MILLENNIUM **Bulk Terminals—Longview**

National Environmental Policy Act
Draft Environmental Impact Statement

Volume I: Draft Environmental Impact Statement

September 30, 2016

Printed on Recycled Paper

US Army Corps
of Engineers ®
Seattle District

Millennium Bulk Terminals—Longview
Cowlitz County, Washington
National Environmental Policy Act Draft Environmental Impact Statement
September 30, 2016

Responsible Agency: The lead federal agency responsible for compliance with the National Environmental Policy Act (NEPA) is the U.S. Army Corps of Engineers (Corps), Seattle District. The NEPA cooperating agencies are the U.S. Environmental Protection Agency and the U.S. Coast Guard.

Abstract: Millennium Bulk Terminals—Longview, LLC (Applicant) is proposing to construct and operate an export terminal in Cowlitz County, Washington, along the Columbia River. The export terminal would receive coal from the Powder River Basin in Montana and Wyoming and Uinta Basin in Utah and Colorado via rail shipment. The proposed export terminal would receive, stockpile, blend, and load coal by conveyor onto vessels in the Columbia River for export to Asia. Once construction is complete, the export terminal would have a maximum annual throughput capacity of up to 44 million metric tons of coal per year.

The Applicant is required to obtain Department of the Army authorization, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (codified as 33 USC § 403) and Section 404 of the Clean Water Act (codified as 33 USC § 1344), to construct the export terminal. The Corps' decision to issue, issue with conditions, or deny a permit for activities within the Corps' jurisdiction associated with construction and operation of the proposed export terminal is a Federal Action requiring NEPA review.

This Draft Environmental Impact Statement (Draft EIS) evaluates the effects of the proposed export terminal on the built, natural, and operational environments. Two action alternatives for the proposed export terminal, the On-Site Alternative and the Off-Site Alternative, and a No-Action Alternative are analyzed. Construction and operation of the proposed export terminal (On-Site Alternative and Off-Site Alternative) were evaluated for their potential impacts on the built environment (land use, social and community resources, aesthetics, cultural resources, tribal treaty rights and trust responsibilities, hazardous materials, and energy), natural environment (geology and soils, surface water and floodplains, wetlands, water quality, vegetation, fish, and wildlife), and operational environment (rail transportation, rail safety, vehicle transportation, vessel transportation, noise and vibration, air quality, coal dust, and greenhouse gas emissions). Mitigation measures are proposed where feasible and reasonable. The Draft EIS also reviews the potential impacts of the proposed terminal on the built, natural, and operational environments when considered in combination with other past, present, and reasonably foreseeable future actions.

This document is available online at www.millenniumbulkeiswa.gov. Comments on this Draft EIS will be accepted during a 60-day comment period (September 30 through November 29, 2016). Comments may be submitted in the following ways:

- **By mail:**
  Millennium Bulk Terminals—Longview NEPA EIS
  c/o ICF International
  710 Second Avenue, Suite 550
  Seattle, WA 98104
- **Online:**
  http://www.millenniumbulkeiswa.gov
- **In person at a public hearing verbally or in writing:**

  Monday, October 24, 2016
  1:00 p.m. to 4:00 p.m. and 5:00 p.m. to 9:00 p.m.
  Cowlitz County Regional Conference Center
  1900 7th Avenue
  Longview, WA 98632

  Tuesday, October 25, 2016
  1:00 p.m. to 4:00 p.m. and 5:00 p.m. to 9:00 p.m.
  Clark County Event Center
  17402 NE Delfel Road
  Ridgefield, WA 98642

Please send requests for additional information to:

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Acronyms and Abbreviations

°F	degrees Fahrenheit
μg/m^3	micrograms per cubic meter
ACM	active channel margin
ACS	American Community Survey
AD	anno Domini
ADT	average daily traffic
AERMOD	EPA atmospheric dispersion modeling system, Version 14134
AFY	acre-feet per year
AMR	American Medical Response
Applicant	Millennium Bulk Terminals—Longview, LLC
Bar Pilots	Columbia River Bar Pilots
BC	before Christ
BCE	Before the Common Era
BMP	Black Mud Pond
BNSF	BNSF Railway Company
BPA	Bonneville Power Administration
bws	below water surface
Cadna/A®	Computer-Aided Noise Abatement Noise Prediction Model
CCC	Cowlitz County Code
CDID	Consolidated Diking Improvement District
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	cubic feet per second
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COLRIP	Columbia River Pilots
Corps	U.S. Army Corps of Engineers
County	Cowlitz County
CPAH	carcinogenic polycyclic aromatic hydrocarbon
CRD	Columbia River Datum
CREOFS	Columbia River Estuary Operational Forecast System
CRITFC	Columbia River Inter-Tribal Fish Commission
CSZ	Cascadia Subduction Zone
CTC	Centralized Traffic Control
DAHP	Department of Archaeology and Historic Preservation
dB	decibels
dBRMS	decibels root mean square
dBSEL	sound exposure level
DEQ	Oregon Department of Environmental Quality
DMMP	Dredged Material Management Program
DNR	Washington State Department of Natural Resources
DPS	distinct population segment

Draft EIS	Draft Environmental Impact Statement
DWT	deadweight tonnages
DWZ	deepwater zone
Ecology	Washington State Department of Ecology
EFH	essential fish habitat
EIA	U.S. Energy Information Administration
EIS	environmental impact statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	evolutionarily significant unit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FR	Federal Register
FRA	Federal Railroad Administration
FRA/FTA Manual	Transit Noise and Vibration Impact Assessment
FTA	Federal Transit Administration
g	gravity
g/L	grams per liter
g/m^2/month	grams per square meter per month
g/m^2/year	grams per square meter per year
GHG	greenhouse gas
GIS	geographic information system
GMA	Growth Management Act
gpm	gallons per minute
GWP	global warming potential
HAPS	hazardous air pollutants
HEA	habitat equivalency analysis
HFC	hydrofluorocarbon
HGM	hydrogeomorphic
ICF	ICF International
JARPA	Joint Aquatic Resources Permit Application
Ldn	day-night sound level
Leq	equivalent sound level
LiDAR	light detection and ranging
LMC	Longview Municipal Code
LVSW	Longview Switching Company
MCL	Maximum Contaminant Level
MDNS	Mitigated Determination of Non-Significance
MFR	Memorandum for Record
MG	million gallons
mg/L	milligrams per liter
MMPA	Marine Mammal Protection Act
MMTPY	million metric tons per year
mph	miles per hour
MTCA	Model Toxics Control Act

NAAQS	National Ambient Air Quality Standards
NAVD88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NORPAC	North Pacific Paper Corporation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTU	nephelometric turbidity unit
O_3	ozone
OHWM	ordinary high water mark
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	primary constituent element
PDXMEX	Merchants Exchange of Portland, Oregon
PEM	palustrine emergent
PFO	palustrine forested
PHS	Priority Habitat and Species
PM2.5	particulate matter up to 2.5 micrometers in size
PM10	particulate matter up to 10 micrometers in size
Port	Port of Longview
ppb	parts per billion
ppm	parts per million
proposed export terminal	Millennium Bulk Terminals—Longview project
PSS	palustrine scrub-shrub
PTS	Permanent Threshold Shifts
PUD	Public Utility District
RCW	Revised Code of Washington
Reynolds facility	Reynolds Metals Company facility
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMP	Shoreline Management Master Program
SO_2	sulfur dioxide
SOLAS	Safety of Life at Seas
SR	State Route
SR 432	Mt. Solo Road
STB	Surface Transportation Board
SWCAA	Southwest Clean Air Agency
SWMP	Stormwater Management Plan
SWPPP	stormwater pollution prevention plan

SWZ	shallow water zone
TEEC	trace elements of environmental concern
TESC	Temporary Erosion and Sediment Control
TPH	total petroleum hydrocarbons
Treaty Tribes	Confederated Tribes and Bands of the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of Warm Springs, and the Nez Perce Tribe
TTS	Temporary Threshold Shifts
TWC	Traffic Warrant Control
U&A	usual and accustomed
UP	Union Pacific Railroad
US 30	U.S. Route 30
USC	United States Code
USCG	U.S. Coast Guard
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VEAT	Vessel Entries and Transits
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WHR	Washington Heritage Register
WISAARD	Washington Information System for Architectural and Archaeological Records Database
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WUTC	Washington Utilities and Transportation Commission
WWHM	Western Washington Hydrology Model
Zone 6	mainstem Columbia River from Bonneville Dam to McNary Dam