

# **Tesoro Savage Vancouver Energy Distribution Terminal Facility**

## **Draft Environmental Impact Statement**

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### **Washington State Environmental Policy Act Lead Agency:**

State of Washington, Energy Facility Site Evaluation Council  
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## LIST OF ACRONYMS, INITIALISMS, AND ABBREVIATIONS

°C	degree(s) Celsius	BNSF	Burlington Northern Santa Fe
°F	degree(s) Fahrenheit	BP	before present
µg/m <sup>3</sup>	microgram(s) per cubic meter	bpd	barrel(s) per day
AADT	Annual Average Daily Traffic	BTEX	benzene, toluene, ethybenzene, and xylenes
ACA	American Correctional Association	CAD	computer-aided design
AFF	aqueous film-forming [foam]	CAP	Climate Action Plan
AIS	aquatic invasive species	CEMP	Comprehensive Emergency Management Plan
AISC	American Institute of Steel Construction	CEQ	Council on Environmental Quality
Alcoa	Aluminum Company of America	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
ALERT	Assistance for Local Emergency Response Training	CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
API	American Petroleum Institute	CFR	Code of Federal Regulations
Applicant	Tesoro Savage Petroleum Terminal LLC	cfs	cubic feet per second
AQCR	Air Quality Control Region	City	City of Vancouver
AREMA	American Railway Engineering and Maintenance-of-Way Association	CLIMB	Cascade Locks International Mountain Bike (trail)
ASC	Application for Site Certification	CO	carbon monoxide
ASCE	American Society of Civil Engineers	CO <sub>2</sub>	carbon dioxide
ASIL	Acceptable Source Impact Level	CO <sub>2e</sub>	carbon dioxide equivalent
ASTM	American Standards Testing and Materials	CPS	coastal pelagic species
ATB	articulated tug barge	CPT	cone penetrometer test
B&O	business and occupation (tax)	CPU	Clark Public Utilities
bbl	barrel(s)	CRC	Clean Rivers Cooperative
BE	Biological Evaluation	CRD	Columbia River datum
bgs	below ground surface	CRESA	Clark Regional Emergency Services Agency
BIA	Bureau of Indian Affairs	CRSOA	Columbia River Steamship Operators Association
BLM	Bureau of Land Management	CRWMB	Columbia River Wetland Mitigation Bank
BMP(s)	best management practice(s)		

CSZ	Cascadia Subduction Zone	EPA	US Environmental Protection Agency
CT	census tract	ESA	Endangered Species Act (federal)
CWA	Clean Water Act	ESD	emergency shutdown (button)
DAHP	Washington State Department of Archaeology and Historic Preservation	ESHB	Engrossed Substitute House Bill
dB	decibel(s)	ESU	evolutionarily significant unit
dBA	A-weighted decibel(s)	Facility/Project	Vancouver Energy Distribution Terminal
dBrms	root mean square sound in decibels	FEMA	Federal Emergency Management Agency
DDT	dichlorodiphenyltrichloroethane	FHWA	Federal Highway Administration
dilbit	diluted bitumen	FIRM	flood insurance rate map (FEMA)
DLC	Donation Land Claim	FOSC	Federal On-Scene Coordinator
DOE	US Department of Energy	F-PAAC	Fire Protection Agencies Advisory Council
DOGAMI	Oregon Department of Geology and Mineral Resources	FPRP	Fire Prevention and Response Plan
DOT	US Department of Transportation	FRA	Federal Railway Administration
DOT-117	DOT Specification 117	FRP	Facility Response Plan
DPM	diesel particulate matter	FTA	Federal Transit Administration
DPS	distinct population segment	GAP	USGS Gap Analysis Program
DWT	deadweight ton(nage)	GCR	General Conformity Rule
Ecology	Washington State Department of Ecology	GHG	greenhouse gas
EDNA	environmental designation for noise abatement	GIS	geographic information system
EEZ	exclusive economic zone	GLO	General Land Office
EFH	essential fish habitat	gpd	gallon(s) per day
EFSEC	Energy Facility Site Evaluation Council	gpm	gallon(s) per minute
E-house	electrical house	GPS	global positioning system
EIA	US Energy Information Administration	GRP	geographic response plan
EIS	environmental impact statement	GWMA	Ground Water Management Area
EMD	Military Department's Emergency Management Division	GWP	global warming potential
		HAPs	hazardous air pollutants
		HAZWOPER	Hazardous Waste Operations and Emergency Response

HBC	Hudson's Bay Company	Lmax	maximum Leq (equivalent sound level)
HBD	hot bearing detectors	LOA	length overall
HDPE	high-density polyethylene	LOS	Level of Service
HHFT	high-hazard flammable train	MCE	Maximum Considered Earthquake
HMERP	Hazardous Materials Emergency Response Plan	MDWT	million deadweight ton(s)
HMRTs	Hazardous Materials Response Teams	MFSA	Maritime Fire and Safety Association
hp	horsepower	mg/m <sup>2</sup>	milligrams per square meter
HPA	Hydraulic Project Approval	MGD	million gallon(s) per day
HSSE	Health, Safety, Security, and Environment (Plan)	MLLW	mean lower low water
HTUA	High Threat Urban Areas	MMBtu	million British thermal units
Hz	hertz	MMDT	million dekatherm(s)
I-	Interstate	MMMP	Marine Mammal Monitoring Plan
IBC	International Building Code	MMPA	Marine Mammal Protection Act
ICMA	International City/County Management Association	MMscf	million standard cubic feet
IH	Heavy Industrial (zone)	MNHP	Montana National Heritage Program
IMO	International Maritime Organization	mph	mile(s) per hour
IMPLAN	IMPact Analysis for PLANning	MSA	Metropolitan Statistical Area
in/sec	inch(es) per second	MSATs	Mobile Source Air Toxics
ISO	International Standards Organization	MSDS	material safety data sheet
ITOPF	International Tanker Owners Pollution Federation Limited	MTCA	Model Toxics Control Act
JWC	Clark County Jail Work Center	MVCU	marine vapor combustion unit
Kg	kilograms	NAAQS	National Ambient Air Quality Standards
kHz	kilohertz	NAVD	North American Vertical Datum
KOP	Key Observation Point	NCP	National Contingency Plan
Ldn	day-night sound level	NCP	National Contingency Plan
LEPC	Local Emergency Planning Committee	NDIC	North Dakota Industrial Commission
Leq	equivalent sound level	NEHRP	National Earthquake Hazards Reduction Program
LiDAR	light distancing and radar	NEPA	National Environmental Protection Act

NETL	National Energy Technology Laboratory	OSCP	Oil Spill Contingency Plan
NFPA	National Fire Protection Association	OSHA	Occupational Safety and Health Act
NGL	natural gas liquid	PADD	Petroleum Administration for Defense District
NGVD	National Geodetic Vertical Datum	PAHs	polycyclic aromatic hydrocarbons
NIOSH	National Institute for Occupational Safety and Health	PBDEs	polybrominated diphenyl ethers
NMFS	National Marine Fisheries Service	PCBs	polychlorinated biphenyls
nmi	nautical mile(s)	PDEIS	Preliminary Draft Environmental Impact Statement
NO <sub>2</sub>	nitrogen dioxide	PFMC	Pacific Fisheries Management Council
NOAA	National Oceanic and Atmospheric Administration	PGA	peak ground acceleration
NOx	nitrogen oxide	PHMSA	Pipeline and Hazardous Materials Safety Administration
NPDES	National Pollutant Discharge Elimination System	PHS	Priority Habitats and Species (Program)
NPS	National Park Service	PM	particulate matter
NRHP	National Register of Historic Places	PM10	suspended particulate matter less than or equal to 10 microns in diameter
NRS	National Recovery System	PM2.5	fine particulate matter less than or equal to 2.5 microns in diameter
NRT	National Response Team	Port	Port of Vancouver
NTSB	National Transportation Safety Board	PPE	personal protective equipment
NuStar	NuStar Energy LP	ppm	part(s) per million
NWACP	Northwest Area Contingency Plan	PSD	Prevention of Significant Deterioration
NWI	National Wetlands Inventory	psi	pound(s) per square inch
NWR	National Wildlife Refuge	PTC	Positive Train Control
OARRA	Oregon Archaeological Records Remote Access	PVC	polyvinyl chloride
ODEQ	Oregon Department of Environmental Quality	RCNM	Roadway Construction Noise Model
ODFW	Oregon Department of Fish and Wildlife	RCRMS	Rail Corridor Risk Management System
OHWM	ordinary high water mark	RCW	Revised Code of Washington
OPA 90	Oil Pollution Act of 1990		
ORS	Oregon Revised Statute		

RFFA	reasonably foreseeable future action	TWIC	Transportation Worker Identification Credential
RM	river mile	U&A	usual and accustomed
RP	responsible party	UP	Union Pacific
RRT	Regional Response Team	USA	Unconsolidated Sedimentary Aquifer
Sa	spectral acceleration	USACE	US Army Corps of Engineers
SARA	Superfund Amendments and Reauthorization Act	USC	United States Code
SCA	Site Certification Agreement	USCG	US States Coast Guard
SDWA	Safe Drinking Water Act	USFS	US Forest Service
SEPA	Washington State Environmental Policy Act	USFWS	US Fish and Wildlife Service
SLM	sound level measurement	USGS	US Geological Survey
SMA	Shoreline Management Act	UTC	Utilities and Transportation Committee (Washington)
SMP	Shoreline Master Program	v/c	volume-to-capacity (ratio)
SO <sub>2</sub>	sulfur dioxide	VdB	vibration velocity decibel(s)
SOx	sulfur oxide	VFD	Vancouver Fire Department
SPCC	Spill Prevention, Control, and Countermeasure	VMC	Vancouver Municipal Code
SPL	sound pressure level, spent pot liner	VOCs	volatile organic compounds
SPT	standard penetration test	VPD	Vancouver Police Department
SR	State Route	VPIC	Vessel Person in Charge
SWCAA	Southwest Clean Air Agency	VRM	Visual Resources Management
SWPPP	Stormwater Pollution Prevention Plan	VRP	Vessel Response Plan
TAPs	toxic air pollutants	VTIS	Vessel Traffic Information System
TAS	Troutdale Aquifer System	WAAQS	Washington Ambient Air Quality Standards
TCE	trichlorethylene	WAC	Washington Administrative Code
TCP	Traditional Cultural Property	WCD	worst-case discharge
TGA	Troutdale Gravel Aquifer	WDFW	Washington Department of Fish and Wildlife
TMDL	total maximum daily load	WDNR	Washington Department of Natural Resources
TMPL	Trans Mountain pipeline	WDOH	Washington State Department of Health
TPH	total petroleum hydrocarbon	WHR	Washington Heritage Register
TPIC	Terminal Person in Charge		
TCI	Transportation Technology Center Inc.		

WISAARD	Washington Information System for Architectural and Archaeological Records Data	WRIA	Water Resource Inventory Area
WISHA	Washington Industrial Safety and Health Act	WSDOT	Washington State Department of Transportation
WNHP	Washington Natural Heritage Program	WSP	Washington State Patrol
		WVFA	West Vancouver Freight Access
		WWTP	Wastewater Treatment Plant