance](#))

Puyallup Tribal Leadership and Local Stewardship

The Puyallup Tribe has existed since creation as the aboriginal people who are the guardians of their lands and waters and is an independent sovereign nation. The Puyallup Tribe “is committed to a high quality of life for all its tribal members, seven generations and beyond, described by access to healthy, affordable housing, environmentally friendly transportation options, access to sustainable jobs, a rich cultural community that honors [their] ancestors and culture, and thriving ecological environment to sustain our salmon, orca, and other threatened wildlife.” The City of Tacoma “strive[s] to achieve an exceptional quality of life for every generation and leave a legacy of stewardship. We work together to achieve lasting and equitable prosperity; build safe, healthy, vibrant communities; and minimize our negative impacts in order to conserve the natural resources that sustain us.” Climate change threatens both organizations’ visions. We must act together to ensure a safe future together. This Tacoma Climate Action Plan commits the City to our shared community and a future that is more sustainable, just, and collaborative between the City of Tacoma and Puyallup Tribe of Indians.

In December 2019, the Puyallup Tribal Council demonstrated its continued vision, leadership, and commitment to protecting our Earth and future generations in [declaring a climate emergency](#) in coordination with Tacoma City Council. In its resolution, the Tribal Council emphasized reducing its greenhouse gas emissions, preparing for and managing climate impacts, and facilitating a just transition away from fossil fuels. The Puyallup Tribe acknowledges what is at stake with worsening climate impacts -- hotter average temperatures threaten our communities, air, lands, soil, waters, and all other life as well as traditional Puyallup hunting, gathering, and fishing grounds and historical village sites. In these and other ways, climate change threatens the material, cultural, and spiritual well-being of our communities.

A History of Local Pollution and Lessons for Future Regeneration

For thousands of years, indigenous communities stewarded Tacoma’s lands and waters. The natural environment thrived, species were abundant, food was available, and the air, soils, and waters were clean. In just the last 150 years, the colonization, development, and industrialization of Tacoma has seriously degraded our day-to-day life support systems, marginalized indigenous peoples, and resulted in extreme short-term gains for some people at great cost to other people, animals, and plants. Some industries and transportation have polluted and continue to pollute our air, soils, and waters, affecting culturally and economically important species like salmon as well as the health of our communities. A history of logging and lack of environmentally-conscious City policies have contributed to an unhealthy, underdeveloped tree canopy, particularly in Tacoma’s South End and East-side. Wintertime wood smoke pollution [once affected all of Tacoma-Pierce County](#) until public sector intervention facilitated widespread wood stove change-outs less than a decade ago. While we have made some progress addressing pollution, other pollution continues to worsen.

“For future generations to meet their needs... we need to think about the economy in terms of environment and social needs... to include non-human and life-giving entities like bodies of water, mountains, watersheds...”

Tacoma community member

Today, greenhouse gas (GHG) pollution threatens the well-being of our interdependent web of life — for generations. Climate-warming gases are causing and worsening “natural” disasters. We must face the facts and strengthen our path towards environmental regeneration and restorative justice. Black, Indigenous, and People of Color (BIPOC) communities are valued role models and collaborators as we improve our stewardship and seek this new path for our communities.

ENVIRONMENTAL REGENERATION AFTER MORE THAN 100 YEARS OF CONTAMINATION

After more than 100 years of industrial pollution, Tacoma’s Thea Foss and Wheeler-Osgood waterways were burdened with more than 1 million cubic yards of contaminated sediments, to the point that they were categorized by the Environmental Protection Agency (EPA) as heavily polluted Superfund sites. In 2006, the City of Tacoma and our community decided to shoulder much of a \$105 million clean-up of these waterways. With help from the State of Washington and others, the City made great progress in cleaning these waters and continues to protect them from pollution today ([City of Tacoma](#)). Additionally, while not a city-led effort, the [Port has cleaned up most of the waterways](#) in Commencement Bay and the nearshore along Ruston Way, and participated in habitat restoration on over 200 acres.



COVID Recovery and the Just Transition

In 2020, the COVID-19 pandemic nearly halted Tacoma’s economy. Since the initial shutdown, there have been waves of economic and health impacts blunted by public health and social welfare interventions. It has become clear that the pandemic-recession disproportionately harms communities of color, low-income families, small business owners, and other frontline communities – the very same communities which have been historically underserved by the City. COVID-19 teaches us important lessons for the climate crisis: that we must prioritize frontline communities; that we must be well prepared for and invest appropriately for crises we see coming; that government has a unique and central role in crisis planning and response; and that, amid crisis, government and communities can and must act urgently, collectively, innovatively, and transformationally to promote our community’s welfare.

We think these lessons can inform a community resilience- and equity-focused approach to climate action. We can decrease our emissions to enjoy many other benefits, like good jobs, less traffic, cleaner air, more quality housing, and community health and safety. Indeed, these are opportunities we need now more than ever as we recover from COVID-19. Our approach to anti-racism, through a just transition away from fossil fuels, must bring greater benefits to and reduce burdens for our BIPOC and other frontline communities. This Plan lays out a path to realize these outcomes.

“...food forests and community gardens... electric buses and rail... jobs programs, and affordable housing... as a start”

Tacoma community member

WHAT DO WE MEAN BY A JUST TRANSITION?

Shifting our economy away from fossil fuels and other extractive practices without leaving anyone behind. A new, just economy prioritizes living wage jobs in green sectors, human rights, and protection of our life-giving natural systems.

MAYOR WOODARDS CALLS FOR A GREEN AND EQUITABLE RECOVERY FROM COVID-19

In 2020, [Mayor Woodards joined hundreds of other U.S. mayors](#) to call for “bold action [from Congress] to protect our planet and build a more just economy in the wake of the COVID-19 pandemic”

Climate Mayors

TACOMA'S ANTI-RACIST SYSTEMS TRANSFORMATION POLICY

[Resolution 40622](#) affirms Tacoma City Council's dedication and commitment to comprehensive and sustained transformation of all of the institutions, systems, policies, practices, and contracts impacted by systemic racism. It also expresses the City Council's commitment to a comprehensive transformation process that will establish new practices based on community and expert opinion as well as past reform efforts, centering the voices of those most impacted by systemic racism.

Climate Action and Social Justice

Tacoma has not been a place of equal opportunity in the past. For our climate work, it has been important to acknowledge and work from the knowledge that some communities have been denied socio-economic opportunities, made more vulnerable to climate impacts, and underrepresented in City decision-making processes. Our Climate Action Plan intends to be a tool to serve **overburdened** and **frontline communities'** needs and priorities, beyond reducing emissions and building resilience against climate impacts.

"I think preparing workers and investing in green jobs will make Tacoma a location where those businesses can come and thrive."

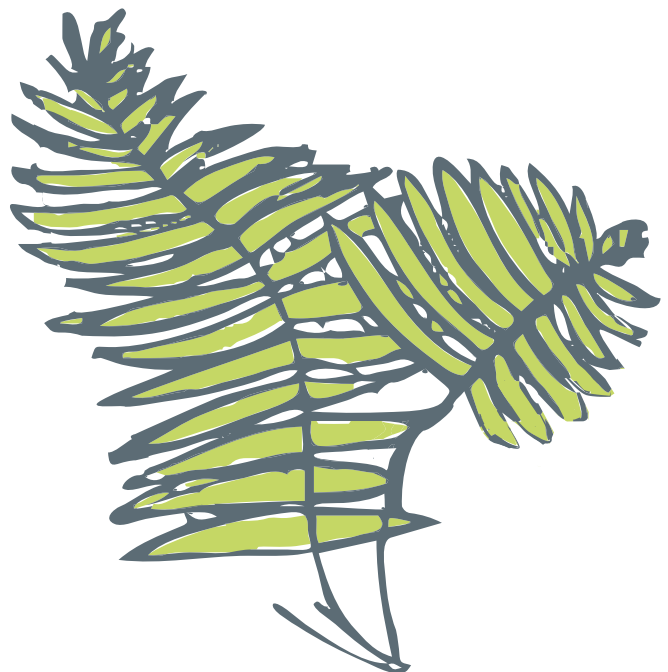
Tacoma community member

OVERBURDENED COMMUNITIES

The EPA describes [overburdened communities](#) as "Minority, low-income, tribal, or Indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks. This disproportion can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors." (U.S. Environmental Protection Agency)

FRONTLINE COMMUNITIES

Frontline communities tend to experience inequity in multiple ways. They tend to be underrepresented, underserved, or made vulnerable; experience lower quality of life outcomes before COVID-19; or now experience worse impacts from the COVID-19 economic and health crisis. Frontline communities also include those expected to experience the first and worst consequences of climate damage. We prioritized frontline communities in our engagement and plan development processes. Frontline



community members include individuals from one or more of the following backgrounds:

- Black, Indigenous, and People of Color (BIPOC)
- Speak English as a second language
- Living with a low household income
- Ages 16-26
- LGBTQIA+
- Living with three or more generations in one home
- Living with more than one family in one home
- Living with a disability
- Immigrant or refugee
- Experiencing homelessness
- Completed formal education up to a high school/GEDI

Our Journey So Far: A Brief History of Tacoma Taking Action

With support and leadership from our community, the City of Tacoma formally started its climate journey in 2006 by forming a Green Ribbon Task Force to produce our first Climate Action Plan in 2008. Mayor Baarsma then joined a movement of over 1,000 cities across the country to pledge to reduce emissions in line with the international Kyoto Protocol.

To date, Tacoma-Pierce County communities have implemented meaningful climate action projects. During the Environmental Action Plan (EAP) from 2016-2020, we rescued over a hundred thousand pounds of food and added over 20% more community gardens in low income communities and communities of color; conducted public education about waste prevention, electric vehicles, and biking; increased home comfort while reducing energy bills for 1,833 households through energy efficiency assistance programs; and expanded urban forests across Tacoma's hottest neighborhoods by over 4,500 trees. However, the EAP goals and investments were not aggressive enough to get us onto a path for a net-zero emissions future. The City must significantly accelerate its efforts to reach the transformational pace and scale required to avoid a climate disaster.

WHAT DO WE MEAN BY TRANSFORMATIONAL?

Transformational can be described as causing a major change to something or someone, especially in a way that makes it or them better. In the context of climate action, it means quickly and drastically changing our value systems, behaviors, governance structures, financial practices, and technologies so that our society can thrive without disrupting our climate or destroying our natural world.

Figure 1. History of climate action milestones and events by the City of Tacoma.

-
- 2007** • The [South Sound Sustainability Expo](#) is created in collaboration with local colleges and universities, supported by the City of Tacoma
 - 2008** • Tacoma's 1st [Climate Action Plan](#) adopted by City Council
 - 2009** • Sustainability Managers hired by City of Tacoma and Pierce County
 - [Sustainable Tacoma Commission](#) created
 - 2010** • [86% of Tacoma's traffic signals converted to LED units to cut nearly 60 tons of carbon and save almost \\$73,000 per year](#)
 - City Council passed the [Mobility Master Plan](#), Tacoma's first comprehensive bicycle and pedestrian plan
 - 2011** • The [Center for Urban Waters](#), a LEED Platinum building, is built by the City of Tacoma following a 2010 municipal [Green Building Resolution](#)
 - 2012** • [Curbside residential food waste pick-up](#) begins in Tacoma
 - 2013** • Over [50 community gardens](#) established throughout Pierce County
 - 2014** • [1st DePave](#) project is organized in Tacoma at Sprague & 6th Ave
 - 2015** • [Local winter air quality improves](#): Tacoma finally meets EPA standard for fine particulate pollution due to a multi-year effort to reduce indoor wood burning
 - 2016** • Tacoma's [2nd Climate Action Plan](#) adopted by City Council
 - 225 kW of [community solar](#) installed by Tacoma Power
 - City street tree giveaways formalized as the [Grit City Trees Program](#)
 - 2017** • Mayor pledged to uphold [Paris Climate Agreement](#)
 - Tacoma's [Bring Your Own Bag](#) law goes into effect
 - 2018** • [East 40th Street](#) receives highest Greenroads® certification in the country. Improvements include new permeable roadway, biofiltration swales, shared use path, and 150 street trees.
 - 2019** • [Climate Emergency Resolution](#) adopted by City Council
 - [Tacoma Power launches new low income energy efficiency programs](#), including a zero interest deferred loan program, based on expanded income guidelines
 - 2020** • [Anti-Racist Systems Transformation Resolution](#) adopted by City Council
 - Publicly available electric vehicle charging stations [installed at 40 locations](#), with dozens more in the planning stages
 - 2021** • Tacoma's first cycle track opens on [E 64th St from Pacific Ave to Mckinley Ave](#).
 - [Decarbonization Resolution](#) adopted by City Council

Local Climate Impacts & Costs

As our climate warms, we must prepare for many [local impacts](#). In the summertime, we will experience more very hot days, longer dry periods without rain, less snowpack, lower stream levels, and more wildfire smoke. In the wintertime, we will see more extreme rainfall, contributing to flooding and landslides. These impacts can be particularly intense for our unhoused neighbors, outdoor workers, kids, seniors, pregnant people, low-income households, BIPOC community members, people with breathing or heart issues, as well as other species, like salmon and orcas. Sea level rise may also cause flooding, especially during high tides and storm surges, or damage important infrastructure near water's edge. The following graphic depicts these effects:

GLOBAL WARMING vs CLIMATE CHANGE

[Global warming](#) is the increase in the Earth's average temperature due to an excess of greenhouse gases trapping heat in the atmosphere. Climate change is the resulting "side effects" of this extra heat causing changes our natural systems. Climate change can look like more intense storms, melting glaciers, changes to rainfall patterns, or changes to agricultural growing seasons.



TACOMA'S FUTURE CLIMATE

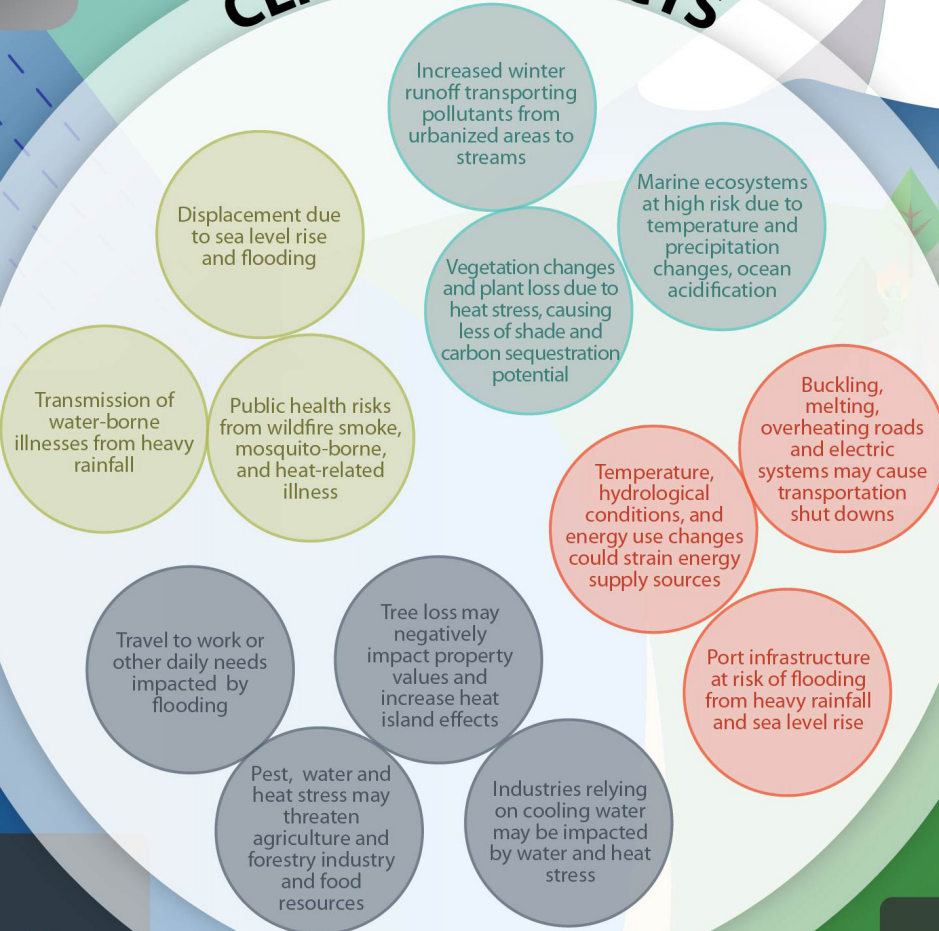
Flooding from extreme precipitation and storm surges

Coastal communities at high risk
Risk release of hazardous materials in vulnerable areas

Extreme heat and drought DRAFT

Increased heat-related illness in vulnerable groups
Greater urban heat island effect in areas with low canopy cover
Strain on electrical supply systems, causing outages

CLIMATE IMPACTS



Sea Level Rise

Low altitude sites at risk for saltwater intrusion, including Central Wastewater Treatment Plant

Roads in tideflat areas at high risk due to lack of protection from dikes or levees

Wildfires and smoke

Poor air quality of special concern for sensitive groups

Damage to critical infrastructure

Changes in water availability for water systems

Landslides

Areas along coastlines at higher risk

Damage to critical conveyance infrastructure, causing system failures

Figure 2. Tacoma's Future Climate, Cascadia Consulting Group, City of Tacoma Adaptation Strategy

An Example of Inequitable Climate Impacts: Urban Heat in Tacoma

[Extreme heat](#) – made worse by the “urban heat island” effect and climate change – is one of the [deadliest climate related challenges](#) in the United States. Urban heat islands occur in areas with large amounts of impervious surface with little green space, such as streets, sidewalks, parking lots, and buildings.

In Tacoma, urban heat islands increase maximum temperatures by as much as 6.2°F above the local baseline. Neighborhoods in Central and South Tacoma may be as much as 14 °F hotter than neighborhoods in North Tacoma. Temperatures above 82°F significantly increase the risk of cardiovascular diseases, respiratory illnesses, and heat stroke.

As our climate warms, we can expect [more extreme heat days](#) in Tacoma. Neighborhoods burdened with the worst extreme heat tend to also suffer from the worst economic and health inequality. In particular, we are concerned about seniors, kids, pregnant people, people with breathing or heart issues, low-income and BIPOC community members, outdoor workers, and our unhoused neighbors. This map shows how urban heat islands correlate with [Tacoma’s Equity Index](#). Low equity neighborhoods are those that have experienced a history of disinvestment and race- and income-based segregation. The City of Tacoma and other institutions, like the federal government, supported practices like [redlining and racial covenants](#) to control neighborhood development. This history has caused gaps in generational wealth, educational attainment, health, and access to essential, life-saving technologies and services like air conditioning, health care, and public transit. We must serve these neighborhoods first. ([Earth Economics](#))

“I believe focusing on reducing heat and the negative impacts of climate change on the most vulnerable communities is crucial.”

Tacoma community member

Costs of Inaction

While taking action to reduce emissions seems expensive, inaction is significantly more costly, to our economies, ecosystems, and human welfare.

Based on an incomplete analysis, our community faces \$250 million or more in potential economic costs of lost ecosystem services by 2080 due to climate change impacts, including worsening wildfires, reduced food production, lost recreational opportunities, and increased health and energy related expenses.¹

Climate impacts are already affecting the lives of Tacoma’s residents and will worsen if we do not act. The cost of climate impacts—or the loss of human life, reduction in quality of life, disruption of critical services, and loss of economic assets from natural hazards and extreme events under future climate change conditions—is \$3.05 billion by 2050.²

¹Source: Tacoma Climate Adaptation Strategy.

²Source: The Cost of Climate Change Inaction: An Examination of Outdoor Tourism & Recreation in Tacoma-Pierce County, Shayla Miles and Abby Perry-Johnson, Evergreen State College, May 2021.

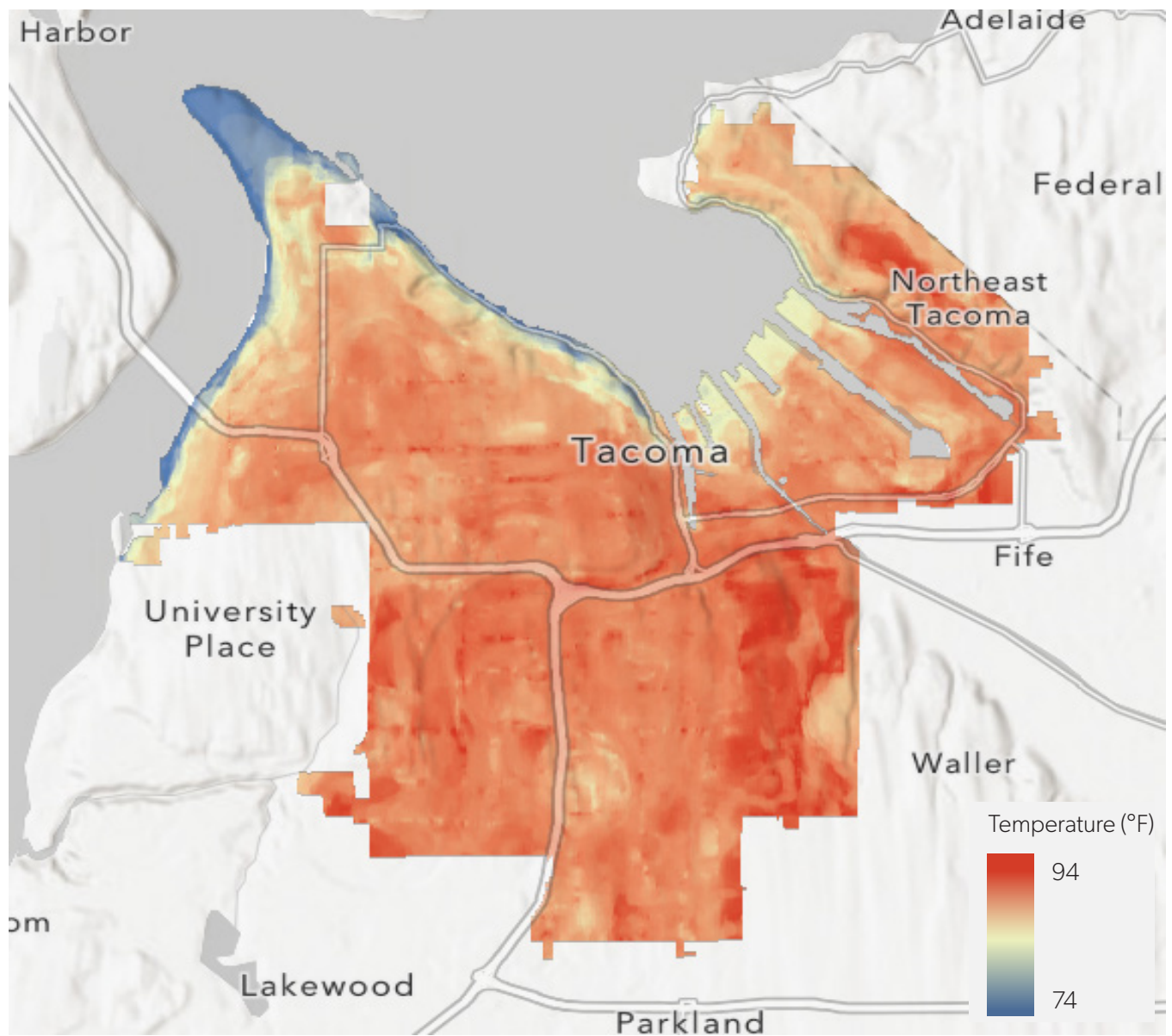


Figure 3. 3pm Temperatures in Tacoma in July 2018, [Tacoma Community Forestry storymap.](#)

“The price of not taking action, both in economic terms and in the potential cost of human health and life, particularly for Tacoma’s most vulnerable populations, is not only fiscally irresponsible but morally unacceptable.”

Mayor Victoria Woodards

Past and Current GHG Emissions

CURRENT EMISSIONS IN TACOMA

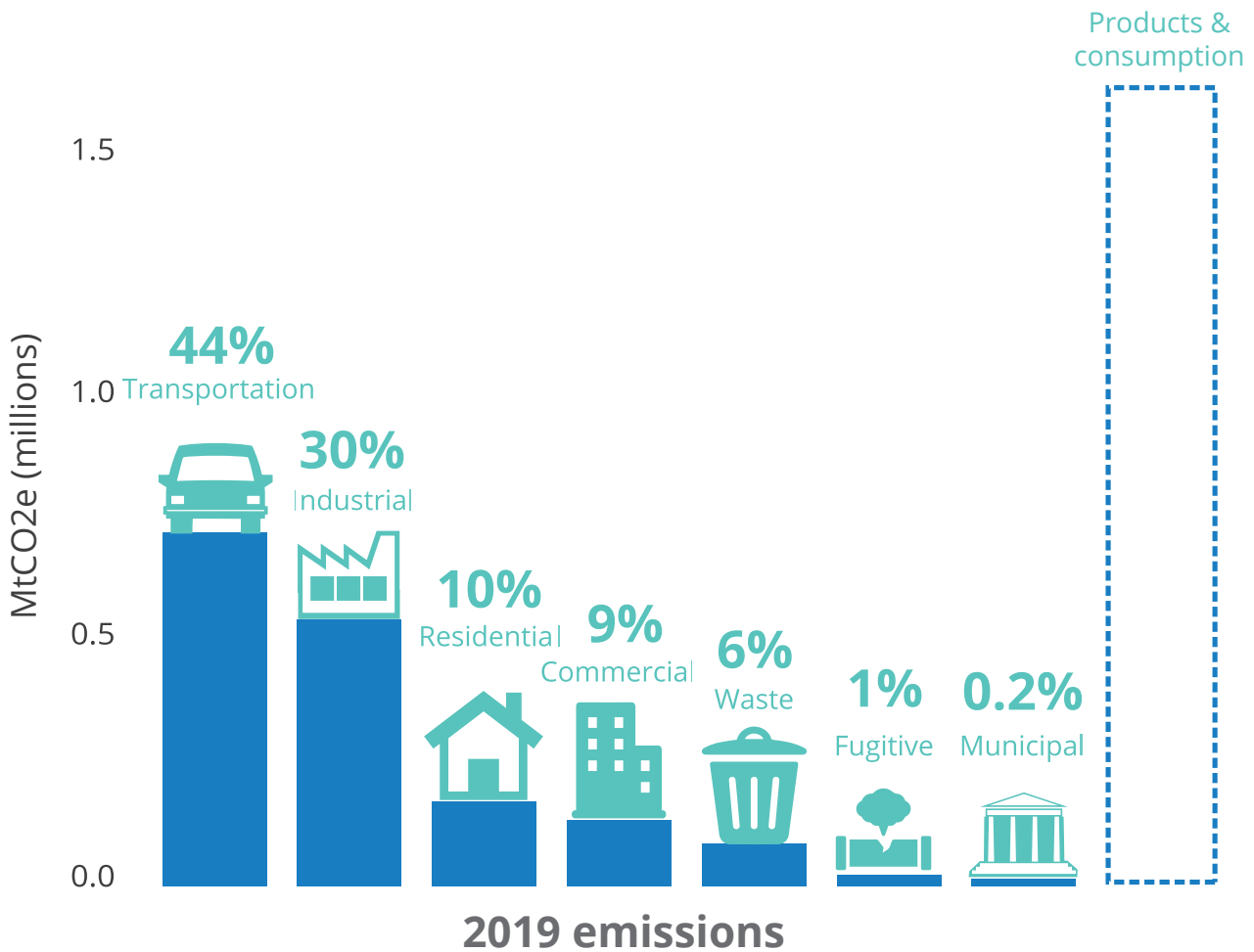


Figure 4. Emissions by sector for Tacoma, 2019

For 2019, Tacoma’s GHG pollution amounted to approximately 1.7 million metric tons of carbon dioxide equivalent emissions (MtCO₂e), or 7.8 MtCO₂e per person. The figure above shows that 44% of GHG pollution resulted from transportation – fossil fuels burned by cars, buses, trains, and trucks. Thirty percent of emissions came from industrial processes. Natural gas used to heat commercial, residential, and municipal buildings and their water accounted for 19% of the city’s

emissions. By comparison, [Tacoma’s electricity is nearly carbon-free](#) (97%) now and working towards being 100% carbon-free by 2045. Six percent of Tacoma’s GHG pollution came from the decomposing organic materials at landfills, and 1% from leaks in natural gas and oil pipelines and systems (also known as fugitive emissions).

This assessment is only the GHG pollution that was created within the city of Tacoma. If we were to include GHG pollution from items produced outside Tacoma that we buy to eat or use, our GHG pollution would nearly double (Products & Consumption portion of bar graph). New technologies and the products we consume can have severe impacts to environmental health and local communities, often in frontline or developing countries.

Choosing a New Path

For a climate-safe and socially just future for Tacoma, we are committed to reaching net-zero emissions by 2050. This is in line with targets being set by many other communities across the U.S., and the global target needed to increase our chances of avoiding catastrophic climate change. Analysis shows that our current climate plans and policies don’t get us nearly as far as we need to go, and that if no new action is taken we will only reduce our GHG pollution by 14% by 2050. We need to forge a new path that reduces our emissions by 33% by 2030 on our way to zero emissions in 2050.

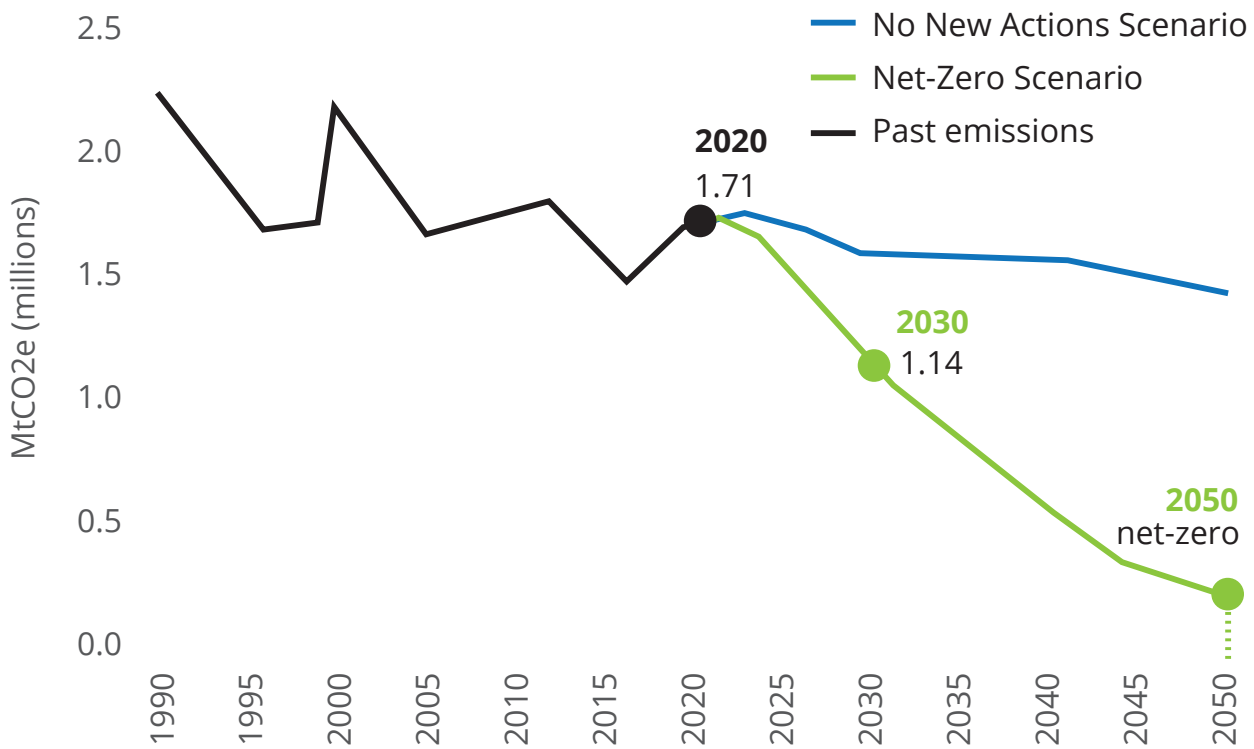


Figure 5. Tacoma’s No New Action versus Net-Zero pathways

The Opportunity

Building a Sustainable, Equitable, and Prosperous Tacoma

What's New for 2021 Climate Action Planning

This is the City's 3rd climate action plan and much has changed since the first plan was released in 2008. Climate impacts that seemed distant then are ones we are experiencing now. Our ability to take action and make a meaningful impact also seemed distant. But there is [increasing evidence](#) that we can make investments to reduce vehicle miles traveled, encourage active transportation, and increase affordable housing. Technology is changing fast – there are now over [80 makes and models of electric vehicles](#) and [more jobs in clean energy than in fossil fuels](#) across the country.

Much has also changed in how we plan for action. We have learned that:

- We can make big changes quickly. Investing time and resources in transformational work cannot wait.
- Communities are willing to participate in climate change actions when they understand how impacts and benefits contribute to a better Tacoma.
- Accountability and transparency are important. Specific actions and measurable targets and outputs make accountability possible.
- The science and the moral cases are clear. Public leaders must make appropriate investments or risk hurting public confidence in institutions.
- Centering frontline communities must be a part of every strategy and action or else we risk worsening socio-economic inequalities. To be anti-racist, every policy, program, and practice must seek to reduce racial inequality.
- All actions provide opportunities to inform, educate, and engage with our communities. We must use these and other tools available to us, like regulations and incentives, to be effective.
- We cannot do this work alone. Tacoma must share resources and collaborate with local, regional, and national partners to achieve the pace and scale of transformation required.

“We need to support frontline communities, but that doesn’t mean leaning on them to provide all of the answers. That’s a lot to ask. We need everyone involved.”

Tacoma community member

Process Matters

Our climate action planning work took risks to break with past practices, diverging from traditional public input approaches onto a new path. We attempted new engagement methods with some success, and some shortcomings. We tried new models, including compensating community participants and partner organizations, particularly from frontline communities, in various roles. This contributed to a new, participatory and people centered process in the hopes of creating a more equitable and anti-racist climate action plan. Recognizing the limits of this process and Plan to transform our community, we are committed to continuous learning and advancing anti-racism in all of our work. In this Plan, from the design stage through implementation, all climate action policies and programs must prioritize affordability and equity outcomes, especially for communities most impacted by climate change.

SUMMARY OF ENGAGEMENT ACTIVITIES/CONTRIBUTORS

As an organization composed primarily of white staff members, we recognize the need to address power dynamics that can subtly or overtly shape engagement and planning processes.

To put people first during our planning process, we used three rounds of community engagement and prioritized input from frontline communities. We recruited 10 Environmental Justice Leaders to form a workgroup met monthly to provide guidance and feedback on the Plan and even write their own section. We also recruited and trained 33 Climate Justice Ambassadors who helped us reach frontline community members through their personal networks to provide interviews, personal stories, and survey responses. Finally, we partnered with frontline organizations to host gatherings with their communities to learn more and provide input. Hosts, Ambassadors, and EJ Leaders were paid a stipend for their contributions.



WHAT WE HEARD – PHASE I, II, & III COMMUNITY ENGAGEMENT REPORTS

Our first phase of community engagement focused on envisioning a sustainable, socially just Tacoma in 2030. Phase II engagement focused on community priorities and feedback for draft climate actions. The third phase of engagement primarily invited public comments on the newly available draft Plan. Detailed information about community engagement can be found in Section 7.

Overall, we engaged a diverse group of Tacoma community members and partners during Phases I and II, built new connections, and collaborated to build community climate knowledge.

What we heard reinforced past community calls for affordable housing, good transportation options, economic opportunities, community health, ecosystem restoration, other basic needs, and an intersectional climate action plan that serves social justice for the benefit of both current and future generations. This Plan is consistent with a long record of community planning and engagement processes, including [Community Survey \(2021\)](#), [One Tacoma Plan](#), [Tideflats Public Engagement Plan \(2021\)](#), [Affordable Housing Action Strategy](#), and the [Transportation Master Plan \(2015\)](#).

It is important to note that, despite our best efforts to reach frontline community members, it is clear from the demographic data we collected that we are often still hearing from a disproportionate number of white, high-income community members. By partnering with frontline serving community organizations to host workshops we were able to prioritize in-depth discussion feedback from frontline community members. 74% of workshop attendees who were able to participate in a short survey self identified as frontline community members. To center historically underrepresented community members, we have reviewed responses by demographic groups to focus on the priorities of BIPOC, low-income, youth, and other frontline communities. You will find community input in Section 7 as well as reflected in our climate actions in coming pages.

ENVIRONMENTAL JUSTICE LEADERS WORKGROUP (EJLW)

The Workgroup convened over the last year was a deliberate attempt to better and more deeply center voices that are not historically at the table for climate and policy discussions. We made the decision to design for quality over quantity of input. Unfortunately, the City did not meet expectations and what is necessary to truly move climate justice forward and strengthen frontline agency. We thank the EJ Leaders for their honesty and commitment and want them and everyone to know that the City will take responsibility to strengthen our anti-racism work and increase meaningful participation in climate justice actions and engagement.

Below is an excerpt of comments from members of the Workgroup:

“As it currently stands, the CAP does not adequately reflect EJLW’s direct input and stated priorities from the past year. We recognize and commend the City of Tacoma for taking a risk and branching out to change their public engagement strategies from the past. We strongly encourage them to continue down this path with some necessary course corrections. We thank you for seeing this need to incorporate our voices and now we demand that you listen to us:

structural, systemic and institutional change must happen now! And in order for communities' faith in municipal institutions to be restored and carried forward for the duration of this CAP, we must move toward a collaborative governance structure."

Implementing the Plan – Putting it All Together

The planning process is about centering frontline involvement, honoring their contributions, and getting to an equitable plan. Implementation of the Plan is how we actually deliver benefits to our community.

To best implement this Plan, we need to spend our time and resources on designing policies, programs, and projects with an equity lens and that address multiple community priorities. Our Plan's actions strive not only to reduce GHG pollution but also improve community health, safety, housing, transportation, green living wage jobs, and access to other essential services. Since climate change interacts with every part of our lives and community, we must work at these intersections.

With an ambitious and intersectional plan, we need to partner – regionally, nationally, and internationally – with trusted community leaders, prioritize actions in neighborhoods that have been made most vulnerable, and build community capacity and access to decision-making. Within and beyond city limits, we will rely on community, public, nonprofit, and private partners to share information and expertise, offer funding and other resources, and deliver services that make our communities better off. We are inspired by the commitment of our local public partners to aggressive climate action, and we are all accountable to each other and the public we must protect and serve. We are collaborating and supporting each other in this work. Section 2 lists dozens of partner organizations we plan to work with on climate actions. Our primary public partners and our local government leaders in Tacoma-Pierce County are: [Pierce Conservation District](#), [Pierce County](#), Pierce Transit, Tacoma Public Schools, Tacoma-Pierce County Health Department, Metro Parks, and [Port of Tacoma/Northwest Seaport Alliance](#). We strive to approach these partnerships with a spirit of humility and collaboration.

We approach this work with clear eyes and determination in our hearts: the pace and scale of action required will not be easy. Trying to balance City budgeting across our current emergencies while making long-term investments to ensure a sustainable future is challenging. By working together, acknowledging the tensions in our work, and changing systems that limit our capacity, we can avert the climate crisis and achieve the many community benefits that come with taking action.

"Make sure to get all neighborhoods involved, not just the most vocal ones. Seek out community leaders in all communities and ask THEM how to make [climate action] equitable."

Tacoma community member

"Action needs to happen at all levels by all departments at the government, local, state, and federal levels."

Tacoma community member

The Work We Need to Do to Achieve a Better Tacoma by 2030

High Impact Actions

The following section lists a series of **2030 Strategies for a Better Tacoma**, based on the themes for better: togetherness, living, breathing, resource use, opportunities, and preparedness. These strategies are each supported by a set of high-impact, near-term mitigation and adaptation climate Actions to complete by the end of 2024. These Actions were developed based on input from community members, staff, and practitioners from numerous local organizations and judged based on the best available facts and science. There is no one solution to reducing our emissions. We need to implement all of these actions to achieve our emissions goal and improve the lives of our communities. Implementing all actions will require the rapid mobilization of significant amounts of resources. However, immediate action will also mean that the city will begin to see the many co-benefits and cost-savings from taking action sooner (for example, cleaner air and lower energy bills). To help jump-start the implementation of the full Plan, ten priority actions have been highlighted in bold below.

The actions in this section are considered **High Impact** because they:

1. Contribute to significant GHG reductions and/or climate resilience;
2. Center historically underserved voices in policy design, development, and implementation;
3. Deliver significant co-benefits, such as improved health, safety, economy and jobs, and affordable housing, that lead to greater prosperity and endure for the long term.

More details on all actions can be found in Section 2 (action numbers are matched to the ones listed here).

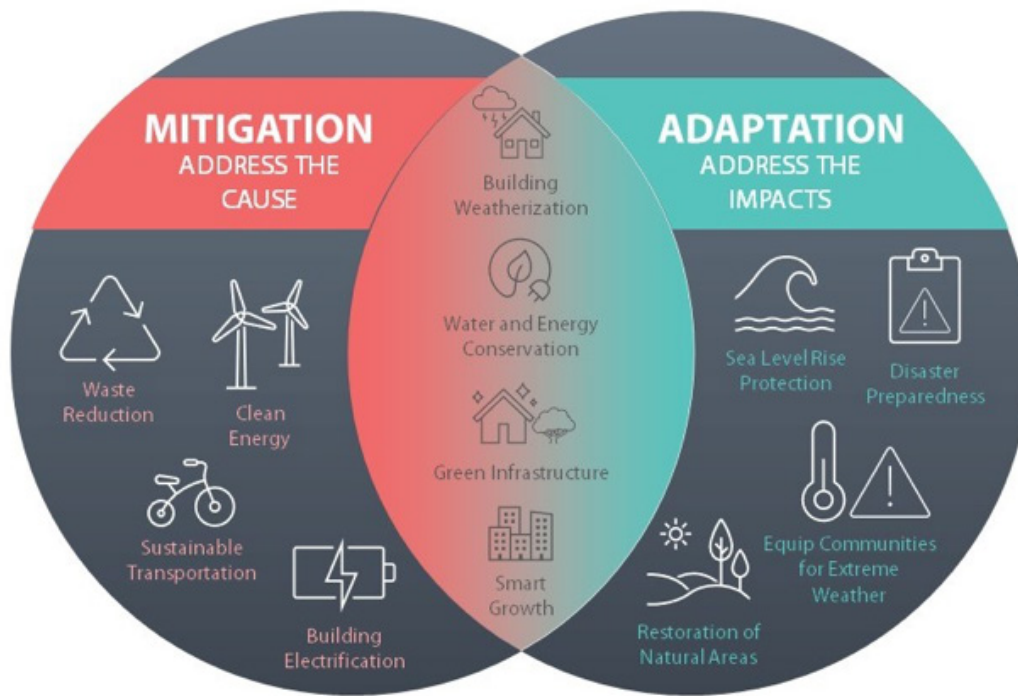


Figure 6. Climate Mitigation and Adaptation: What's the Difference?, City of Tacoma Adaptation Strategy

BETTER TOGETHER

By 2030, City of Tacoma, partners, and communities are equally invested in taking leadership on climate action to build resilient and connected neighborhoods.

Actions by 2024:

1. Prioritize engaging frontline communities in climate work.
2. Fund community participation and partners in waste prevention.
3. **Fund 10 community food access projects like community gardens, food forests, orchards, farms, food rescue efforts, or farmers markets.**
4. **Support community organizers to share expertise and promote climate action engagement.**
5. Increase advocacy for climate action at the State and Federal level.
6. Support development of a collaborative workgroup to help industries decarbonize through efficiency, electricity, and clean fuels.
7. Partner to tackle cross-jurisdictional, adaptation opportunities, including river management and flooding.

“Ensure that community food projects funded are within or in partnership with organizations with a track record of equitability in Tacoma and/or are BIPOC-led.”

Tacoma community member

BETTER LIVING

By 2030, Tacoma has abundant healthy, affordable, emissions free housing, abundant quality local food and green spaces, and safe, efficient, reliable transportation. We are all able to meet our daily needs without having to travel far.

Actions by 2024:

8. Improve regulations to make it easier to grow, make, and sell food.
9. **Build a complete, citywide network of sidewalks, safe and ADA-accessible intersections, bike connections and Safe Routes to School improvements by 2050.**
10. Increase staff capacity to collaborate on low carbon transit projects.
11. Increase partnerships and funding for active transportation and public transit programs and events that reduce barriers to using these modes and encourage their use.
12. Update street design guidelines and processes to make walking, biking, rolling, and riding transit easy and safe.
13. Actively implement the City's 2018 Affordable Housing Action Strategy by maintaining housing and making it affordable and resilient for residents to promote livability and avoid displacement.
14. **Support and create single and multi-family low carbon, healthy retrofit solutions**
15. **Improve energy codes to make commercial buildings efficient, low carbon, and healthy.**
16. Research and pilot home and commercial building energy scores to be shared with buyers.
17. **Incentivize green buildings, land use density, and mixed-use development with affordable housing near transit.**

“Focus on densifying neighborhoods without gentrifying them. Keep people in place! Especially BIPOC, and maintain cultural integrity of neighborhoods so community members do not become strangers in or are priced out of their own neighborhoods.”

Tacoma community member

BETTER BREATHING

By 2030, we are stewards of healthy natural spaces and honor our relationship with the land. Through increasing the use of active transportation and transit, and use of electrification and renewable energy, our air is free of pollution and healthy for our human and nonhuman residents.

Actions by 2024:

18. Preserve and expand healthy tree canopy.
19. Support Pierce Transit in developing a zero emission public transit plan.

“We need more public transportation, more routes, and more frequently run.”

Tacoma community member

- 20. Incentivize active transportation, transit, car sharing, and electric vehicles, and reduce parking minimums in new developments.
- 21. Fund electric vehicle and bicycle programs.
- 22. Partner to support zero emission innovation in marine, rail, and truck transportation.
- 23. Increase Tacoma's Urban Forestry team to care for more trees.

BETTER RESOURCE USE

By 2030, Tacoma is home to a thriving circular economy where materials are reused, and products are built to last and are repaired. We share with our neighbors and eliminate waste.

Actions by 2024:

- 24. **Develop and support programs for food waste prevention, rescue, and diversion to keep food out of the landfill and improve local food security.**
- 25. Reduce per-person water use during summer months.
- 26. Recognize green business achievements.
- 27. Increase commercial and industrial reuse and recycling through a marketplace.
- 28. Reduce construction and demolition waste through permit requirements.
- 29. Divert more clean wood waste and other materials at the Recycling and Transfer Center.
- 30. Add or improve low carbon and sustainability requirements in City investments and contracts.
- 31. Build GHG impact analysis into City budgets, projects, and plans.

“There needs to be better accountability on the waste stream.”

Tacoma community member

BETTER OPPORTUNITIES

By 2030, the community supports a healthy, innovative local economy with new opportunities for all people and businesses to thrive within our ecosystem.

Actions by 2024:

- 32. Partner to train nature stewards for employment and to restore green spaces.
- 33. Partner to retrain the workforce for well paying jobs in the green economy sector.
- 34. Research how to develop a community food hub, with space for food training, sharing, and business.

- 35. Use business taxes to encourage businesses to create more green job opportunities.
- 36. Amend zoning codes to encourage low carbon, resource-efficient, resilient, and businesses.
- 37. Research, identify, and prepare to recruit green industries and jobs that fit Tacoma.
- 38. **Increase City staff capacity to grow green economy partnerships and resources.**

“At the city level, I think preparing workers and investing in green jobs will make Tacoma a location where those businesses can come and thrive.”

Tacoma community member

“Focus on job training in neighborhoods/ schools that are low income and minoritized. Ensure that there is a job pathway for trainees with entry level work and a clear path to careers/ education.”

Tacoma Community Member

BETTER PREPARED

By 2030, we are not only preventing carbon emissions but preparing our communities made most vulnerable for expected climate change impacts.

Actions by 2024:

- 39. Protect and restore biodiversity and habitat to be climate change ready.
- 40. **Plant and maintain right-of-way trees to reduce heat and support neighborhoods and local businesses.**
- 41. Establish cooling/warming/clean air shelters in every neighborhood.
- 42. **Partner to distribute clean air kits, including filter fans.**
- 43. Make communication materials and trainings about climate impacts and emergency preparedness accessible.
- 44. Assess, monitor, and prepare natural systems, infrastructure, and habitat for sea level rise.
- 45. Study flooding impacts and improve services, codes, and planning efforts.
- 46. Plan for future clean energy needs with adequate and equitable electricity distribution and transmission

“Part of what the city needs to do is coordinate efforts to ensure that the most vulnerable are protected against the worst impacts of climate change-excessive heat, wildfire smoke exposure, etc.”

Tacoma community member

A Better Tacoma: Stories from 2030

What does taking action on climate change mean for our daily lives? To illustrate what achieving climate actions and working towards our 2030 Strategies will mean for our communities, the following Stories are snippets of 2030 life in Tacoma. Sprinkled throughout the Stories are references to Actions by 2024.

These Stories are fictional. While we hope you find characters in the Stories relatable, any resemblance to real people is coincidental. For more information about specific actions, visit the linked action reference numbers.

STORY 1: MORNING COMMUTE

Dolores is just clearing the breakfast plates into the compost bin (24) when she checks the clock. The school bell will ring in 15 minutes, it's time to get Nadine on her way to class. Dolores helps her wheel her bike off of the porch and down the front path, gives a quick hug, and watches her

ride down the block to meet her friends. The trees planted (18) by a crew of forest stewards (33) cast a cool shade on Nadine and her classmates as they take the path to school (9).



Assured her grand-daughter will make it safely there on time, Dolores heads back inside to prepare for her own commute. Double-checking to make sure she has loaded cash onto her reduced fare ORCA card, she heads out the back door of their duplex.

At the end of the alley, Dolores crosses the protected bike lane (12) and joins several others at the bus stop (11). She missed her usual bus this morning but the next one arrives in 8 minutes (10) so she won't be late to work. While she waits, Dolores sees her neighbors cross the road heading towards the car share station (20, 21). She calls out and waves.

They hold up their picnic gear in response and call back, "We're heading to the mountains!" Dolores starts to reply, wondering which trail they will be hiking this time, but is cut off by the noiseless arrival of her bus (19). Dolores guides her walker up the bus ramp and finds her seat.

STORY 2: LUNCH WITH FRIENDS

Andrea sets the last box of apples down on the counter, wipes their brow, and peels off their work gloves. They have spent the morning gleaning fruit from right-of-way trees (40) around town and delivering them to restaurants (24). This is the last stop and Andrea is ready for lunch. They

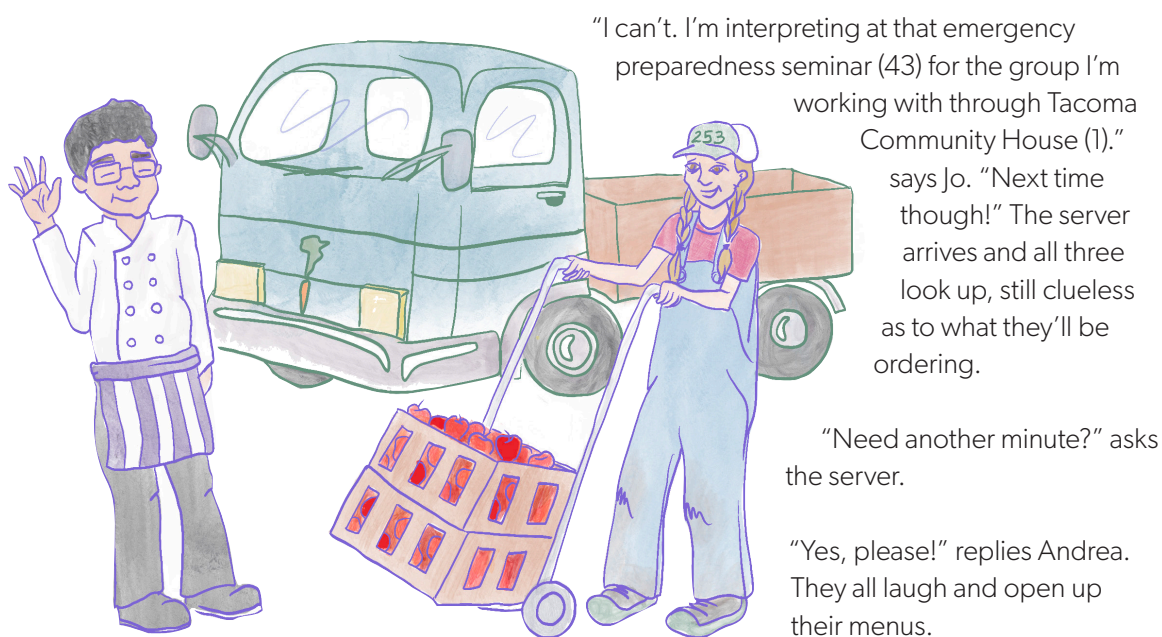
peek out into the dining room and smile. Jo is already seated at a table for their lunch date!

“María will be here in a minute, she’s just getting off the Link (11) from campus,” says Jo as they pick up their menus. “How’s your new apprenticeship (32) going?”

“Honestly, so great! I’m learning so much about tree care (23). And I dropped off fresh apples and plums at the community food hub (34) today. I hadn’t been there before. Whatever they were making in the cooking class smelled delicious. I’m so hungry now!”

“Well, perfect timing!” replies Jo, seeing María walk in.

“Sorry I’m late,” María apologizes, “I was trying to get a few more sign-ups for tomorrow’s beach clean-up (4) after class. Are you coming?”



“I can’t. I’m interpreting at that emergency preparedness seminar (43) for the group I’m working with through Tacoma Community House (1).” says Jo. “Next time though!” The server arrives and all three look up, still clueless as to what they’ll be ordering.

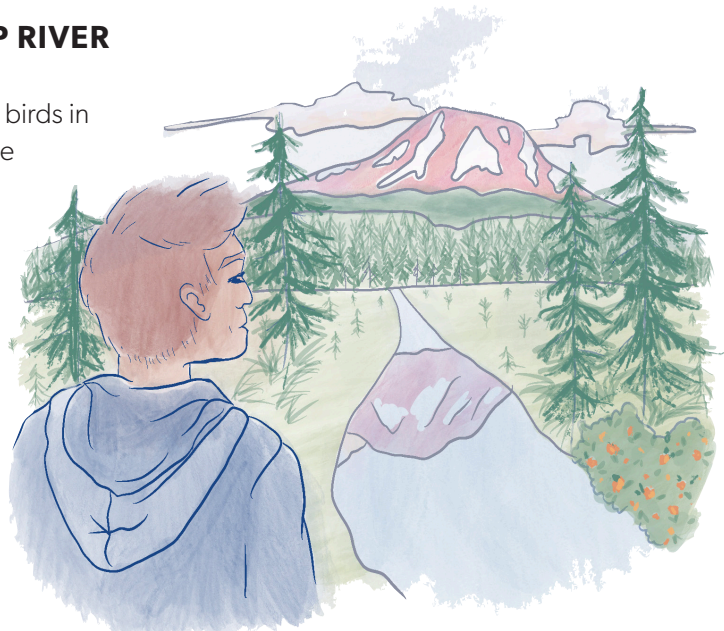
“Need another minute?” asks the server.

“Yes, please!” replies Andrea. They all laugh and open up their menus.

STORY 3: WORK DAY BY THE PUYALLUP RIVER

Carlos shuts the back of the truck closed, stirring the birds in the fir tree nearby. It’s cold out but it’s his favorite time of the day – prepping the crew trucks just as the sun is starting to rise. Today is a special day too. They have new crew members joining them, recent grads from the TCC landscaping and restoration program (32, 33). Julia, the crew manager, was able to hire more members due to the new green jobs incentive the City is offering (35).

It’s been almost 10 years since Julia and Carlos first visited the site as new crew members themselves. Julia will lead the new crew through a tour of the site and get them started planting



salmon berry and sedge along the river bank (39). Carlos is most excited for their Puyallup Watershed restoration partners (7) to join him to talk about water management and flood and erosion control (45). He wants his new crew to understand the land they are on. Just beyond their site is an organic farm (3, 8). They benefit from clean water for irrigation from the river and are protected from winter floods by the habitat restoration and bank stabilization the crew is working on (44). Last year Carlos worked with the farm owner to make sure their nutrient runoff isn't affecting the river ecosystem downstream and so now they're a recognized green business (26).

Carlos tosses Julia a set of keys. The trucks pull out of the lot and head to the river. Carlos watches Mount Tahoma turn pink with the rising sun and feels ready for the day ahead.

STORY 4: COFFEE AT THE COMMUNITY CENTER

Ray has moved his usual Tuesday morning coffee with friends to the Peoples Community Center, a cooling center (41), on this hot and smoky 94°F August day. He chats with Leilani and Rob over a game of cards. They discuss their weeks. Ray's grandchildren were just visiting from across town. Conversation keeps returning to the heat and the wildfires in the region. Ray shares that his grandson, Osmar, has asthma as he pats the filter fan (42) beside him. City staff were handing them out to homes that don't have air filters. They said this building was retrofitted a few years ago to be a space with clean air and an all-electric heating and cooling system (15). They also said that with his fixed income he could qualify for a ductless heat pump, which can provide home heating, cooling, and air filtration. He might just do it, since summers are hotter than they used to be.



Leilani shares they have a barbecue planned this weekend if the weather improves and the burn ban is lifted by then. With the heat and smoke, they plan to stay overnight in the cooling center. In a way, it reminds Rob of the summer camps he used to attend – food, social activities, and a recent blockbuster will be playing on the big screen in the community hall after dinner.

STORY 5: FIRST DAY ON THE JOB

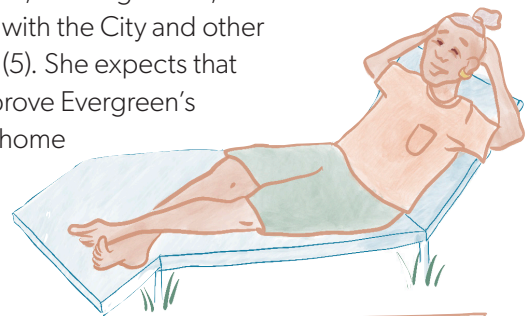
Akash arrives to his first day on the job at Container Services Terminal (CST) with a mix of excitement and anxiety. His mom worked in the tideflats for years, serving on teams that moved countless containers from the huge oceangoing vessels that come to Tacoma. He takes pride in the idea that he will help bring food and cargo to and from Tacoma and the wider region.

His supervisor, Theresa, explains that the organization has been around since 1939. It values not only its reputation as a reliable business partner, but as a responsible company with its roots in Tacoma. It has accomplished big reductions in emissions through innovation in its operations and has helped its shipping partners in truck and rail transportation reduce their emissions too.

And, it has a commitment to reduce emissions another one-third by the end of the decade. To meet their goal,

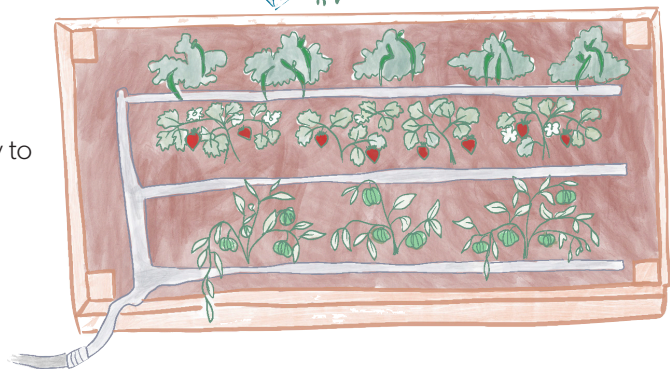
Theresa represents CST as part of a Tacoma sustainable manufacturing and industry collaborative (37, 38), which is a group of Tideflats businesses developing a cooperative approach to clean fuels (6, 46) and delivering port services to build their competitive edge internationally. Container

Services Terminal and the Port of Tacoma are committed to getting to net zero by 2050 to meet the commitments established in the Northwest Ports Clean Air Strategy. The company recently deployed shore power at its terminal so that vessels can turn off their engines while they are at berth and now they are working with the Port of Tacoma and Tacoma Power to explore innovative ways to deploy zero emission cargo-handling equipment. This will reduce emissions and noise, creating a safer, better working environment for waterfront workers. CST, in partnership with the City and other regional organizations, is helping shape national green port policy now (5). She expects that Akash can follow in her footsteps someday, helping to maintain and improve Evergreen's services into the next generation. Working at CST means Akash can go home at the end of the day with good pay and satisfaction that he helped deliver the day-to-day goods everyone depends on. "This work is profitable without sacrificing fair pay and responsible environmental practices, and we want you to hold us to it"(37). Akash nods and smiles.



STORY 6: SATURDAY'S HOME PROJECTS

Sam is around the house for the weekend. There's plenty to get done, and truth be told she likes home projects. The to-do list: add a garden bed, plant giant sequoia and blueberry seedlings from the Lincoln High School plant sale, and walk the contractor through the house energy audit. Sam begins with the garden bed. Reusing old

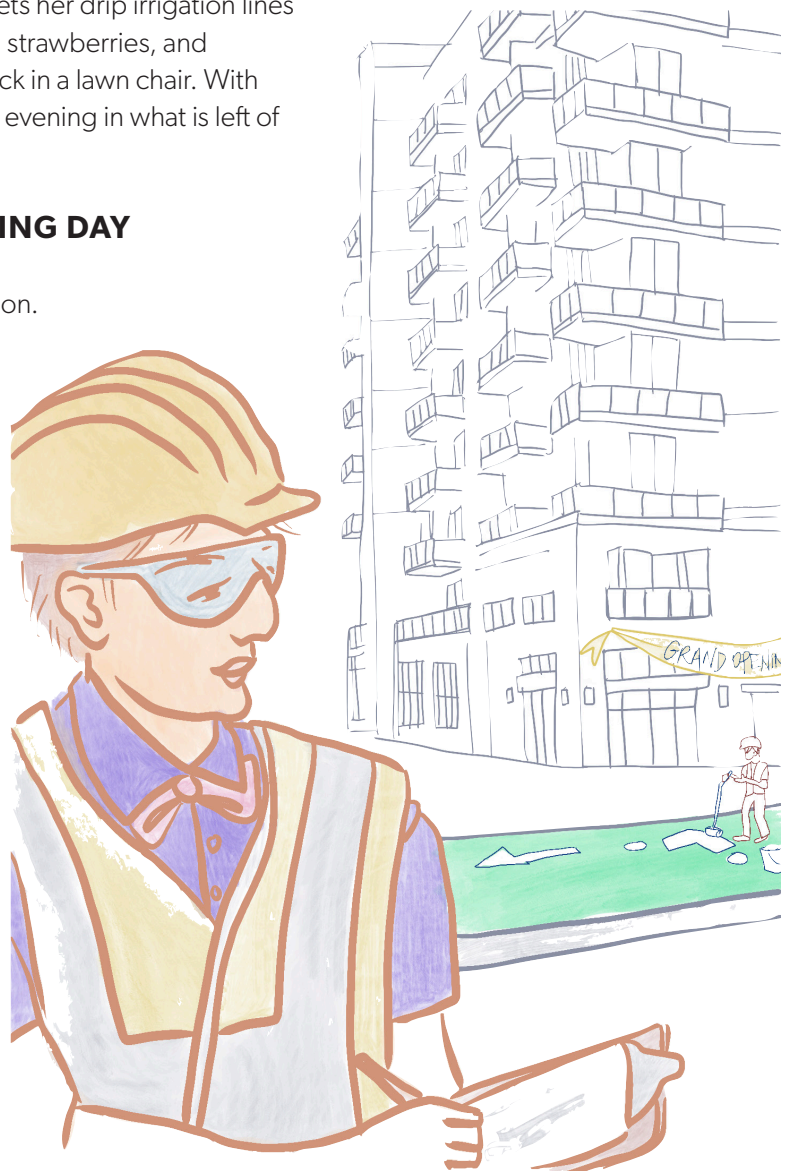


wooden fence boards (29), she digs into the soil using a shovel from the Tacoma Tool Library (2). Topping the new bed off with TAGRO soil amendments she moves onto places marked yesterday around the yard for the seedlings: two sunny spots with plenty of root space away from the fenced property line and other structures for the sequoias, and a place with partial sun near one of the cherry trees for the blueberry bush. With all the potential new produce, she might sell some of her extra fruits and veggies to neighbors (8).

Right on time at 1:00pm, the contractor, LaTasha, rings the doorbell. LaTasha asks about the insulation in the ceiling and walls, and then about the old cadet heaters. After touring the house LaTasha shares her notes on potential energy efficiency improvements and the additional comfort and bill savings they would bring. She provides a website where Sam can find affordable City loans and incentives for them (14). “If you’re thinking of selling some day, improving your home’s energy score (16) would really add some value” LaTasha explains. Sam says she’ll think about LaTasha’s recommendations, but that she loves living in Lincoln and isn’t thinking about selling soon. “Those upgrades will help keep you happy and comfortable here for years, too! By the way, I was trained in home energy audits while still in high school at Lincoln!” LaTasha responds. After chatting about the neighborhood, it’s time for LaTasha to leave. Thanking her, Sam returns to the backyard. She sets her drip irrigation lines (25) on a short timer, glances at the young beans, strawberries, and tomatillos in the old garden bed, and then sits back in a lawn chair. With everything done, Sam is ready for a lazy Saturday evening in what is left of the springtime sun.

STORY 7: WORKING TOWARD OPENING DAY

AJ is the property manager at Pacific Avenue Station. With its 4 floors of housing above street-level businesses, Pac Ave Station is the tenth building they have managed since graduating from UWT in 2017. It’s also the one AJ is most excited about. To develop this building, the regional company asked AJ to explore the latest construction standards and opportunities in Tacoma. He recommended durable, low-carbon green building materials (28), efficient technologies, and the inclusion of affordable housing units (13), which helped the company access financial incentives and better serve the neighborhood. Working closely with the City and Spaceworks, some of the commercial space downstairs has been set aside for local start-ups (36). Sitting on the #1 bus line, residents will be able to ride right into downtown for work, school, and weekend fun (17). This location means easy connections across town for residents and business tenants, and consistent interest in the units will mean low turnover costs for the company.



Pac Ave Station is on track to open in two months. AJ watches from the window of a nearly finished unit as construction trucks carry away recyclable construction materials (27) that will be sold and reprocessed into new construction materials. A team of City contractors works across the street. Beside a cement truck, they pour a new low-carbon concrete mix into place for a new sidewalk and transit stop (30, 31). AJ heads downstairs and into the bustle of the neighborhood – it's lunch time.

Holding Ourselves Accountable – Tracking Our Progress

In order to ensure transparency and accountability, each year we will develop a progress report and track **2030 Indicator Targets** (Section 3). These indicators are often easier to relate to than measurements of tons of GHG pollution and often show more immediate community impact. They are not perfect outcome measures, but they are currently trackable and more noticeable in our community. We will be tracking things like trees planted in neighborhoods, public electric vehicle charging stations installed, and miles of sidewalks built or repaired.

The [Sustainable Tacoma Commission](#) was established in 2009 to bring “accountability, transparency and vigilance to the long-term implementation of Tacoma’s Climate Action Plan”. This volunteer group meets monthly and provides a watchdog function and forum for the Plan’s implementation by monitoring progress on equitable implementation and engaging in regular communication with the City Council.

To implement each climate action, we will work with and empower communities using a range of engagement methods. At the same time, we must hold ourselves and other institutions accountable – those who have benefited most from a history of pollution and have the means to support our just transition must take the lead. It is our goal to both rebuild relationships and remain results-oriented to make good on promises to our community. We will also share our progress at an at least annual community meeting, focus on expanding our on-going relationships, and support the influence and leadership of youth and other frontline communities in climate action planning.

The 2030 Strategies for a Better Tacoma and 2030 Indicator Targets will guide our work over the next nine years. In addition to our yearly progress reports, we will update Actions every 3-4 years and check in with our stakeholders and implementation partners to make sure we are still prioritizing actions that are true to the community’s vision for a Better Tacoma and on track for net-zero emissions by 2050.

Financing Tacoma Climate Action

To achieve our climate action goals, residents, businesses, property owners, and all levels of government will need to make substantial investments in new infrastructure, programs, and incentives over the next 30 years. Making these investments helps everyone save in the long-run including, for example, through lower energy bills and lower maintenance costs on electric vehicles.

While it will likely take about \$2.5 billion collectively to achieve Tacoma’s 2050 climate goal, the total savings could easily exceed \$6.6 billion, resulting in a net savings of \$4.18 billion for our residents, businesses, and organizations (Section 4). With the savings, businesses and the City will have more money available to expand operations, hire employees, and develop other innovations to improve their energy and emissions performance. Those investments will lead to hundreds of new jobs, making Tacoma part of the transition to a green economy.

Additionally, spending on electricity keeps money in our local economy, since our electric utility is publicly owned. More dollars spent on fossil fuels, on the other hand, go to oil and gas businesses, many of which are located outside the city’s borders. If our community invests in a zero carbon pathway, by 2050 Tacoma could spend around \$66 million more per year with its local electric utility, and save up to \$643 million each year not paid to outside fossil fuel companies for a net savings of up to \$577 million annually.

“It’s time to start acting: do some pilots, some projects based on data and research available to get results, then adjust and continue accordingly.”

Tacoma community member

What You Can Do For Tacoma Climate Action

There are many individual choices we can make as consumers and community members to help reduce our GHG emissions. For Tacomans, it is particularly impactful to buy less stuff if we don’t need it; limit air travel; carpool, walk, bike, or take public transit instead of driving alone; eat a more plant-based diet and buy from local farmers; and choose electric, efficient options when changing our homes and vehicles. All of these actions add up and help encourage others to do the same.

That being said, the pace and scale of climate action that Tacoma needs ultimately depends on transformational changes to our institutions and systems. The previous sections have outlined what transformational steps the City and our community needs to take to mitigate and prepare for climate change. Indeed, this change also relies on all of us, as members of an engaged community.

“Again, and always, involve those directly affected. Take the time and effort.”

Tacoma community member

Here are a few ways you can help implement the Tacoma Climate Action Plan:

1. **Hold the City accountable.** Show up at City Council meetings or contact your Tacoma City Council representative to let Council know that climate action is important to you and ask them to prioritize funding for climate action.

Find your Council representative here: www.cityoftacoma.org/government/city_council

2. **Get involved in City decision-making and budgeting.** Participate on a City committee, board, commission, neighborhood council, or future participatory budgeting process.

Find open positions on committees, boards, and commissions:

www.cityoftacoma.org/commissions

Get involved in your neighborhood council:

www.cityoftacoma.org/neighborhoodcouncils

3. **Connect with local public organizations to advocate** for more climate action, dense affordable housing, electrification, public transit, and pollution prevention.

Learn more about and engage with: Pierce County, Tacoma-Pierce County Health Department, Tacoma School District, Pierce Transit, Metro Parks Tacoma, Port of Tacoma, Washington State

Learn about local environmental events and opportunities by joining the EnviroNews email list:

www.healthybay.org/get-involved/environews-listserv/

“Make sure funding is available. Make sure personnel and resources are available to carry out identified programs.”

Tacoma community member

4. **Talk to your friends, family members, and neighbors** about climate change, the local impacts we are experiencing, and the solutions available to us. Simple, everyday conversations can go a long way in increasing awareness and action on climate change.

Find resources on local climate change impacts: www.cityoftacoma.org/climate

5. **Bring partners and resources to our shared cause** by engaging at the state and national level:

- County Council: [Representatives](#)
- State and national representatives: [Find Your District](#)
- Port of Tacoma Commission
- Pierce Transit Board: [Representatives](#)

Conclusion

This Plan charts Tacoma’s path towards net zero GHG emissions by 2050. Our city has much to gain by implementing its Climate Plan, including more than \$4 billion in potential net savings, decreased vulnerability to climate disasters and impacts, attracting innovation and new businesses interested in taking part in the transition to a green economy, and more. Most of all, this Plan puts Tacoma’s community members at its center, focusing on how the City’s climate action efforts and investments can also help to improve the health and quality of life of Tacomans. It seeks to ensure that no community member is left behind in this transition, prioritizing efforts that will protect the most vulnerable to climate impacts and improve the living conditions of and create opportunities for marginalized groups.

“Our future has trees in every neighborhood... [and] healthy, vibrant, and cohesive communities... Neighbors helping neighbors to grow a greener, healthier, and more connected Greater Tacoma.”

Tacoma community member



Drawing by Tatyana, RU

Sections

SECTION 1 ENERGY AND EMISSIONS MODELING RESULTS

SECTION 2 IMPLEMENTATION ACTIONS

SECTION 3 2030 INDICATOR TARGETS

SECTION 4 FINANCIAL ANALYSIS

SECTION 5 FUNDING OPTIONS

SECTION 6 PLAN CONTRIBUTORS

SECTION 7 COMMUNITY ENGAGEMENT SUMMARY

SECTION 8 ENVIRONMENTAL JUSTICE LEADERS WORKGROUP COMMENTS

SECTION 9 MUNICIPAL CARBON NEUTRALITY STRATEGY

From: [Megan Cornish](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 3:48:23 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone lives in the area and is concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a "clean fuels" project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

We simply cannot continue a status quo approach to projects that increase global heating. No project is "too small" to count!

Thank you for reading my comment.

Megan Cornish

mcornish@igc.org
2940 36th Ave S
Seattle, Washington 98144

From: [Melissa Brechbiel](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:35:25 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Melissa Brechbiel
melbrechbiel@gmail.com
6613 South Monroe Street
Tacoma, Washington 98409

From: [Melissa Brooks](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:23:48 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Melissa Brooks
melissabrooks25@gmail.com
29817 4th Ave SW
Federal Way, Washington 98023

From: [Meryle A. Korn](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 3:13:03 PM

Principal_Planner Shirley Schultz,

I am sending this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107. Although I did not prepare the comment, I agree 100%!

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!
Thank you for reading my comment.

Meryle A. Korn
meryle.korn@gmail.com
2821 Huron Street

Bellingham, Washington 98226

From: [Michael Madden](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:34:31 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Michael Madden
myke907@gmail.com
50 Germonds Road
New city, New York 10956

Doll, Christine

From: Michelle Collar <info@email.actionnetwork.org>
Sent: Saturday, December 24, 2022 9:19 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Michelle Collar

revlon72@aol.com

35 Sunset Ave

North Attleboro, Massachusetts 02760

From: [Michelle Hartman](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:21:51 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Michelle Hartman
mhartmanshore@gmail.com
10607 Vantage Dr
Anderson Island, Washington 98303

From: [Michelle Mood](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 4:01:18 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Michelle Mood
moodm@kenyon.edu
3719 South Gunnison St
Tacoma, Washington 98409

From: [Mike Conlan](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:26:15 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Mike Conlan
mickconlan@hotmail.com
6421 139th Place NE, 52
Redmond, Washington 98052

From: [Miranda Marti](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:47:54 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Miranda Marti
tuesdaymira@gmail.com
6709 23rd Ave NW
Seattle, Washington 98117

From: m'lou_christ
To: [Seaport Plant Modernization DEIS](#)
Subject: NO NO NO! SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:37:06 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

m'lou christ
mnortie@yahoo.com
w lk samm pkwy ne
Redmond, Washington 98052

Doll, Christine

From: Molly Frankel <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 1:25 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Molly Frankel

moe.frankel@gmail.com

1283 SE Carl Pickel Dr

Port Orchard , Washington 98366

Doll, Christine

From: Mona Lee <mona_lee@centurylink.net>
Sent: Tuesday, December 27, 2022 4:40 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Mona Lee

mona_lee@centurylink.net

4802 S Othello St.

Seattle, WA 98118, Washington 98118

From: [Morgan Rivasplata Newton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:41:31 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Morgan Rivasplata Newton
morgannova.rivasplata@gmail.com
1501 S MacArthur St
Tacoma, Washington 98465

Doll, Christine

From: nancy corr <info@email.actionnetwork.org>
Sent: Tuesday, December 27, 2022 4:00 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

nancy corr

cornnancy03@gmail.com

816 S 216 #608

des moines, Washington 98198

Doll, Christine

From: nancy corr <info@email.actionnetwork.org>
Sent: Tuesday, December 27, 2022 4:07 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

WE MUST NOT INCREASE THE USE OF FOSSIL FUELS, SO AS TO SAVE THE EARTH FOR OUR CHILDREN !! am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

nancy corr

cornnancy03@gmail.com

816 S 216 #608

des moines, Washington 98198

From: [nancy corr](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 3:28:06 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

nancy corr
cornancy03@gmail.com
816 S 216th #608
des moines, Washington 98198

From: [Nancy Hausauer](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:25:01 PM

Principal_Planner Shirley Schultz,

I am writing about SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Nancy Hausauer
nancy@nancyhausauer.com
706 6TH AVE
Tacoma, Washington 98405

From: eilatan5445
To: [Seaport Plant Modernization DEIS](#)
Subject: Comment on seaport fuel expansion
Date: Friday, December 16, 2022 10:24:02 AM

I am writing to comment that I am very concerned that the port is attempting to increase its fossil fuel storage, and evidently, use. We are in a climate crisis that threatens human life and health, and should be reducing our fossil fuel use, not increasing it or the infrastructure that supports it. Increased fossil fuel use, dependence and infrastructure leads to -> more carbon emissions, more air pollution, and a warmer climate, which leads to increased infectious disease (<https://pubmed.ncbi.nlm.nih.gov/28051192/>), respiratory disease, cardiovascular disease, injuries (<https://www.cdc.gov/climateandhealth/effects/default.htm>), and more stillbirths (<https://pubmed.ncbi.nlm.nih.gov/29422441/>).

Expanding fossil fuel infrastructure is unacceptable and wrong.

Sincerely,
Natalie Franz, MPH
Tacoma, WA

Sent from my Galaxy

Doll, Christine

From: Norma Ramirez <info@email.actionnetwork.org>
Sent: Friday, December 23, 2022 12:26 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Norma Ramirez

norma137carr@gmail.com

819 N Washington St

Tacoma, Washington 98406

From: [Pat Villa](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 1:53:47 PM

Principal_Planner Shirley Schultz,

Stop fossil fuel expansion!!

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard.

Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Pat Villa
padavilla@hotmail.com
11448 Newcastle Way
Bellevue, Washington 98006

Doll, Christine

From: Paula Smith-Vanderslice <info@email.actionnetwork.org>
Sent: Sunday, December 25, 2022 6:02 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Paula Smith-Vanderslice

psmithvanderslice@gmail.com

1403 Monroe St NE

Washington, District of Columbia 20017

Doll, Christine

From: Phil Brooke <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 10:48 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Phil Brooke

oldbrickhousefarm@yahoo.com

3811 84th St E

Tacoma, Washington 98446

Doll, Christine

From: Phil Harty <info@email.actionnetwork.org>
Sent: Tuesday, December 27, 2022 10:34 AM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Phil Harty

philhartymusic@gmail.com

1 North Broadway apt. #2

Tacoma, Washington 98403

Doll, Christine

From: Phillip Hope <info@email.actionnetwork.org>
Sent: Monday, December 26, 2022 5:36 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Phillip Hope

phillip.hope@gmail.com

319 Avenue C Apt 1F

New York, New York 10009-1618

From: [Querido Galdo](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 1:32:27 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Querido Galdo
querido@queridomundo.com
3009 E. 29th Street
Oakland, California 94601

From: [R. L. Aseret](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Please Enforce the Law & Protect Our Health & Environment
Date: Tuesday, December 20, 2022 9:19:45 AM

I want to comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

The Climate Crisis is having increasingly devastating effects. We need clean air to breathe, clean water to drink, safety from wildfires & environmental catastrophes, and livable weather. We need to cut down and cease using fossil fuels ASAP, NOT increase capacity.

We need an accurate and thorough EIS. We need you to lead and act to prevent increasing the severity of the Climate Crisis. We need you to enforce the law.

Thank you for your time and attention to this crucially important matter. Our health and safety--and that of our children and grandchildren, depends on you acting responsibly and enforcing the law. Please respond and let me know how you will act to protect our health and environment and address the Climate Crisis.

Thanks very much,

R. L. Aseret

From: [R. Vanstrien](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 11:51:12 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

R. Vanstrien
zvan030@gmail.com
25 Independence Blvd
Warren, New Jersey 07059

From: [Rama K Paruchuri](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:44:10 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Rama K Paruchuri
paruchurirk@gmail.com
2245 Glencoe Hills Dr. Apt 8
Ann Arbor, Michigan 48108

From: [Rebecca Stith](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Comment re inadequacy of SeaPort Sound DEIS Permit# LU20-0107
Date: Tuesday, December 27, 2022 4:25:00 PM

Planner Shirley Schultz,

Dear Principal Planner Shirley Schultz:

I am writing to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107. The current DEIS is not SEPA compliant and fails to address the myriad potential deleterious impacts of this project. It cannot be allowed to stand. Below are listed several of its most glaring shortcomings.

The DEIS does not address what the project impacts would likely be if the new storage is used at FULL capacity, which means that the risks from more ships and railcars, the risks from spills, and the potential adverse effects on our air quality cannot have been adequately taken into account.

It uses outdated data, doesn't include GHG projections from leakage and transportation, and fails to account for the likely GHG impacts of operating at FULL capacity. The GHG study must be redone.

The DEIS is unclear as to types and quantities of fuels to be moved, how they would be moved, and for how long they would be stored.

It fails to address ship-noise risks and reduction to protect orcas and other marine life.

It inadequately analyzes the likelihood of increased flooding and the potential adverse impact such flooding would have on project location, with the potential flushing of toxic petrochemicals into Hylebos Creek and Commencement Bay.

The DEIS entirely ignores Tacoma's Climate Emergency Declaration including, most significantly, its core mission and goals. Surely this Declaration must mean more to the City of Tacoma's decision-makers than the paper on which it is written.

It ignores the adverse impacts of increases in truck and other private and commercial vehicle traffic because the project area is not currently served by regular public-transit routes.

This project will consume an additional 8+ million kilowatt hours of TPU power, the costs of which TPU will pass along to consumers who will then be involuntarily subsidizing, and suffering the consequences of, the fossil-fuel industry's increased GHG and other toxic emissions. It is NOT a "clean fuels" project. This label is nothing more than greenwashing. Because it is not actually changing its fuel mix to reduce deleterious climate impacts, the company should be prohibited from "gaslighting" our community with deceptive marketing. Transparency - a truly compliant, adequate DEIS - is needed.

Please protect this community by requiring SeaPort Sound to comply with the law and address the above deficiencies and other concerns communicated by residents and organizations during this comment period. Thank you.

Rebecca S. Stith

Tacoma resident

Member, Policy and Technical Advisory Committee, Communities for a Healthy Bay

Rebecca Stith

rstithlaw@gmail.com

1119 North Fife Street

Tacoma, Washington 98406

From: [Riley Lynch](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Permit# LU20-0107
Date: Thursday, December 22, 2022 1:58:20 PM

Planner Shirley Schultz,

Planner Schultz,

I am writing to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement for permit# LU20-0107. I am very concerned about climate change and Tacoma's fossil fuel industry, especially as it relates the the impacts on human health. The DEIS did not do enough to fully analyze all the impacts that could come from this project, and does not follow the law of SEPA. This is unacceptable.

SeaPort Sound did not show us what the impacts could be if they used their new storage to its full capacity. So we don't know what the risks could be from more ships and railcars, the risks of spills, and the impacts to our air.

The greenhouse gas study that was done is also completely flawed. It uses outdated data, doesn't include the GHGs we would see from leakage and transportation, and because they didn't study the impacts of operating at full capacity, we don't know what the actual GHG pollution will be. This must be redone, using the most up-to-date data, and use the 20-year GWP since it most closely matches with the life of the project.

Lastly, Seaport Sound has completely greenwashed this project. They are not actually changing their fuel mix, and should not be allowed to call this a "clean fuels" project.

Thank you for this opportunity to comment. Please protect this community by requiring SeaPort Sound to follow the law.

Riley Lynch
riley@wpsr.org
4732 18th Ave NE, APT 4
Seattle, Washington 98105

From: [Rita Glasscock](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:43:53 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Rita Glasscock
ritalink9@gmail.com
1200 Camino Consuelo #25
Santa Fe, New Mexico 87507

From: larkbrown@everyactioncustom.com on behalf of [Robert Brown](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Require Revised SeaPort Sound EIS
Date: Tuesday, December 20, 2022 12:12:47 AM

Dear Shirley Schultz, AICP,

I'm concerned that SeaPort Sound Terminal's draft environmental impact statement does not meet the requirements of the State Environmental Policy Act (SEPA), nor does it adequately study the environmental effects of the proposed increase of fossil fuel storage capacity by 11%. As the community overwhelmingly requested in the EIS scoping period, potential effects or increases in vessel, train, or truck traffic must be thoroughly studied. Additionally, the greenhouse gas analysis is insufficient as it does not account for leaks and needs to use the most up to date IPCC data.

In this time of climate crisis, fossil fuel expansion in our community is a profound moral issue, and we must have all the facts available to consider this proposed project.

I am grateful that the City made a Determination of Significance to study the environmental impacts of this proposed expansion. Now, please require SeaPort Sound Terminal to revise their EIS to meet the requirements of SEPA and fully study the impacts of this expansion. Especially given that our city has declared a climate emergency, your role of accountability and oversight is more important than ever.

Sincerely,
Mr. Robert Brown
1443 Edwards Ave Fircrest, WA 98466-6640
larkbrown@comcast.net

From: [Robert Posch](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:29:51 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Robert Posch
robertposch323@gmail.com
1612 Pepper Grass Ct
Orlando, Florida 32825

From: [Robin Evans-Agnew](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Letter opposing Seaport Sound Terminal Modernization
Date: Tuesday, December 27, 2022 1:48:58 PM

Dear Planning committee

I object to the SeaPort Sound Terminal's application to "modernize" their fossil fuel storage and shipment facility located on the north shores of the Hylebos Waterway.

The proposal is simply an effort to expand fossil fuel capacity at the port in what is an incredibly sensitive environmental area, posing risks to people and the waterway.

I have found the draft Environmental Impact Statement to be flawed because it does not adequately explicate the potential impacts to air quality, greenhouse gasses, and the risks to human and environmental health associated with an increase in rail, vessel, and vehicle traffic in the area. The forests lining the embankment to the north are rich in biodiversity, providing vitality to the streams that feed the Hylebos. These would be under threat from excessive traffic and risks of fire. The communities in Northeast Tacoma would be impacted by any fire or mishap to marine drive. There has been no health impact assessment made of this project. Finally this project expands fossil fuel activity in the port during what the City of Tacoma has declared is a climate emergency.

Thank you

Robin Evans-Agnew, RN
3015 N 15th street
Tacoma, 98406

From: [Roger Martin](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Re: Comment on SeaportPlant DEIS
Date: Wednesday, December 7, 2022 11:14:58 AM

PS: Sorry about the sloppy grammar. I should have done better. Also, your EIS should have the chart showing the areas around the Sound most likely to liquefy in an earthquake. If you need any of these charts, let me know, and I will send you images of them.

Thanks again, and sorry for the sloppy grammar in my writing,

Roger T

On Wednesday, December 7, 2022 at 11:03:39 AM PST, Roger Martin <fbrogert@yahoo.com> wrote:

Shirley,

Thank you for your meeting on Monday. It was very valuable, and I think you are a superb host for such a meeting. I spoke up, and I promised you I would send in my comment/question. Here it is, somewhat expanded. I kept what I had to say to two minutes.

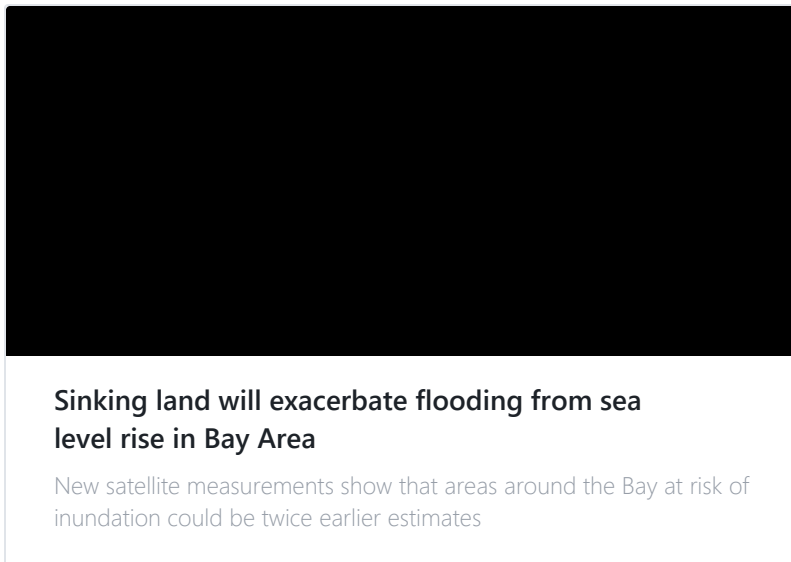
So, for my background: I have a BA in Biology and Oceanography, and an MS in Systems Management. I have been provided some materials I will reference here that came from my daughter's grad-student group, studying rising sea levels and infrastructure for the University of Oxford. She is leader, faculty adviser, and PhD candidate for Oxford's US West Coast team--one of six international teams in the study. She was recruited by Oxford with her masters' degree from Harvard Business School.

I have been unpleasantly surprised at the lack of subject-matter knowledge by people who should be experts with regard to the multi-faceted aspects regarding the development of the Tacoma Tideflats, especially since there is so much material out there. This was most notable during the PSCAA / PSE promotion for the LNG facility, where BERK Engineering was responsible for producing the EIS and apparently wrote the two Supplemental EIS'. I will get to some specifics later in this comment.

In 2018, a report appeared in the San Jose Mercury News, offering a discussion of, and link to, a scientific report by geologists from UC-Berkeley (UC-B) and Arizona State University (ASU). This newspaper is the largest one in Silicon Valley and in 2018 had a circulation of 324,500 daily and 415,200 on Sundays. In other words, the report was hardly a secret, and one would think that a company in BERK's position at the time would have found it pertinent to what they were responsible for having some expertise. That is building facilities on top of shoreline landfill and putting together an EIS and two SEIS' for this construction and subsequent operation, especially when the consequences of getting it wrong could result in explosion or fire. The UC-B / ASU report was published in the Mercury News not only in 2018, but an updated version was re-published in 2019. Again, it was hardly a secret from somebody in BERK's line

of responsibility.

Here is a link to an original report that was quoted by the Mercury News: [Sinking land will exacerbate flooding from sea level rise in Bay Area](#)



The part I found most useful in this article are the images of the future of the areas around Foster City and San Francisco International Airport (SFO), showing the projected areas that would be flooded because of rising sea levels alone, then by how much shoreline landfill being used, and then the combination of the two effects being far worse than the sum of the first two. This is the situation you have in the Tideflats; i.e., building on top of landfill that is in contact with tidal water during the time of rising sea levels.

Although I mentioned this both in public testimony regarding the LNG proposal and in written comments to all three EIS', none of it was ever written into any of the three documents. One of two things must have been happening: either BERK, PSE, and PSCAA don't read about critical issues affecting what they are supposed to be doing, or they did read it and didn't want it being read by EPA and/or the public. In other words, they were/are incompetent and/or deliberately corrupt and non-transparent.

I also provided information in these different ways to comment regarding the fact that the Tideflats have Puget Sound's most dangerous rating for the likelihood of liquefaction in an earthquake, and charts that show how deep the alluvial detritus under the Tideflats goes before it finally gets to bedrock. It ranges between 500 and 600 meters in depth--roughly 1500 to 2000 feet down.

I also provided charts showing the location of earthquake faults around Puget Sound, showing that a branch of the Tacoma Fault goes directly under a part of the Tideflats.

I also provided information about the 1989 Loma Prieta Earthquake, the fact that it occurred about 60 miles away from San Francisco's Mission District, that construction built on landfill sank into the material below the buildings during the quake, that

people were killed, and that there were fires from broken natural gas lines that couldn't be easily put out, largely because the earthquake also broke the water lines going to the fire hydrants. The depth to get to bedrock under the Marina District wasn't 1500-2000 feet down; it was only about 300 feet down. Yet, at least eight people died in the Marina District from that quake, centered 60 miles away.

Finally, I had a friend and member of my church--a recently retired Professor Emeritus from PLU with a PhD in geology and specialty in geological hazards in the Puget Sound, volunteer to serve as an unpaid consultant for the LNG project--but nobody from PSE, PSCAA, Tacoma City Council, or the Planning Commission ever asked for his advice. Add that to nobody discussing the UC-Berkeley - ASU report.

So, now your applicants and PSE and PSCAA are OK with putting a 10-inch, pressurized natural-gas line (for the LNG plant) on or in landfill construction in the presence of rising sea levels that sits on top of 1500-2000 feet of most-likely-to-liquefy substrate that sits on top of an earthquake fault. Of course, let's not forget the storage tanks full of flammable and/or explosive contents and refinery chemicals that would collapse into the Sound and/or explode and/or burn. Also, consider what leaks from the tanks and pipelines associated with the facilities would do to the marine life and water quality of the area in the event of breakage and sinking of the facilities into the Sound.

First, you had better have your folks look up those charts from USGS showing the depth of the bedrock. Then, you had better get those charts from the local tribes and/or DNR that show the fault lines under the Sound, and include them in your EIS, along with the report from UC-B and ASU in the EIS also, instead of being like PSCAA and PSE and BERK.

Next, here is what I would recommend. Find yourself a really good group of oceanography and/or geology students from one of the local universities to work with you as subject-matter experts (SME) doing a grad-school project. Talk to your applicants to find out how long they plan for their fuel facility to operate. Then have the SMEs tell you how much the sea levels are expected to rise during the life of their facility. Then, have your SMEs apply the math described in the UC-B - ASU report to see how long it will be before the SeaPort fuel facility will be flooded and what damage would be done in that scenario. Think of what people are saying what could happen if the safety controls in Ukraine's largest nuclear plant are disabled.

Next, have your SMEs advise you on the probability of a major earthquake affecting the Tacoma Fault during the proposed lifetime of the SeaPort facility. Then have the SMEs do computer simulations of what sort would happen to their storage and refinery in the presence of the predicted magnitude of the quake, including the effect of the combination of sinking landfill and rising sea levels on the damage that would come in a quake added to the liquefaction of the detritus between the surface and 1500-2000 feet to the bottom. All this belongs in your EIS. The key to understanding this awful situation is the computer simulation of the combined hazards in this plan.

My daughter is now writing the first words of her Oxford doctoral dissertation. She

apparently has access to Oxford's supercomputer. I suspect that some of the SMEs on the Oxford study will indeed run such simulations on the Tideflats before they publish, but I won't swear to it, and I don't know when that publication will happen. I warned the people working on Tacoma's LNG, both in my recorded verbal remarks and my written commentary that if the LNG facility blows up and/or catches fire and kills people like what happened in the Mission District of San Francisco, my testimony and written warnings are on the record and could be cited by plaintiffs.

My daughter says the situation on the Tideflats is going to be a primary focus of her report that, upon peer review and comment, will likely be made public in Oxford's final report on rising sea levels and infrastructure. Her opinion of how the LNG project was done was best expressed by her comment to me a few years ago: "How can they be so stupid?" I think you have a chance here to do a better job.

Please do.

Thank you. I really do respect you and how you handled things up to this point with regard to the SeaPort development. But, I think you guys need to do some serious homework--especially the computer simulations of an earthquake over the fault that sits under the 1500-2000 feet of Sound-soaked landfill and liquefying detritus. You need to tell EPA what the hazards might be.

With sincere thanks for your obvious concern for this task,

Roger T Martin

From: [Russell Burke](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:17:27 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Russell Burke
russellburke@comcast.net
16700 Guerneville Rd
Guerneville, California 95446

From: [Ryan Sexton](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Public Comment - Seaport Plant Upgrade
Date: Wednesday, December 21, 2022 9:54:34 AM

Ms. Schultz,

I greatly appreciate the opportunity to comment on the prospective Seaport Plant Upgrade. To ensure the availability of alternatives to traditional fossil fuels in the future, our region needs to support local investment in these types of projects. As part of the continued effort to support increased demand of greener fuel supplies, Seaport's equipment modernization will not only ensure that the PNW has a supplier capable of meeting this increased demand, but will also ensure it is done safely, all while improving local infrastructure's flexibility to quickly adapt in today's changing energy market.

Please feel free to reach out with any questions – thank you for your time

Ryan Sexton
Senior Associate

WESTWARD PARTNERS
2412 Westlake Ave N, Suite 4
Seattle, WA 98109
M. +1 425 279 3253
ryan@westwardpartnersllc.com

This electronic mail message and any attachments may contain confidential or privileged information and is intended for use solely by the above-referenced recipient. Any review, copying, printing, disclosure, distribution, or other use by any other person or entity is strictly prohibited under applicable law. If you are not the named recipient, or believe you have received this message in error, please immediately notify the sender by replying to this message and delete the copy you received. If a recommendation is included in the above email, please contact our office for additional investment information supporting the recommendation.

From: [Sammy Low](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:09:26 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Sammy Low
cougarcreek7@gmail.com
20420 Marine Dr, Apt P2
Stanwood, Washington 98292

From: [Sara Bhakti](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:52:00 PM

Principal_Planner Shirley Schultz,

Re: SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

Protecting the environment is my top priority.

Environmental Impact Statements are an important tool in that protection.

The draft Environmental Impact Statement referenced in this email is highly flawed. It fails to provide a comprehensive overview of the potential impacts to air quality, greenhouse gasses, and the risks associated with an increase in rail, vessel, and vehicle traffic.

To quote from an environmental group that I follow:

“First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

“Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

“This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.”

Please insist that SeaPort Sound submits a SEPA-compliant EIS.

Thank you for the opportunity to comment.

Sara Bhakti
sarabhakti@yahoo.com
521 7th Ave
Kirkland, Washington 98033

From: [Sasha Funk](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:27:31 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Sasha Funk
dukesfunk@gmail.com
636 N Oakes St
Tacoma, Washington 98406

From: [Shae Pyke](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 8:59:05 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Shae Pyke
shalonpyke@gmail.com
3843 A St
Tacoma, Washington 98418

From: [Sharon Knight](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 5:57:25 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Sharon Knight
finny65@outlook.com
5514 58th Ave Ct W
University Place, Washington 98467

From: [Shaun Hubbard](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Permit# LU20-0107
Date: Wednesday, December 21, 2022 4:49:22 PM

Planner Shirley Schultz,

Dear Planner Schultz,

I am writing to submit comments on SeaPort Sound Terminal's Draft Environmental Impact Statement for permit # LU20-0107. I am a resident of San Juan Island where we value the endangered Southern Resident killer whales (SRKWs, aka orcas) and have been working hard to protect them.

For this reason, I am very concerned about Tacoma's expanding fossil fuel industry and its impact on our climate and waters. The SRKWs travel all of Puget Sound (NOAA-designated critical habitat), including Tacoma, in search of scarce food. The DEIS did not do enough to fully analyze all the impacts to the orcas that could come from this project. It does not follow the law of SEPA. The DEIS must be re-done.

SeaPort failed to consider all of the impacts that could result from using their proposed new storage to its full capacity. Therefore, the DEIS fails to consider ALL of the possible impacts that could come from more ships, more railcars, more vehicular traffic, the risks of spills, and the impacts to our air, as a result of this proposed project.

What are the potential vessel traffic increases?

What are the impacts (all impacts, including those to orcas) from increased vessel traffic that could come from this project?

What are the cumulative impacts from the vessel traffic from all current and future projects in Puget Sound?

What are the impacts from the vessels all along the route, not just the project site?

What are the low probability/high consequence impacts from project-related oil spills and ship strikes?

In the DEIS, SeaPort Sound failed to consider these scenarios, as required by SEPA.

The greenhouse gas study that was done is also completely flawed. It uses outdated data, doesn't include the GHGs we would see from leakage and transportation, and because they didn't study the impacts of operating at full capacity, we don't know what the actual GHG pollution will be. The DEIS must be redone, using the most up-to-date data and using the 20-year (not 100-year) GWP since those statistics more realistically match to the life of the proposed project.

Lastly, Seaport Sound has completely greenwashed this project. They are not actually changing their fuel mix, and should not be allowed to call this a "clean fuels" project.

Thank you for this opportunity to comment. Please protect this community -- and the orcas -- by requiring SeaPort Sound to follow the law.

Shaun Hubbard

shaunalice@gmail.com

PO Box 805; 286 Flicker Road

Seattle, Washington 98250

Shirley Schultz
City of Tacoma
Planning and Development Services
747 Market Street, 3rd Floor
Tacoma, WA 98402
Sent via email to SeaportPlantModernizationDEIS@cityoftacoma.org

PUB-182

December 27, 2022

Re: SeaPort Sound Terminal Plant Modernization Project Draft Environmental Impact Statement (LU20-0107)

Dear Ms. Schultz:

Thank you for the opportunity to review and comment on the SeaPort Sound Terminal Plant Modernization Project Draft Environmental Impact Statement (SST DEIS), #LU20-0107. I am submitting the comments representing myself, as a Browns Point neighbor of the SeaPort Sound Terminal.

The SST DEIS does not meet the requirements of SEPA because it fails to identify and evaluate possible adverse effects on earth, air, water, shoreline, construction and environmental health and safety as well as operation.

The following (in italics) is a summary of the issues I identified in my letter submitted on February 25, 2021 with respect to scoping. None of these comments area addressed in the DEIS, but are necessary in identifying potential impacts during construction. I've attached a copy of that letter.

In summary, the draft EIS should include the following:

- 1. A description and timeline of all historic and current activities on the site, including refining, terminal activities, expansion and hydrocarbon mix.*
- 2. A list of all process chemicals and fuels used stored or transferred on site from 1967 to the present.*
- 3. A Description of all permits and past and current compliance with them.*
- 4. Summary of the studies required by the most recent NDPES permit WA0003204*
- 5. Sampling plan and preliminary information on subsurface contamination*
- 6. Description of long-term plans for this site.*

Many of the possible effects could be mitigated by a report on soil sampling. It would be highly unique that a refinery could operate for as long as it did with no spills or transfer of product or waste to the surrounding soils. It would be very surprising that SeaPort Sound has not done site sampling for hydrocarbon and other contamination, and the results should be made part of the DEIS. If they have not done so, the risk of contamination to the surrounding environment is significantly elevated because of the lack of knowledge.

Other letters comment on oil transportation and possible impacts to Southern Resident Killer Whales as well as on greenhouse gas emissions and shortfalls in the DEIS with respect to the analysis. I've reviewed and support those comments, and won't repeat them here.

It is critically important to the environment of Tacoma and that the FEIS evaluate and mitigate the effects of this project if it moves ahead.

Sincerely yours,



Sheri J Tonn, PhD

7311 East Side Drive NE
Tacoma, WA 98422
February 25, 2021

Shirley Schultz
City of Tacoma
Planning and Development Services
747 Market Street, 3rd Floor
Tacoma, WA 98402
shirley.schultz@ci.tacoma.wa.us

Re: SeaPort Sound Terminal Substantial Shoreline Development Permit (SSDP) and State Environmental Policy Act (SEPA) – LU20-0107 – Environmental Impact Statement Scoping

Dear Ms. Schultz:

I appreciate the opportunity to review and comment on the scope of the Environmental Impacts Statement for the SeaPort Sound Terminal Substantial Shoreline Development Permit and the SEPA checklist for this project. My comments are my own, but I also serve as the chair of the Citizens for a Healthy Bay Policy and Technical committee, and have reviewed the CHB comments and fully support and endorse them. In the interest of efficiency, I will not duplicate the comments submitted in the CHB letter and will focus on pollution related issues. I have been working on Commencement Bay related cleanups and permits for the past 40 years and am a PhD chemist, recently retired from the Chemistry Department at Pacific Lutheran University. As a resident of Browns Point, I have direct experience with this terminal, and observe the tankers, ATBs and towed barges transiting to and from the SeaPort Sound Terminal.

I understand that the project will demolish seven existing tanks, construct ten new tanks, renovate the wastewater treatment system, and remove towers once used for asphalt processing. As such, the terminal very likely has historic contamination related to the previous refining operations. There are three documented outfalls to the Hylebos Waterway. Previous CHB records, meetings with the leadership of the previous owner, Targa, and a search of Department of Ecology records document some of the facility cleanups and expansion that have taken place in the past. Since there is a mix of voluntary cleanups, permits granted by various agencies, and past terminal expansion projects, this EIS should include a complete description of the facility operations since 1967 and as expected into the future. It is my understanding that the asphalt refinery opened in 1967 and closed in 1999. Over time, the terminal grew to its present size, a rail car transfer station and pipeline under the Hylebos built and expanded, wastewater treatment systems were created, and expanded, and small voluntary cleanups were completed. It is highly likely that there were spills on site while the asphalt refinery was in operation. There is at best a partial picture of these activities in the public record. Without better documentation, it is difficult to be sure that the EIS addresses future activities on this site. This EIS should provide the documentation for understanding the site history and the effects of this proposed development, a possible no action alternative, and can identify potential cleanups needed via MTCA and/or RCRA.

In 2018, Targa Sound Terminal was granted a National Pollutant Discharge Elimination System Permit (NPDES Permit) No. WA0003204. As outlined in the table on p 4 of the permit (attached), the permit required monthly discharge monitoring reports (DMRs), reporting permit violations and bypasses, a spill control plan, a stormwater prevention plan. A PCB study, AKART analysis and engineering report, a sediment quality impact report, sediment sampling, an engineering report for construction or modification activities, and other submittals. It is my understanding that SeaPort Sound is meeting the requirements of this permit. Since the area of the outfalls and their drainages match the proposed demolition and construction, the EIS should summarize all of the data and compliance from this NPDES permit.

The NPDES permit deals with stormwater, not likely historic subsurface contamination, or subsurface water reaching the Hylebos Waterway. As the historic equipment is demolished there is the possibility of disturbing any contamination. Given the voluntary cleanup Targa did with previous site expansion, the likelihood of contamination is very strong. Preliminary sampling results should be included in the EIS. The EIS should have an associated sampling plan, and this plan should be available for public review and comment.

In addition to the stormwater permit, SeaPort Sound has air permits issued by the Puget Sound Clean Air Agency. Compliance with these permits should also be included and analyzed in this EIS.

SeaPort Sound has submitted an oil spill contingency plan to the Department of Ecology, with public comment open until April 3, 2021. This contingency plan should be referenced, and the requirements for spill response clearly delineated in the EIS.

Finally, a variety of projects have been completed with mitigated determination of non-significance. This action has been determined to have significance. The sum of all other recent projects should be summarized in this EIS, along with plans for future expansion that might have environmental significance.

In summary, the draft EIS should include the following:

1. A description and timeline of all historic and current activities on the site, including refining, terminal activities, expansion and hydrocarbon mix.
2. A list of all process chemicals and fuels used stored or transferred on site from 1967 to the present.
3. A Description of all permits and past and current compliance with them.
4. Summary of the studies required by the most recent NPDES permit WA0003204
5. Sampling plan and preliminary information on subsurface contamination
6. Description of long-term plans for this site.

Thank you for the opportunity to comment on this EIS scoping.

Sincerely

A handwritten signature in blue ink, appearing to read "Sheri J. Tonn".

Sheri J Tonn, PhD

From: [ste ho](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 6:09:35 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

ste ho
orcadog85@gmail.com
85 park ave
baltimore, Maryland 21208

From: [Stephen Williams](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 9:05:21 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Stephen Williams
Prospect2125@aol.com
2125, North Prospect Street
Tacoma, Washington 98406

Doll, Christine

From: Steve Thompson <info@email.actionnetwork.org>
Sent: Saturday, December 24, 2022 9:32 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Steve Thompson

hansolie@hotmail.com

9050 Avondale Rd NE

Redmond , Washington 98052

From: [Steven Gary](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 12:31:34 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Steven Gary
gramgary66@gmail.com
5124 S Graham St
Seattle, Washington 98118

From: [Susan DeWitt](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 5:18:17 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Susan DeWitt
sedewitt4@gmail.com
325 Twin Lake Dr
Largo, Florida 33770

From: [Susan MacGregor](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 2:40:25 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Susan MacGregor
seesue@gmail.com
16911 NE 95th
Redmond, Washington 98052

From: [Tanisha Roberts](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 7:57:05 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Tanisha Roberts
troberts141@gmail.com
2815 Galleon Ct. Ne
Tacoma, Washington 98422

From: [Ted Lilyblade](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: In Support of SeaPort Sound
Date: Wednesday, December 21, 2022 10:41:10 AM

I am writing this comment to affirm support of the Sound Terminal's Plant Modernization Project.

SeaPort Sound had been a leader in the community under the Renewable Fuels Standard (RFS) by bringing biodiesel and ethanol into the Pacific Northwest region.

New carbon reduction programs, like the Low Carbon Fuel Standard and the State's planned Clean Fuel Standard, cannot be successful without sufficient logistics and storage capacities. The Plant Modernization Project will allow the Sound Terminal to compete in these markets, provide lower carbon intense fuels and feed stocks into the region, and support low carbon fuel initiatives. This project will also allow for improvements to water treatment systems with updated technologies and equipment.

Thank you,

Ted Lilyblade

From: [Thomas Libbey](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:30:50 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Thomas Libbey
thomas_libbey@hotmail.com
1122 E Pike St PMB 1027
Seattle, Washington 98122

From: [Thomasin Kellermann](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:35:13 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Thomasin Kellermann
kthomasin2@aol.com
500 Mendon Rd Unit 111
Cumberland, Rhode Island 02864-6219

Doll, Christine

From: Tika Bordelon <info@email.actionnetwork.org>
Sent: Thursday, December 22, 2022 8:44 PM
To: Seaport Plant Modernization DEIS
Subject: SeaPort Sound DEIS Is Highly Flawed

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Tika Bordelon

tikab1@gmail.com

1400 Hubbell Pl

Seattle, Washington 98101

From: [Tom Craighead](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound Terminal DEIS
Date: Tuesday, December 20, 2022 10:31:38 AM

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Tom Craighead
Vashon, WA

From: [Tracy Ouellette](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 7:56:24 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Tracy Ouellette
tracyjouellette@gmail.com
14078 MacTaggart Ave
Bow , Washington 98232

From: [Twylia Westling](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Comments regarding LU20-0107 Seaport Plant Modernization
Date: Monday, December 26, 2022 10:15:33 PM

To Whom It May Concern:

I offer my comments with regard to plans to modernize the Seaport Alliance. I am unequivocally against the plans for additional 11% storage capacity by the Seaport Alliance.

The seaport is not a good neighbor. The work done there is hazardous to human and environmental health. This is not disputed – it is why we have regulations. Or, at least the appearance of regulations. The work that is done at the port is damaging generations of human and more-than-human life. The methane, NO₂, VOCs and other toxins emitted into the air, over time, slowly kill people and the environment. And here we are, facing a request for an increase in capacity that is predicted to increase greenhouse gases by 9%.

The Mitigation plans listed on the cover letter fall short of the drastic actions needed by all municipalities the world over to avoid climate catastrophes becoming the norm for humans. An expected 9% increase in greenhouse gases, as stated in the DEIS cover letter, does not allow for compliance with the Paris Agreement, a legally binding international treaty on climate change. The three main aims of the Agreement are: reduce emissions, build resilience and decrease vulnerability to the adverse effects of climate change; and uphold and promote regional and international cooperation. And here we are, as a municipality, moving forward with a plan to grant permission to fossil fuel interests to build more capacity, PAST the 2030 deadline for avoiding climate catastrophe. In fact, the analysis looks at the next 40 years of greenhouse gas emissions!! We don't need to be permitting for an additional forty years of fossil fuel processing.

Additionally, the mitigation plans laid out in the DEIS Cover Letter do not go far enough to truly account for a meaningful mitigation of the impacts of increased greenhouse gas emissions. Specifically, the proposed requirement to restore a segment of the shoreline leaves serious questions. Who will be doing the 'monitoring and maintaining' of the buffer area? Will the City allow industry to take the lead on this? This resident is concerned that the city will allow for industry to take the lead role in that. It is my observation that the city historically allows industry to 'call the shots' when it comes to regulations and reporting. Nothing meaningful will come of that and the residents will once again pay for the folly of industry. I think it is especially crucial to point out that a five years monitoring and maintenance plan for a forty year fossil fuel project is a ridiculously insignificant mitigation plan.

The proposed mitigation requiring the contribution of funds toward the City's Urban Forestry Program also falls short of a meaningful mitigation. The city continues to allow for urban forests to be destroyed in the name of commerce. How can there be a city urban forestry

program when trees are being felled daily? This mitigation sounds good on paper, but in reality, it is nothing more than window dressing. Nothing meaningful will come of this mitigation and the residents will pay for the folly of industry.

Finally, I am tracking air quality in my neighborhood again. Very concerning. Every day for the last week there have been incredible spikes in not only particulate matters but also NO2 and VOCs. Daily exposure to these spikes can have potentially catastrophic effects on human health. The fossil fuel odors have been so bad that I have nearly had asthma attacks in the last few weeks. I will continue to monitor the air around my neighborhood and gather data.

Rather than moving toward more fossil fuel capacity, we should be reducing that option and moving toward clean energy capacities in the port.

If the Seaport Alliance wants to modernize their equipment so that there is true mitigation of greenhouse gas emissions and other toxic emissions, let them do so 'as the right thing to do' but without increasing their capacity.

Thank you

Twylia Westling, MPA
4408 Browns Point Blvd
Tacoma, WA 98422
253-517-5855

From: [Virgene Link-New](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Wednesday, December 21, 2022 4:37:17 PM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Virgene Link-New
linkerwan@yahoo.com
2004 10th St
Anacortes, Washington 98221

From: [wendy wright](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: Seaport Plant Modernization Plan
Date: Wednesday, December 21, 2022 11:47:09 AM

I am opposed to the Seaport Plant Modernization Plan. This is a cleverly planned expansion of fuel capacity. We should be working to end our reliance on fossil fuels. This expansion will be harmful to the Hylebos Waterway and the surrounding Puget Sound. With 8 storage tanks there is an increased chance of spills.

The Draft Environmental Impact Statement leaves out important considerations. The DEIS does not provide a comprehensive analysis of the potential impacts to the air and water surrounding the Port of Tacoma and the entire city. It does not mention the impacts on greenhouse gases. There also will be an increase of rail, vessels, and other vehicle traffic. These transportation increases will harm the air quality of the area.

The Seaport Plant Modernization Plan should not be allowed.

Wendy Wright

From: [William Biederman](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 11:10:49 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

William Biederman
wjb259@gmail.com
259 Shorewood Court
Fox Island, Washington 98333

From: [Yonit Yogev](#)
To: [Seaport Plant Modernization DEIS](#)
Subject: SeaPort Sound DEIS Is Highly Flawed
Date: Tuesday, December 20, 2022 10:19:11 AM

Principal_Planner Shirley Schultz,

I am writing this comment on SeaPort Sound Terminal's Draft Environmental Impact Statement (DEIS) for permit# LU20-0107.

As someone concerned about the environment, climate change, and the direction of Tacoma's fossil fuel industry, I know that an EIS is the only way that all potential impacts of development projects are uncovered – thus the work must be of the highest standard. And yet the DEIS in this case falls short in important ways. In these days of rapid and dynamic climate change, we need extra care and oversight of Environmental Impact Statements to make sure they are compliant with the State Environmental Policy Act (SEPA).

First, the greenhouse gas (GHG) study not only uses outdated data but also does not even model the impacts of operating at full capacity! In addition, this GHG study did not include the GHG from leakage and transportation. Taken together, this means that the actual GHG pollution is still unknown. This is truly unacceptable. A thorough EIS must use the most up-to-date data and use the 20-year global warming projections (GWP), given the projected life of the development.

Next, since SeaPort Sound did no work modeling the impacts of the new storage capacity at full capacity, the full environmental risks are completely unknown and mark this DEIS as violating SEPA. Larger capacity will mean more ships and railcars, more activity which could create more spills, and a greater impact to our air and our health. These are basic facts that must be included in any legally compliant EIS.

This is not, in fact, a “clean fuels” project. SeaPort Sound is planning to use an unchanged fuel mix. The modernization of the heating units, which will have a positive effect on GHG reduction, can be completed without allowing a fossil fuel storage capacity increase of 11%. Resist greenwashing by calling it out for what it is.

We need our leaders to face the facts in this case, and guide SeaPort Sound to a SEPA-compliant EIS. Our city's One Tacoma Plan and Climate Action Plan are implemented in projects like this, step by careful step. Do not let our planning get thrown under the bus. This is the time for you to step up to secure all our futures by enforcing the law!

Thank you for reading my comment.

Yonit Yogev
yonityogev@gmail.com
821 Kaiser Rd. NW #2D
Olympia, Washington 98502

From: [Roger Martin](#)
To: [Schultz, Shirley](#)
Subject: Additional commentary on DEIS for SeaPort Terminal
Date: Sunday, January 8, 2023 2:47:19 PM

Ms Schultz,

I want to again thank you for providing opportunities for comment on the SeaPort Terminal DEIS. I apologize for the poor editing I did on my previous comment before I submitted that material. The reason I'm writing now is in hope that this might also get into the official commentary.

Regarding how high the sea level is likely to get, I have some new information from my daughter's Oxford group, but it will not be releasable to the public until the entire group has had a chance to get peer review on the materials. However, there is something else that just came out in open media I hope your team at the Planning Commission might consider.

As I mentioned before, NOAA's administrator had made a widely dismissed prediction that sea levels would not rise more than one foot between now and 2100. I certainly hope that your applicants and their supporters do not use this figure, but I think it is worthwhile pointing out how extreme it is. A report recently published in a few places discusses the likely consequences of various scenarios of the future of the Thwaites Glacier complex in the Antarctic in that period, and what we learned from the recent king tide in the area of Olympia WA.

From what I read, the seawater there rose to more than 18 feet above the reference sea level from the combination of the king tide and the storm surge earlier this month, setting a new historic record.

en f

Now, I hope your team will look at the new information in the report on Thwaites. Notice the prediction put out by IPCC for sea-level rise by 2100. If I read it correctly, they said the *lowest* (not highest, like in NOAA's numbers) prediction is two feet. Later in the article, it says if the entire Thwaites glacier complex in Antarctica fails, you are talking about a rise of ten feet. Add those numbers to the 18+ feet of sea level rise that occurred along with this month's king tide, and you can get an idea of the possible impact of future king tides on top of predicted sea-level rise on locations in the Puget Sound. How much of a rise in sea level can your SeaPort Terminal tolerate without doing damage that can harm the Sound? What safeguards are in place, especially after the UC-Berkeley / ASU study on the combined consequences of shoreline landfill sinking at the same time the sea level is rising. That study shows that inundation will occur much faster than what would happen on construction built on other than shoreline landfill.

Again, I beg you to have competent and independent analysts with a background in geology, geophysics, and/or oceanography study this scenario, combined with the likelihood of a Tacoma Fault earthquake and run a full computer simulation of how far down the facilities could be predicted to sink, how much of it would break up from the shaking and sinking, and what the leakage of the contents would do, chemically, physically, and biologically, to the surrounding area. And this simulation should include calculations using the equations found in the UC-B / ASU study to include the sinking

factor of the landfill itself just because of its being partially submerged landfill. This simulation should cover the declared projected lifetime of the Terminal's operation and should include worst-case what-ifs for an earthquake during a king tide near the projected end of the facility's lifespan--not just in the next five years. No EIS should be submitted until a study like this is complete so that the findings can be included in the EIS'.

Here is a link to the recent article on Thwaites with some new sea-level numbers I believe are more believable than the NOAA Administrator's.

https://www.popsci.com/environment/thwaites-glacier-history/?utm_source=Newsletter+Subscribers&utm_campaign=daf703d5e6-EMAIL_CAMPAIGN_2023_01_06_06_02&utm_medium=email&utm_term=0_387276506e-dc9ceb0bc7-%5BLIST_EMAIL_ID%5D#affinity=Environment

I really appreciate all you are doing to make this a good document.

Thanks again,

Roger T. Martin, Lt Col, USAF (Ret)

Cell/txt: 253 569-7793

Residence: Steilacoom.

Mailing address: 3800-A Bridgeport Wy, W, #543, University Place WA 98466

From: [Roger Martin](#)
To: [Schultz, Shirley](#)
Subject: Re: Additional commentary on DEIS for SeaPort Terminal
Date: Sunday, January 8, 2023 2:59:12 PM

I am sorry. My computer erased part of a paragraph about Olympia and the king tide. What is said, and what you probably already know, is that the recent king tide and storm surge in Olympia set a record in excess of 18 feet.

My apologies once more.

Thanks,

Roger T Martin

On Sunday, January 8, 2023 at 02:47:09 PM PST, Roger Martin <fbrogert@yahoo.com> wrote:

Ms Schultz,

I want to again thank you for providing opportunities for comment on the SeaPort Terminal DEIS. I apologize for the poor editing I did on my previous comment before I submitted that material. The reason I'm writing now is in hope that this might also get into the official commentary.

Regarding how high the sea level is likely to get, I have some new information from my daughter's Oxford group, but it will not be releasable to the public until the entire group has had a chance to get peer review on the materials. However, there is something else that just came out in open media I hope your team at the Planning Commission might consider.

As I mentioned before, NOAA's administrator had made a widely dismissed prediction that sea levels would not rise more than one foot between now and 2100. I certainly hope that your applicants and their supporters do not use this figure, but I think it is worthwhile pointing out how extreme it is. A report recently published in a few places discusses the likely consequences of various scenarios of the future of the Thwaites Glacier complex in the Antarctic in that period, and what we learned from the recent king tide in the area of Olympia WA.

From what I read, the seawater there rose to more than 18 feet above the reference sea level from the combination of the king tide and the storm surge earlier this month, setting a new historic record.

en f

Now, I hope your team will look at the new information in the report on Thwaites. Notice the prediction put out by IPCC for sea-level rise by 2100. If I read it correctly, they said the *lowest* (not highest, like in NOAA's numbers) prediction is two feet. Later in the article, it says if the entire Thwaites glacier complex in Antarctica fails, you are talking about a rise of ten feet. Add those numbers to the 18+ feet of sea level rise that occurred along with this month's king tide, and you can get an idea of the possible impact of future king tides on top of predicted sea-level rise on locations in the Puget Sound. How much of a rise in sea level can your SeaPort Terminal tolerate without doing damage that can harm the

Sound? What safeguards are in place, especially after the UC-Berkeley / ASU study on the combined consequences of shoreline landfill sinking at the same time the sea level is rising. That study shows that inundation will occur much faster than what would happen on construction built on other than shoreline landfill.

Again, I beg you to have competent and independent analysts with a background in geology, geophysics, and/or oceanography study this scenario, combined with the likelihood of a Tacoma Fault earthquake and run a full computer simulation of how far down the facilities could be predicted to sink, how much of it would break up from the shaking and sinking, and what the leakage of the contents would do, chemically, physically, and biologically, to the surrounding area. And this simulation should include calculations using the equations found in the UC-B / ASU study to include the sinking factor of the landfill itself just because of its being partially submerged landfill. This simulation should cover the declared projected lifetime of the Terminal's operation and should include worst-case what-ifs for an earthquake during a king tide near the projected end of the facility's lifespan--not just in the next five years. No EIS should be submitted until a study like this is complete so that the findings can be included in the EIS'.

Here is a link to the recent article on Thwaites with some new sea-level numbers I believe are more believable than the NOAA Administrator's.

https://www.popsci.com/environment/thwaites-glacier-history/?utm_source=Newsletter+Subscribers&utm_campaign=daf703d5e6-EMAIL_CAMPAIGN_2023_01_06_06_02&utm_medium=email&utm_term=0_387276506e-dc9ceb0bc7-%5BLIST_EMAIL_ID%5D#affinity=Environment

I really appreciate all you are doing to make this a good document.

Thanks again,

Roger T. Martin, Lt Col, USAF (Ret)

Cell/txt: 253 569-7793

Residence: Steilacoom.

Mailing address: 3800-A Bridgeport Wy, W, #543, University Place WA 98466