

**OCTOBER 2016 REVISED APPLICATION FOR SITE CERTIFICATION
CHANGE HISTORY PARTS 1-4 - GENERAL**

The following table is a summary of the main revisions and updates made to the May 2016 Application for Site Certification (ASC). The table indicates the source of the materials used for the revisions, as follows, and the date the sources were submitted to EFSEC.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information <i>(PD indicates the Project Description was revised)</i>
Part 1				
1.1	Updated Applicant information.	See references	5-27-2016	Tesoro Corporation and Savage Companies descriptions were updated based on more recent corporate information available publicly.
1.2	Updated Applicant contact information.	NA	5-12-2014	
1.3	Updated Applicant's financial assurance commitments.	Appendix E.2	5-27-2016 8-29-2013 10-6-2016	1.3.1 – 1.3.5.2: The Applicant provided a clearer description of its financial assurance commitments. The substance of the commitments was the same as that which appeared in the Port lease as provided to EFSEC in August 2013. 1.3.5.2: Information was added regarding Washington State financial responsibility requirements applicable to vessel and rail operations. 1.3.6: Editorial changes to reflect the updated decommissioning discussion in Section 2.3.9.
1.4	Updated per revisions to Parts 1, 2, 3, and 4.	See Parts 1 - 4	5-27-2016 10-6-2016	Section 4 is a summary of commitments and mitigation measures which appear elsewhere in the document – see the changes to Parts 1-4.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD indicates the Project Description was revised)
1.4.1	Added description of Table 1.4-3.		10-6-2016	Table 1.4-3 provides a summary of all the mitigation measures included in the DEIS and the status of each measure in the ASC.
Table 1.4-3	DEIS Mitigation Measures Table	DEIS	10-6-2016	Provided a summary of all the mitigation measures included in the DEIS and the status of each measure in the ASC.
1.4.1.1	Added types of crude oil within the API gravity range that may be received, handled, stored, and loaded at the facility.		10-6-2016	"This range can include the Bakken and Dilbit."
1.4.1.2	Added additional tank car specifications.		10-6-2016	The Facility will only receive cars with 9/16-inch shell thickness and that comply with both the Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains Rule (HM-251) and the FAST Act, which amended HM-251.
1.4.1.3	Added information regarding vessel calling requirements at terminal.		10-6-2016	Added new requirement that vessels will only be permitted to arrive and load at the Facility's marine terminal that have been vetted in accordance with the Tesoro Maritime proprietary vetting process.
1.4.1.3	Added information regarding marine terminal configuration and construction mitigation measures.		10-6-2016	Clarified containment at the dock is 84 barrels. Revised containment design at the dock to increase pumping capacity and physical storage capacity of the catch basin.
1.4.1.5	Added information regarding spill prevention and control mitigation measures.		10-6-2016	Provided a description of booming activities proposed for the Facility and their compliance with applicable regulatory statutes.
1.4.1.6a 1.4.1.15	Added Construction Communication Plan		10-6-2016	Detailed contents of the Construction Communication Plan that will be distributed to the public, City, County, EFSEC, and other appropriate state agencies.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
1.4.1.7	Added footnote regarding compliance with 2015 IBC		10-6-2016	"Preliminary review of the facility design indicates that the Facility complies with the 2015 IBC."
1.4.1.7	Added information regarding flooding mitigation measures		10-6-2016	Modified design of project elements located in Area 400 to ensure the floor of the structures is at least 2 feet above the base flood elevation.
1.4.1.7	Added information regarding jet grouting mitigation measures		10-6-2016	Provided description of actions to be taken if there is a water quality exceedance in accordance with the project's NPDES Individual Construction Stormwater Permit.
1.4.1.7	Added information regarding spill prevention, control and countermeasures		10-6-2016	Clarified containment at the dock is 84 barrels. Revised containment design at Area 400 to increase pumping capacity and physical storage capacity of the catch basin. Added description of an assessment to be performed to inventory existing oil-water spill control devices at the downstream inlets adjacent to the transfer pipeline.
1.4.1.7	Added activities to be performed in the event of an expected site inundation.		10-6-2016	Added a measure that movable equipment will be relocated above the 500-year floodplain and static equipment will be secured.
1.4.1.7	Added information regarding decommissioning mitigation measures		10-6-2016	Added a measure that ground improvement locations will be covered by an impervious surface.
1.4.1.7 1.4.1.14	Added additional public water supply mitigation measure		10-6-2016	The applicant will install a water line loop.
1.4.1.7	Revised in-water work period. This revision was included throughout the ASC as applicable.		10-6-2016	The in-water work window has been revised to September 1 to January 15 to avoid peak migration and larval stages of salmonid and nonsalmonid species. The revised work window is preferred by EFSEC and WDFW. Coordination to align the USACE

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
				work window with the preferred window is ongoing.
1.4.1.7	Added construction noise mitigation measure.		10-6-2016	Sound dampening devices will be used to minimize sound of impact pile driving.
1.4.1.14	Added mitigation measures in response to VFD emergency response gaps presented in Appendix B of the DEIS		10-6-2016	Provided fire department connections on the Facility side of the fire protection systems; and provided a description of the training to be provided to emergency responders. Provided a description of the emergency response drills to be performed and potential grants that may fund first responder planning, preparedness and equipment needs identified during the drills.
1.4.1.14	Added operations safety standards compliance measure.		10-6-2016	The applicant will provide employees with fire retardant clothing in accordance with applicable state regulations.
1.4.1.16	Deleted operational transportation mitigation measure.		10-6-2016	Removed measure stating a YIELD sign will be posted at Old Lower River Road to SR 501.
1.4.1.18	Added a new section that provides additional general mitigation measures addressing performance based facility throughput, first call for Washington refiners and the mitigation fund		10-6-2016	Added new mitigation measures that discuss performance based facility throughput, first call for Washington refiners and the mitigation fund
1.4.1.19	Added decommissioning impacts and mitigation measures.	PDEIS	7-28-2014 10-6-2016	Added a measure that ground improvement locations will be covered by an impervious surface.
1.4.2	Updated Fair Treatment Discussion with analysis from PDEIS	PDEIS	7-28-2014	
1.5	Updated per revisions to Parts 1, 2, 3, and 4.	See Parts 1 - 4	5-27-2016 10-6-2016	Section 1.5 is the collection of references supporting the ASC. New references have been

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
				identified in track changes format for each section.
1.6	Updated with Applicant's ongoing consultation activities.	EFSEC EIS Data Request No. 12 (Makarow 2016b)	1-25-2016 5-27-2016 10-6-2016	Information regarding tribal consultation was added.
Part 2				
2.1.1	Impact Acreages were updated. This revision was included throughout the ASC as applicable.	PRM	5-27-2015	
2.1.1	Number of people directly employed by businesses at the Port was updated.	See references	5-27-2016	
2.1.1.1	The status of the BHP Billiton proposal, adjacent to the Facility site, was updated.	PDEIS	7-28-2014	
Figure 2.1-1	The figure was updated with the most current Facility site boundary.	PRM	5-27-2015	
Figure 2.1-2	The figure was updated with the most current Facility site boundary.	PRM	5-27-2015	
2.1.1.2	The reference to the boilers in Area 300 was removed.	PDEIS	7-28-2014	
2.1.1.2	The current use of Parcel 1A was updated.	See references	5-27-2016	
2.1.1.5	This section was updated to reflect that steam piping facilities are included in Area 600 for purpose of the project description, and that an E-house will also be constructed at this location.	PDEIS	7-28-2014	
2.1.1.6	The description of rail improvements at Terminal 5 was	PRM	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	revised. This revision was included throughout the ASC as applicable.			
2.1.2.3	Width of the Columbia River at Terminal 4 was revised. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	
2.1.3.1	Revised name of Portland West Hills to Tualatin Mountains. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	
Figure 2.3-1	Revised figure showing product flow.	PDEIS	7-28-2014	
2.3.1	Added information regarding the project need and purpose.		10-6-2016	Section 2.3.1 has been updated with information regarding the project need due to decline in Alaska North Slope crude oil and limited pipeline connections.
2.3.1	Clarified grade of crude oil received, handled, stored, and loaded at the facility. This revision was included throughout the ASC as applicable.	NA	5-27-2016	
2.3.1	Clarified the Applicant will neither own nor source the crude oil shipped through the Facility.	PDEIS ^{1,2}	2-5-2015	
2.3.1	Summary of Primary and Ancillary Project Elements were updated. This revision was included throughout the ASC as applicable.	PDEIS, PRM	7-28-2014 5-27-2015 5-27-2016	-
2.3.1	Named the private access road to Old Alcoa Facility Access Road for	PDEIS	7-28-2014	

¹ Letter from David Corpron and Irina Makarow to Stephen Posner, Responding to Request for Additional Information to Assess EIS Alternatives, February 5, 2015.

² Letter from Irina Makarow to Stephen Posner, Response to EFSEC Request for Review of Draft Environmental Impact Statement (EIS) Chapter 2- Proposal Description, April 1, 2015.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	purposes of the ASC. This revision was included throughout the ASC as applicable.			
2.3.1	Revised the parking at the marine terminal area to be located on a reconstructed asphalt and gravel area.	NA	5-27-2016	
2.3.1.1	Revised capacity of intermediate berms.	PDEIS	7-28-2014	
2.3.1.1	Revised capacity of stormwater facilities.	ER, Appendix C.2	10-15-2015	
2.3.1.1	Clarified the transfer pipeline conveyance locations.	PDEIS	7-28-2014	
2.3.1.1	Clarified Port lease agreement.	Appendix E.2	8-29-2013	
2.3.1.1	Clarified dredging operations at berths 13 and 14 are a separate operation and not subject to site certification.	ASC 2013	8-29-2013	
2.3.2	Clarified average of four train arrivals per day.	PDEIS ³	7-28-2014	
Figure 2.3-2	The figure was updated with the most current Facility site boundary and updated Facility elements. This revision was included throughout the ASC as applicable.	PRM	5-27-2015	
Figure 2.3-3	The figure was updated with the most current Facility site boundary and updated Facility elements.	PRM	5-27-2015	

³ Letter from Irina Makarow to Stephen Posner, Response to EFSEC Draft EIS Data Request 2, February 23, 2015.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
Figure 2.3-4	The figure was updated with the most current Facility site boundary and rail track numbers.	PRM	5-27-2015	
2.3.3.1	Revised number of cars and locomotives in each unit train. This revision was included throughout the ASC as applicable.	PDEIS ²	7-28-2014	
2.3.3.1	Clarified duration of train unloading.	PDEIS ²	4-1-2015	
2.3.3.1	Clarified foundation elements of the unloading structure.	PRM	5-27-2015	
Figure 2.3-5	The figure was updated with the most current rail track numbers.	PRM	5-27-2015	
Figure 2.3-6	The figure was updated with the most current Facility site boundary.	PRM	5-27-2015	
Figure 2.3-7	The figure was updated to clarify surface material under tank car.	PRM	5-27-2015	
Figure 2.3-8	The figure was updated to show the updated track numbering.	PRM	5-27-2015	
2.3.3	Clarified the collection pans will convey stormwater in addition to inadvertent releases.	PDEIS, ER	7-28-2014 10-15-2015	
2.3.3	Revised the rail car unloading facility combined secondary containment volume. This revision was included throughout the ASC as applicable.	NA	5-27-2016	
Figure 2.3-9 and Figure 2.3-10	The figure was updated with the most current Facility site boundary.	PRM	5-27-2015	
2.3.3	The dimensions of the pump basins were revised.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.3.3	The quantities and capacities of the rail car unloading facility containment tanks were revised. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	
Figure 2.3-11	Added new figure to show heated tank cross section.	PDEIS	7-28-2014	
Figure 2.3-12	A note was added to the figure to indicate intermediate berms are not shown.	PDEIS	7-28-2014	
2.3.3	The dimensions of the E-houses were updated.	PDEIS ²	4-1-2015	
2.3.3	Dimensions and components of electrical equipment for the unloading facility were refined.	NA	5-27-2016	
2.3.3	Added DOT 117 rail car or better mitigation measure.	NA	5-27-2016	
2.3.3.1	Revised number of cars and locomotives in each unit train. This revision was included throughout the ASC as applicable.	PDEIS2	7-28-2014	
2.3.3.1	Clarified duration of train unloading.	PDEIS2	4-1-2015	
2.3.3.1	Clarified foundation elements of the unloading structure.	PRM	5-27-2015	
2.3.4	Description of Administrative and Support Buildings foundations was added.	PRM	5-27-2015	
2.3.5	Added conveyance of crude oil from Area 200 to Area 400. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.3.5	Updated description of the 36-inch diameter pipeline to be electrically heat-traced.	PRM	5-27-2015	
2.3.5	Updated diameter of the pipeline delivering hydrocarbon vapor.	Appendix B.5	5-26-2015	
2.3.5	Updated minimum aboveground piping vertical support height.	Appendix B.5	5-26-2015	
2.3.5	Added the belowground transfer pipeline sections will be cathodically protected.	PDEIS	7-28-2014	
2.3.5	Added information regarding the crude oil transfer rates.	PDEIS ²	4-1-2015	
2.3.5	Added information regarding the proving station located at the exit of Area 200.	PRM	5-27-2015	
2.3.5	Clarified unloading transfer rate from Area 200 to Area 400.		10-6-2016	Unloading operation can be conducted so that the flow from one unloading track is diverted to Area 400 (i.e., 14,000 bbl/hr for one feed line), or flow from both tracks is diverted if two trains are unloading at the same time (i.e., 2*14,000 bbl/hr = 28,000 bbl/hr for two feed lines).
Figure 2.3-14	Removed call outs to upland facilities.	NA	5-27-2016	
2.3.6	Height of storage tanks updated.	PRM	5-27-2015	
2.3.6	Shell capacity of storage tanks updated.	PRM	5-27-2015	
2.3.6	Added positioning of storage tanks.	Appendix N.1	2-26-2015	
2.3.6	Clarified potential heating components of two tanks.	PDEIS	7-28-2014	
2.3.6	Added the minimum and maximum distances between the tanks and	Appendix N.1	2-26-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	containment berms. This revision was included throughout the ASC as applicable.			
2.3.6	Revised the height of the intermediate containment berms. This revision was included throughout the ASC as applicable.	PDEIS, PDEIS ²	7-28-2014 4-1-2015	
2.3.6	Provided additional detail regarding the impervious liner in the containment berm. This revision was included throughout the ASC as applicable.	DEIS Letter	1-25-2016	
2.3.6	Stormwater system within the containment area was revised. This revision was included throughout the ASC as applicable.	ER	10-15-2015	
2.3.6	Tank storage pump basin description and dimensions were revised.	NPDES Letter	5-27-2016	
2.3.6	E-house footprint has been updated.	PDEIS	7-28-2014	
2.3.6	Transformer footprint has been updated.	NA	5-27-2016	
2.3.6	Added information regarding electrical switchgear.	NA	5-27-2016	
2.3.6	Refined design of fire foam skid and fire water pump house building. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	
2.3.6	Added seismic importance factor for the tank design.		10-6-2016	Added commitment that the tank design will meet a seismic importance factor of 1.25.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD indicates the Project Description was revised)
2.3.7.1	Added information regarding marine terminal loading operations.	PDEIS ²	4-1-2015	
2.3.7.1	Added additional information regarding the types and capacities of vessels calling at the Facility.	PDEIS ⁴	5-12-2015 10-6-2016	Added new requirement that vessels will only be permitted to arrive and load at the Facility's marine terminal that have been vetted in accordance with the Tesoro Maritime proprietary vetting process.
Table 2.3-3	Added table of ATB and tanker vessel dimensions.	Moved from Part 4.	2-25-2014	
Figure 2.3-13	Added new figure to show Veteran Class Crude Oil Tanker.	PDEIS	8-29-2014	
2.3.7.1	Added information regarding the operations of vessel arrivals.	PDEIS ²	4-1-2015	
2.3.7.1	Added information regarding the booming and loading of vessels at the Facility. This revision was included throughout the ASC as applicable.	PDEIS ² , Appendix B.5	4-1-2015 5-26-2015	
2.3.7.1	Added information regarding the operations of vessel departures and transit.	PDEIS ²	4-1-2015	
2.3.7.1	Added information regarding tug escort operations.		10-6-2016	Revised vessel departure and transit to include a tug escort for the vessel during river transport.
2.3.7.2	Added information regarding containment capabilities at the dock		10-6-2016	Clarified containment at the dock is 84 barrels. Revised containment design at the dock to increase pumping capacity and physical storage capacity of the catch basin. This will include (1) connecting the containment area to the existing pump and return pipeline and implementing an automatic trigger that would turn the pump on in

⁴ Letter from Irina Makarow to Stephen Posner, Response to EFSEC Draft EIS Data Request 8, May 12, 2015.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
				the event of a system shutdown and (2) installation of an additional pump. Additional design features of the pumps and pipeline shutoff valves at the dock are described.
2.3.7.2	Clarified walkway dimensions and descriptions. This revision was included throughout the ASC as applicable.	PRM	5-27-2015	
2.3.7.2	Removed steel tie back wires at the mooring points.	NA	5-27-2016	
2.3.7.2	Clarified operations to be conducted at each berth.	PRM; PDEIS ²	5-27-2015 4-1-2015	
2.3.7.2	Added information regarding dockside equipment.	PRM	5-27-2015	
2.3.7.2	Revised the dimensions and components of the combined fire pump foam, e-house, and control room building.	PRM	5-27-2015	
2.3.7.2	Revised booming configurations.	PRM	5-27-2015	
2.3.7.2	Revised MVCU dimensions and clarified system operations.	PRM	5-27-2015	
2.3.8	Updated natural gas delivery to boiler building.	NA	5-27-2016	
2.3.8	Revised the boiler system water treatment. This revision was included throughout the ASC as applicable.	NPDES Letter	5-27-2016	
2.3.8	Revised the boiler plant discharge pretreatment. This revision was included throughout the ASC as applicable.	NPDES Letter	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.3.8	Clarified the diameter of the natural gas service line to the Area 600 Boiler Building.		10-6-2016	A new pressure regulator and 6-inch-diameter service line to the boiler building will be constructed.
2.3.8.1	Removed the Area 300 Boiler and associated references. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	
2.3.9	Added information regarding decommissioning and lease terms.	PDEIS	7-28-2014	
2.3.9	Added discussion of decommissioning costs.		10-6-2016	Preliminary decommissioning costs have been provided and updated decommissioning costs will be provided after final Facility design.
Table 2.3-4	Added preliminary decommissioning costs for the Facility.		10-6-2016	Provided a preliminary cost estimates to decommission each Area of the Facility as well as total cost.
2.3.10	Revised estimated capital cost of the Facility. This revision was included throughout the ASC as applicable.	PDEIS.	7-28-2014	
Figure 2.6-1	The figure was updated with the most current Facility site boundary.	PRM	5-27-2015	
2.6.3	Maximum daily water use quantity was updated.	NPDES Letter	5-27-2016	
2.6.3	Added water use for ground improvement installation.	PDEIS	7-28-2014	
2.6.4	Revised the process water descriptions. This revision was included throughout the ASC as applicable.	NPDES Letter	5-27-2016	
2.6.4	Clarified the process water description to non-process industrial water. This revision was		10-6-2016	The industrial processes onsite do not use water for manufacturing and water does not come into

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD indicates the Project Description was revised)
	included throughout the ASC as applicable.			contact with any raw, intermediate, or finished products.
Table 2.6-1	Revised Table listing process water use and rates.	PDEIS, NPDES Letter	7-28-2014 5-27-2016	
2.6.5	Revised the potable water usage and description.	NPDES Letter	5-27-2016	
Table 2.6-2	Revised Table listing potable water use and rates.	PDEIS, NPDES Letter	7-28-2014 5-27-2016	
2.6.6	Added new mitigation measure		10-6-2016	Added mitigation measure that would install a 12" waterline loop to eliminate the dead-end supply to the Port.
2.7	Revised quantity and use of boilers, and quantity of process water discharged. This revision was included throughout the ASC as applicable.	NPDES Letter	5-27-2016	
2.7	Revised description of heat dissipation system.	NPDES Report	10-6-2016	Added the option of cooling blowdown water through dry cooling or to be used in combination with previously described technology.
2.8.1	Revised description of aquatic discharge systems. This revision was included throughout the ASC as applicable.	NPDES Letter	5-27-2016	
2.8.1	Added area within the Port's general use stormwater area.		10-6-2016	Added the non-pollution-generating rail yard area on the north side of the rail unloading building.
2.8.1.1	Updated description of Terminal 5 stormwater system.	ER, Appendix C.2	10-15-2015	
2.8.1.1	Provided ASC section for spill containment devices		10-6-2016	Added clarification to refer to Section 2.8.1.2, which provides details on spill containment devices for stormwater inlets receiving stormwater from the general use areas.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.8.1.2	Updated description of Terminal 4 stormwater system.	ER, Appendix C.2	10-15-2015	
2.8.1.2	Clarified stormwater inlet devices		10-6-2016	Clarified that the Applicant will complete assessment to identify downstream stormwater inlets lacking oil-water spill control devices. Install oil-water spill control devices designed to capture a minimum 5 gallons of oil and may include the installation of an inverted 90-degree bend; or installation of an internal tee or baffle on the outlet pipe.
2.8.1.3	Revised the discharge amounts during a 100-year storm at the combined marine terminal and Subaru treatment and infiltration swales.	PRM	5-27-2015	
2.8.1.3	Added information regarding stormwater discharge from the containment area.	ER, Appendix C.2	10-15-2015	
2.8.1.4	Revised wastewater sources discharging to City sanitary sewer.	PRM	5-27-2015 10-6-2016	Clarified the language regarding permitting the disposal to City sanitary sewer.
2.8.1.4	Added information regarding alternative disposal options.	NPDES Letter	5-27-2016	
2.8.1.5	Added information regarding haul off as an alternative disposal option.	NPDES Letter	5-27-2016	
2.8.2.1	Added information regarding Area 600 process wastewater discharge alternatives.	NPDES Letter	5-27-2016	
2.8.2.2	Added information regarding Area 300 process wastewater discharge alternatives.	NPDES Letter	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.9.1 – 2.9.5	Revised section to be consistent with language and terminology updates		10-6-2016	Clarified text consistent with changes to industrial, non-process water
2.9.1	Revised process wastewater sources and descriptions.	NPDES Letter	5-27-2016	
Table 2.9-1	Revised Table listing process wastewater sources.	NPDES Letter	5-27-2016	
2.9.1	Revised analysis for process wastewater discharge.	NPDES Letter	5-27-2016	
Table 2.9-2	Revised table listing estimated chemical makeup of process water discharge	NPDES Letter	5-27-2016	
2.9.1	Added alternatives for discharge of the boiler plant wastewater.	NPDES Letter	5-27-2016	
Table 2.9-3	Revised table listing domestic wastewater quantities.	NPDES Letter	5-27-2016	
2.9.3	Revised pretreatment processes requirements.	NPDES Letter	5-27-2016	
2.9.4	Added alternatives for treatment of industrial wastewater.	NPDES Letter	5-27-2016	
2.9.5	Added alternatives for discharge of industrial wastewater.	NPDES Letter	5-27-2016	
Table 2.9-4	Added Table 2.9.4 Required Wastewater Discharge Constituent Limits listing Facility wastewater discharges compared to City of Vancouver's pre-treatment limits	NPDES Letter	5-27-2016	
2.9.5	Added compliance information regarding the City of Vancouver wastewater discharges and regulatory provisions.	NA	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.10	Clarified: Oils the Facility will handle - Groups 2, 3, and 4 persistent oils as defined in WAC 173-182-030 (24) with a specific gravity less than 1 and an API gravity ranging from 15 to 45, and oils the Facility will not receive.	ASC 2013	8-29-2013	
2.10.1.2	Added WAC 173-184 regulation for advance notice of oil transfer.	PDEIS	7-28-2014	
2.10.1.2	Added WAC 463-60-205 regulation for inclusion of construction and operation SPCC plan description.	NA	5-27-2016	
Table 2.10-1	Updated table with state requirements for advance notice of oil transfer.	PDEIS	7-28-2014	
Table 2.10-3	Added table.	PDEIS, Appendix B.3	7-28-2014 6-26-2015	
Table 2.10-4	Updated Table 2.10-4 Hazardous Materials On site during Operation and Maintenance listing hazardous materials on site during operation and maintenance.	PDEIS	7-28-2014	
2.10.2.2	Revised containment pan description and containment tank capacity.	PRM, PDEIS	5-27-2015 7-28-2014	
2.10.2.3	Updated hydrostatic testing requirements.	PDEIS ²	4-1-2015	
2.10.2.3	Added foundation information for storage tanks. This revision was included throughout the ASC as applicable.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.10.2.3	Added berm capability during seismic induced liquefaction.		10-6-2016	Statement regarding the demonstrated capacity of the berm area if worst case subsidence due to seismic induced liquefaction were to occur.
2.10.2.4	Added information regarding ultrasonic flow meters.	PRM	5-27-2015	
2.10.2.4	Added information regarding secondary containment for underground pipe runs, aboveground pipeline construction, and applicable regulations.	PDEIS	7-28-2014	
2.10.2.4	Clarified catholically protected pipeline.	PDEIS	7-28-2014	
2.10.2.4	Added information regarding ESD valves.	PDEIS ²	4-1-2015	
2.10.2.4	Clarified the spill containment measures applied to transfer pipeline.		10-6-2016	See 2.8.1.2 – Stormwater inlet devices
2.10.2.4	Clarified the available secondary containment capacity in Area 200	May 27, 2016 NPDES Response Letter	10-6-2016	Piping systems in Area 200 will be placed in concrete trenches; the concrete trenches and connected pump basins have a secondary containment capacity of 33,400 bbls.
2.10.2.5	Added information regarding the risk of release from vessel loading operations.	DEIS Letter	1-25-2016	
2.10.2.5	Clarified the available containment at the dock and provided description of design changes.		10-6-2016	See 2.3.7.2 – Containment capabilities at the dock
2.10.2.6	Added information regarding booming equipment and spill response equipment.	Appendix B.5	5-26-2015	
2.10.2.6	Revised length of fence boom.	Appendix B.5, PDEIS	5-26-2015 7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
Figure 2.10-1	Revised figure to show updated booming plan and location of spill response equipment.	PRM, PDEIS	5-27-2015 7-28-2014	
2.10.2.6	Clarified pre-booming activities.	Data Request No. 11	10-6-2016	Provided a description of pre-booming activities and alternative measures proposed for the Facility and their compliance with applicable regulatory statutes.
2.10.2.6	Clarified name of mobile containment boom to Current Buster. This revision was included throughout the ASC as applicable.		10-6-2016	Previously referenced Harbour Buster has been changed to Current Buster. The Harbour Buster and Current Buster are the same equipment.
2.10.3.1	Revised Facility construction spill prevention, control and contingency plan description	Appendix B.2, PDEIS	4-30-2015 7-28-2014	
Table 2.10-5	Added table of oils, fuels, and hazardous materials to be stored during construction.	PDEIS	7-28-2014	
2.10.3.2	Indicated submittal of preliminary spill preparedness and response plans.	NA	5-27-2016	
2.10.3.2	Clarified the Applicant's obligation to comply with the Vancouver planning standards.		10-6-2016	Added demonstrated compliance with the specified benchmarks for spill response equipment, resources, and timelines stated in the Vancouver planning standard in WAC 173-182-420.
Table 2.11-1	Revised table listing construction source control BMPs	Appendix C.1	8-14-2015	
2.11.2	Revised annual rainfall amount.	NA	5-27-2016	
Table 2.11-2	Revised table listing drainage basin areas.	ER, Appendix C.2	10-15-2015	
2.11.2	Added regulation for stormwater facilities.	ER	10-15-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.11.2.1	Revised description of source control BMPs.	PDEIS, PDEIS ⁵ , ER	7-28-2014	
Table 2.11-3	Revised Table 2.11-3 listing applicable structural source control and operational BMPs.	PRM	5-27-2015	
2.11.2.1	Clarified spill containment to be provided for transfer pipelines.		10-6-2016	See 2.8.1.2 – Stormwater inlet devices
2.11.2.3	Provided additional information regarding status of Tier II anti-degradation analysis	NPDES Letter	5-27-2016	
All subsections of Section 2.12	In August 2014 the Applicant submitted to EFSEC a revised air permit application. The entirety of Section 12.2 was, therefore, replaced with the corresponding contents of the 2014 submittal. Major changes from the August 2014 submittal are indicated below. Since that time the Applicant has also responded to an EFSEC request for information dated March 14, 2016; a response was submitted to EFSEC on May 6, 2016. The information submitted in that response has also been incorporated in these ASC revisions, as indicated below. Additional changes have been made for clarification and are also indicated below. See also the changes to Section 5.1.	August 2014 NOC	8-11-2014 5-6-2016 5-27-2016	

⁵ Letter from Irina Makarow to Stephen Posner, Response to EFSEC Draft EIS Data Request on Berm Size, July 27, 2015.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.12	Added construction emissions from third party batch plant.	PRM	5-27-2015	
2.12.2	Corrected definition of nitrogen oxide.	NA	5-27-2016	
2.12.2.1	Added ground improvement activities to construction emissions (temporary batch plant).	PRM	5-27-2015	
2.12.2.2	Clarified the operation assumptions of the Area 600 boilers.	Response to NOC ⁶	5-6-2016 5-27-2016	
Table 2.12-1	Revised table listing projected annual emissions based on updated boiler assumptions and errors corrected. See 5.1.2.17.	Response to NOC ⁶	5-6-2016 5-27-2016	
Table 2.12-2	Revised table listing Facility-wide TAPs/HAPs emissions based on refined tank emission estimates. See 5.1.2.1.7	Response to NOC ⁶	5-6-2016 5-27-2016	
2.13	Added Applicant's CO2 emissions mitigation commitment.	PDEIS	7-28-2014	
Table 2.13-1	Added table listing Facility stationary source annual GHG emissions.	PDEIS	7-28-2014	
2.15.1	Revised construction schedule and milestones. This revision was included throughout the ASC as applicable.	NA	5-27-2016	
2.15.2	Revised construction workforce.	PDEIS	7-28-2014	
Table 2.15-1	Revised table listing construction workforce by trade for Phase I.	PDEIS	7-28-2014	

⁶ Additional information to this response is included in this May 2016 ASC Revision.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.15.3	Revised operation workforce.	PDEIS	7-28-2014	
Table 2.15-3	Revised table listing operations staff.	PDEIS	7-28-2014	
Figure 2.15-1	Revised figure showing construction milestones	NA	5-27-2016	
2.16.2	Revised status and content of the Construction Safety and Health Manual. This revision was included throughout the ASC as applicable.	Appendix D.2	4-30-2015	
2.16.2	Added EFSEC's review comments of the CSHM as revisions to be made to the plan.	Appendix M	5-27-2016	
2.16.6	Added information regarding the Construction Communication Plan.		10-6-2016	Detailed contents of the Construction Communication Plan that will be distributed to the public, City, County, EFSEC, and other appropriate state agencies.
2.17	Added additional information regarding construction staging and laydown activities.	PRM	5-27-2015	
2.17	Added types of construction equipment to be used during construction.	PRM	5-27-2015	
Figure 2.17-1	Revised figure showing temporary construction boundary and laydown areas.	PRM	5-27-2015	
2.17.3	Removed description of foundations and referenced description in Section 2.18.1.4.	NA	5-27-2016	
2.17.4	Added information regarding soil excavation in Area 300.	PRM	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.17.6	Revised and added information regarding natural gas service lines that will serve the Facility.	Personal communication with NW Natural	5-27-2016 10-6-2016	A new pressure regulator and 6-inch-diameter service line to the boiler building will be constructed. Information from discussions with NW Natural representatives did not indicate a lack of system capacity to serve the Facility.
2.18.1.4	Added compliance with City and State design standards	DEIS Letter	1-25-2016	
2.18.1.4	Added descriptions of ground improvement design and potential construction methods.	DEIS Letter, Appendix L.3, PRM	1-25-2016 4-20-2015 5-27-2015	
2.18.1.4	Added description of additional seismic modeling to be completed by the Applicant.		10-6-2016	The Applicant has agreed to conduct 2D static and psuedostatic seismic modeling and provided information on the modeling approach.
2.18.1.4	Clarified design standards for rail infrastructure.		10-6-2016	AREMA standards for design and settlement criteria for a loop track with the outside rail having a differential elevation of 8" will be met.
2.18.1.4	Clarified ground improvement verification.		10-6-2016	If the required settlement is not met, the following action was revised to add additional improvements.
2.18.2.1	Added that ash fall will be addressed in the Construction/Operations Emergency Plan	DEIS Letter	1-25-2016	
2.18.3.1	Added activities to be performed in the event of an expected site inundation.		10-6-2016	Added a mitigation measure that movable equipment will be relocated above the 500-year floodplain and static equipment will be secured.
2.19.1	Added information regarding the Port's security force.	Appendix D.4	4-30-2015	
2.19.2	Added description of Construction Security Plan contents.	Appendix D.4	4-30-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.19.2.1	Added description of security measures to be implemented at the site during construction.	Appendix D.4	4-30-2015	
2.19.2.2	Added description of access control measures to be implemented at the construction sites.	Appendix D.4	4-30-2015	
2.19.2.3	Added description of entry and exit screenings at the site to be implemented during construction.	Appendix D.4	4-30-2015	
2.19.2.4	Added description of protocols for the blockage of roadways to be implemented during construction.	Appendix D.4	4-30-2015	
2.19.2.5	Added description of monitoring and patrols to be implemented during construction.	Appendix D.4	4-30-2015	
2.19.2.6	Added description of incident procedures and emergency response to be implemented during construction.	Appendix D.4	4-30-2015	
2.19.3	Added description of Operations Security Plan contents.	Appendix D.3	4-30-2015	
2.19.3	Clarified presence of Facility personnel.		10-6-2016	Added text to clarify that personnel will be present at the Facility 24/7 to provide emergency responders access to the Facility in the event of an emergency.
2.19.4	Added description of Facility Security Plan contents.	Appendix D.3	4-30-2015	
2.20	Added information regarding additional analyses.	NA	5-27-2016	
2.22.1	Revised status of the Port of Kalama Northport facility.	NA	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.22.1	Added Port of Portland position on crude-by-rail development, and City of Portland fossil fuel resolution.	PDEIS, See references	7-28-2014 5-27-2016	
2.22.1	Added statement regarding the use of Terminal 5.	PDEIS	7-28-2014	
2.22.2	Added statement regarding benefit of the covered unloading facility.	PDEIS	7-28-2014	
2.22.4	Added information regarding wastewater characterization for the proposed discharge streams.	NPDES Letter	5-27-2016	
2.22.6	Added refinements to the marine terminal modifications	PDEIS	7-28-2014	
2.22.7	Added information regarding design changes impacting Facility emissions.	PDEIS	7-28-2014	
Table 2.23-1	Updated table showing applicable Federal, State, and Local permits and regulations	DEIS	11-25-2015	
Table 2.23-1	Updated table showing applicable federal requirements for ballast water management		10-6-2016	Added ballast water management under authority of USCG and regulation 33 CFR 151
2.23.2.2	Revised status of biological evaluation and ESA consultation activities. This revision was included throughout the ASC as applicable.	NA	5-27-2016	
2.23.2.4	Revised status of marine mammal monitoring plan and consultation activities. This revision was included throughout the ASC as applicable.	Appendix H.3	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.23.2.5	Added information regarding Migratory Bird Treaty Act.	DEIS	11-24-2015	
2.23.2.6	Added information regarding Bald and Golden Eagle Protection Act.	DEIS	11-24-2015	
2.23.2.7	Added information regarding Cultural Resources Inadvertent Discovery Plan.	Appendix A.3	4-30-2015	
2.23.2.8	Revised Section 10 permit application status. This revision was included throughout the ASC as applicable.	NA	5-27-2016	
2.23.2.18	Added information regarding CERCLA.	NA	5-27-2016	
2.23.2.19	Added information regarding Pretreatment Section 307(b).	NA	5-27-2016	
2.23.2.20	Added information to clarify federal requirements for ballast water management.		10-6-2016	Added applicable regulations and agreements pertaining to ballast water management, and how the project will comply.
2.23.3.2	Added information regarding Section 401 Water Quality Certificate.	NA	5-27-2016	
2.23.3.8	Removed information regarding PSD permit (no longer applicable)	August 2014 NOC	8-11-2014	
2.23.3.16	Added information regarding Washington State Waste Discharge Permit Program	NA	5-27-2016	
2.23.3.17	Added information regarding recent regulations adopted by Washington State Department of Ecology.		10-6-2016	Added applicable regulations pertaining to crude oil advance notice requirements and a statement of compliance upon Facility operations.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
2.23.4.5	Added information regarding Hazardous Materials Regulatory Fee Certificate.	NA	5-27-2016	
2.23.4.6	Added information regarding Critical Areas Protection.	PDEIS	7-28-2014	
2.23.4.7	Added information regarding Archaeological Resource Protection.	NA	5-27-2016	
Part 3				
3.1.1	Added information on the number and location of field explorations and reference to geotechnical reports in Appendix L.	Appendix L.1, L.2 and L.3	4-20-2015 12-2-2014	
3.1.1.6	Removed City of Vancouver submittal.		10-6-2016	Removed the assumption that EFSEC will contract with the City for review of final project design, code compliance and provide required inspections and occupancy permits.
3.1.2.1	Added Appendix references.	Appendix L.1, L.2, L.3	4-20-2015 12-2-2014	
Figure 3.1-1	Updated project boundaries.	PRM	5-27-2015	
Figure 3.1-3	Updated figure format.	NA	5-27-2015	
3.1.3.5	Added conclusions regarding geotechnical investigation of site.	Appendix L	4-20-2015 12-2-2014	
3.1.3.6	Section reorganized to address construction mitigation followed by operation mitigation.	NA	5-27-2016	
3.1.6	Mitigation introduction revised to discuss geotechnical investigation data sets and conclusions.	Appendix L	4-20-2015 12-2-2014	
3.1.3.6	Added discussion of ground improvement types/methods and	Appendix L.3, ASC 2.18.4	4-20-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	deep structural foundations to mitigate liquefaction-induced settlement and lateral spreading deformations. Added reference locations for additional detail.			
3.1.3.6	Added upland area Facility design information and criteria.	PDEIS	7-28-2014	
3.1.3.6	Added reference to ASC section 2.18.1.2 for preliminary ground improvement design information submitted to EFSEC for review.	PDEIS, ASC 2.17.7	7-28-2014	
3.1.3.6	Clarified mitigation review process		10-6-2016	Removed the language that stated EFSEC would work with the City for required code review and inspections.
3.1.3.6	Added additional plans the applicant will implement related seismic events.	DEIS Letter	1-25-2016	
Figure 3.1-7	Replaced with PDEIS figure.	PDEIS	7-28-2014	
3.1.4.2	Added note concerning determination and documentation of final ground improvements.	DEIS Letter	1-25-2016	
3.1.5.1	Added description of temporary topographical modification resulting from benching at the Marine Terminal (Area 400).	PRM	5-27-2015	
3.1.5.2	Added temporary benching will be removed, shoreline restored after construction is finished, no topography impacts and no mitigation required.	PRM	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.1.7.1	Added impacts of temporary benching during ground improvement.	PRM	5-27-2015	
3.1.7.2	Section reorganized to address Construction and Operation mitigation measures.	NA	5-27-2016	
3.1.7.2	Added summary of erosion impacts.	ASC 3.1.3.5	2-25-2014	
3.1.7.2	Clarified and added mitigation measures from the DEIS Applicant Comment Letter - Attachment ES-1 (ES-1), cSWPPP BMPs for erosion control, sediment transport and construction activities associated with installation of the benches and ground improvement installation activities	ASC 2.11, Appendix C.1, DEIS Letter, PRM	1-25-2016 8-14-2015 5-27-2015	
3.1.7.2	Clarification and mitigation measures related to erosion control and references to oSWPPP.	DEIS Letter, Appendix C.2	1-25-2016	
3.2 and all of its subsections	In August 2014 the Applicant submitted to EFSEC a revised air permit application. The entirety of Section 5.1 was, therefore, replaced with the corresponding contents of the 2014 submittal. Major changes from the August 2014 submittal are indicated below. Since that time the Applicant has also responded to an EFSEC request for information dated March 14, 2016; a response was submitted to EFSEC on	August 2014 NOC	8-11-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	May 6, 2016. The information submitted into that response has also been incorporated to these ASC revisions, as indicated below. Additional changes have been made for clarification and are also indicated below			
3.2.1.1	Text was moved to this location for clarity.	NA	5-27-2016	
3.2.1.2	Text was moved to this location for clarity. The project is no longer subject to PSD review and permitting.	August 2014 NOC	8-11-2014	
3.2.1.7	Corrected statement regarding direction of prevalent winds.	NA	5-27-2016	
3.2.3	Clarified that the MVCUs may also result in a visible water vapor plume.	NA	5-27-2016	
3.2.6	Mitigation measures were updated to include reference to the Washington Associated General Contractors Brochure, "Guide to Handling Dust from Construction Projects"	PDEIS	7-28-2014	
3.3.1	Added reference to containment tank.	NA	5-27-2016	
3.3.1	Updated volume precipitation based on 47.4-acre site.	PRM	5-27-2015	
3.3.1.1	Reorganized Impacts to discuss construction impacts followed by operation impacts, added cross references to ASC sections.	NA	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.3.1.1	Added discussion of ground improvement potential impacts (jet grouting).	Appendix L.3	4-20-2015	
3.3.1.1	Updated nomenclature of Terminal 5 stormwater "lagoons."	NA	5-27-2016	
3.3.1.1	Removed that discharges from the site will contribute only to Terminal 5 ponds.	NA	5-27-2016	
3.3.1.1	Added that discharges from the site will be treated on site and monitored for water quality compliance prior to discharge to the existing stormwater systems.	DEIS Letter	1-25-2016	
3.3.1.1	Added that this project will reduce the amount of existing impervious surface coverage at the Facility site and will convert a portion of the existing pollution-generating impervious area to non-pollution-generating roof areas.	DEIS Letter	1-25-2016	
3.3.1.2	Mitigation measures reorganized to address Construction and Operation mitigation measures.	NA	5-27-2016	
3.3.1.2	Added and revised discussion of mitigation measures: Construction Mitigation - updated with stormwater management mitigation measures from DEIS Letter, site specific BMPs from the Stormwater Management Manual for Western Washington, the NPDES Individual Construction Stormwater Permit and cSWPPP.	DEIS Letter, ASC 2.11, Appendix C.1	1-25-2016 8-14-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.3.1.2	Added mitigation/BMPs for jet grouting activities to construction mitigation.	Appendix L.3, DEIS Letter	1-25-2016	
3.3.1.2	Added cSWPPP detail to construction mitigation.	ASC 2.11, Appendix C.1	8-14-2015	
3.3.1.2	Added NPDES Individual Construction Stormwater Permit reporting and notification details to construction mitigation.	NA	5-27-2016	
3.3.1.2	Added cSPCCP details to construction mitigation	Appendix B.2, DEIS Letter	1-25-2016	
3.3.1.2	Revised and reordered the Operation Mitigation discussion.	NA	5-27-2016	
3.3.1.2	Added details on the permanent stormwater management and treatment system for operations.	DEIS Letter	1-25-2016	
3.3.1.2	Added that the Applicant will implement secondary structural containment measures to supplement the structural source control BMPs.	DEIS Letter	1-25-2016	
3.3.1.2	Revised that equipment and parts wash (including facility washdown, and railcar exterior washing), will be conducted in a covered portion of the rail unloading building. Wastewater will be pumped to secondary containment tanks.	ER	10-15-2015	
3.3.1.2	Updated API 650 tanks inspection information.	PRM, DEIS Letter	5-27-2015 1-25-2016	
3.3.1.2	Added that the tank farm will be surrounded by a containment berm 6 feet high with a full impervious	PRM, (Appendix A, Sec 4.3.3.2)	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	liner capable of containing 110 percent of the largest tank and a 25-year 24-hour rainfall event.			
3.3.1.2	Edited transmission to transfer pipeline and added Area 500.	NA	5-27-2016	
3.3.1.2	Added that parking and access areas will be designed with a combination of catch basin spill traps and water quality filter vaults to treat stormwater runoff.	DEIS Letter	1-25-2016	
3.3.1.2	Added references to ASC sections.	NA	5-27-2016	
3.3.1.2	Added list of planning and preparedness actions required by state and federal regulations to prevent, contain, and respond to inadvertent releases that could impact surface water.	DEIS Letter	1-25-2016	
3.3.1.2	Added oSWPPP coordination with ESFEC.	DEIS Letter	1-25-2016	
3.3.1.2	Updated regarding Tier II anti-degradation analysis being completed.	NPDES Letter	5-27-2016	
3.3.2.2	Revised discussion that construction stormwater will be managed in accordance with the conditions of the Individual NPDES Construction Stormwater Permit issued to the Facility by EFSEC.	DEIS Letter,	1-25-2016	
Figure 3.3-1	Revised Mapped Floodplains using FEMA data and updated project boundaries per PRM	PRM	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
Figures 3.3-2 and 3.3-3	Added Figure 3.3-2 - Public Wellhead Zones and Figure 3.3-3 Private Wellhead Zone.	PDEIS	7-28-2014	
3.3.3.2	Updated title from Protective Measures to Mitigation Measures.	NA	5-27-2016	
3.3.3.2	Added construction mitigation for the 100-500-Year Flood	DEIS Letter	1-25-2016	
3.3.3.2	Clarified that certain facilities will be located in, but elevated above, the 100-year floodplain.	DEIS Letter	1-25-2016	
3.3.3.2	Updated the mitigation measures for Flooding		10-6-2016	Several structures located in Area 400 will be elevated with the top of foundation a minimum of 3 feet above the base 100-year flood elevation and the finish floor elevations are above the 500-year elevation. Added a measure that movable equipment will be relocated above the 500-year floodplain and static equipment will be secured.
3.3.4.1	Added The impacts to groundwater from operations and maintenance activities are expected to be minor.	DEIS Letter	1-25-2016	
3.3.4.1	Section reorganized and information added regarding wellhead zones	DEIS Letter, ER	1-25-2016 10-15-2015	
3.3.4.1	Clarified location of ground improvements relative to locations of existing contaminated media.	DEIS Letter, Appendix F.1	1-25-2016 8-4-2015	
3.3.4.2	Mitigation measures reorganized to address Construction and Operation mitigation. Mitigation measures added from previous references.	DEIS Letter, Appendix F.1	1-25-2016 8-4-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.3.4.2	Clarified well decommissioning process	??	10-6-2016	Clarified that if previously unknown wells are discovered, they would be properly logged and decommissioned.
3.3.4.2	Add ground improvement decommissioning mitigation measures		10-6-2016	Added a mitigation measure that ground improvement locations will be covered by an impervious surface during decommissioning.
3.3.5.1	Updated water consumption numbers for process and domestic potable water.	NA	5-27-2016	
3.3.6	Added reference to Figure 3.3-3.	NA	5-27-2016	
3.4.1.2	Added explanation of why the Applicant has not conducted site-specific wildlife or vegetation species surveys to determine use of the Facility site or the project vicinity.	PDEIS ⁴	5-12-2015	
3.4.2	Clarified distinction between vegetation communities and terrestrial habitats.	PDEIS	7-28-2014	
3.4.2.1	Changed Terrestrial habitat to Terrestrial vegetation communities and referenced Figure 3.4-2	PDEIS	7-28-2014	
Figure 3.4-2	Added Figure 3.4-2 Terrestrial Vegetation.	PDEIS	7-28-2014	
3.4.2.1	Added terrestrial habitat types for the project site	PDEIS	7-28-2014	
Figure 3.4-3	Added Figure 3.4-3 Wildlife Habitats.	PDEIS	7-28-2014	
3.4.2.1	Clarified characterization of vegetation communities in project vicinity, and discussed presence of specific communities.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.2.1	Added discussion of specific habitats present at site and in project vicinity.	PDEIS	7-28-2014	
3.4.2.1	Identified presence of an existing aquatic habitat enhancement site approximately 350 feet downstream of the Berth 14 trestle and Port-planned mitigation activities regarding this site.	PDEIS	7-28-2014	
3.4.2.1	Renamed Upland Cottonwood Stands to Westside Lowland Conifer Hardwood Forest	PDEIS	7-28-2014	
3.4.2.1	Clarified presence of Agricultural, Pasture, and Mixed Environs Lands in vicinity of project.	PDEIS	7-28-2014	
3.4.2.1	Added descriptions of Aquatic Habitats in the project vicinity	PDEIS	7-28-2014	
3.4.2.1	Revised aquatic habitat within the project's vessel prism includes the main stem Columbia River from the project site downstream to the river mouth and includes PHS-listed aquatic habitats.	PDEIS	7-28-2014	
3.4.2.1	Added shoreline types discussion and revised Table 3.4.-1 Lower Columbia River GRP Shoreline Types.	PDEIS	7-28-2014	
3.4.2.1	Added noxious weeds discussion and Table 3.4-1 Noxious Weeds Known to Occur in Clark County.	PDEIS	7-28-2014	
3.4.2.2	Revised construction impacts in the upland portion of the project	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	including temporary impacts for staging and construction access.			
3.4.2.2	Revised construction impacts to ruderal upland grass/forb vegetation.	PDEIS	7-28-2014	
3.4.2.2	Revised construction of the pipeline and other improvements at Area 400 will not impact high quality vegetation and riparian function will not be affected.	PDEIS	7-28-2014	
Figure 3.4-4	Revised Figure 3.4-4 CPU Tree Plan	PDEIS	7-28-2014	
3.4.2.2	Revised that Table 3.4-4 summarizes the impacts to each of the vegetation communities present resulting from construction of the Facility, while Table 3.4-5 summarizes the corresponding impacts to habitats.	PDEIS	7-28-2014	
3.4.2.2	Added discussion of construction-related noxious weed impacts.	PDEIS	7-28-2014	
Table 3.4-1i	Deleted Table 3.4-1i Summary of Habitat Acreage Impacts.	PDEIS	7-28-2014	
Table 3.4-4	Added Table 3.4-4 Summary of Vegetation Community Acreage Impacts.	PDEIS	7-28-2014	
Table 3.4-5	Added Table 3.4-5 Summary of Habitat Acreage Impacts.	PDEIS	7-28-2014	
3.4.2.2	Clarified vessel trips per year in first and subsequent years of operation. This correction was made throughout the ASC.	NA	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.2.2	Added discussion of Shallow Water Habitat, Exotic Species, Temporary Water Quality Impacts and minor impacts associated with each.	DEIS Letter	1-25-2016	
3.4.2.2	Added discussion regarding temporary construction noise impacts on habitats.	PDEIS	7-28-2014	
3.4.2.2	Added discussion regarding impacts of vegetation maintenance activities.	NA	5-27-2016	
3.4.2.2	Added discussion regarding overwater coverage impacts.	PDEIS	7-28-2014	
3.4.2.2	Added discussion of the frequency of marine incidents and spill risk assessment from Appendix P.1	Appendix P.1	1-25-2016	
3.4.2.2	Added discussion of bank erosion impacts resulting from vessel wakes.	DEIS Letter	1-25-2016	
3.4.2.2	Added discussion of aquatic invasive species impacts resulting from operation.	401 Response	2-19-2016	
3.4.2.2	Added updated reference	Appendix H.5	10-6-2016	Added report titled "Wake Stranding in the Lower Columbia River," by Grette Associates (revised May 2016).
3.4.2.3	Referenced other sections where mitigation is also discussed.	NA	5-27-2016	
3.4.2.3	Mitigation measures reorganized to address Construction and Operation mitigation, grammar edits, single word and phrase changes for clarity.	NA	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.2.3	Updated acreage of ruderal upland grass/forb impacts.	PDEIS	7-28-2014	
3.4.2.3	Added that native species will be used to the extent practical. Area 200 will include native trees planted in groups within the landscape to provide additional mitigation for loss of trees onsite.	DEIS Letter	1-25-2016	
3.4.2.3	Added that at locations where ruderal habitat has been impacted by temporary construction laydown will be restored to previous condition so as to result in no net loss to this community.	DEIS Letter	1-25-2016	
3.4.2.3	Added compensatory habitat mitigation discussion.	PDEIS, DEIS Letter	7-28-2014	
3.4.2.3	Added that no purple martin or nest boxes would be directly affected discussion.	DEIS Letter	1-25-2016	
3.4.2.3	Added mitigation measures to minimize impacts to migratory birds during construction.	DEIS Letter	1-25-2016	
3.4.2.3	Added BMPs that will be implemented during construction to minimize the spread and establishment of noxious weeds	DEIS Letter	1-25-2016	
3.4.2.3	Added aquatic invasive species mitigation measures.	401 Response	2-19-2016	
3.4.2.3	Updated the Temporary Construction Water Quality mitigation discussion. Added detail on WQPMP, in-water work window discussion, and referenced	DEIS Letter	1-25-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	Appendix F.2. Added footnote with further explanation of work window.			
3.4.2.3	Updated spill prevention and containment discussion. Added detail related to cSPCCP BMPs and procedures. Referenced Appendix B.2	DEIS Letter	1-25-2016	
3.4.2.3	Added Vegetation Maintenance mitigation.	DEIS Letter	1-25-2016	
3.4.2.3	Added discussion regarding use of biodegradable firefighting foam.	PDEIS	7-28-2014	
3.4.2.3	Updated discussion regarding shipping related impacts relative to Bank Erosion, Exotic Species, and Vessel Transit Related Spills.	DEIS Letter	1-25-2016	
3.4.2.3	Revised in-water work period. This revision was included throughout the ASC as applicable.		10-6-2016	The in-water work window has been revised to September 1 to January 15.
3.4.2.3	Added mitigation measures to deter perching.		10-6-2016	Design features will be incorporated in buildings to restrict access to enclosed spaces for roosting or nesting or to prevent perching where in the design does not interfere with operations of the Facility.
3.4.3.2	Added construction lighting and aquatic Invasive Species impacts discussions.	DEIS Letter	1-25-2016	
3.4.3.2	Added discussion of potential impacts: Fish habitat both at the project site and within the project vicinity also could be temporarily	DEIS Letter	1-25-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	affected by the potential for temporarily reduced water quality conditions during construction and the generation of temporarily elevated levels of underwater noise during temporary pile installation and removal, permanent pile removal, and installation of ground improvements.			
3.4.3.2	Added discussion related to construction is not expected to result in permanent impacts to aquatic habitat in Area 400.	ASC Review	5-27-2016	
Table 3.4-6	Revised Table 3.4-6 Special Aquatic Species and Their Potential to Occur within the Project Area	ASC Review	5-27-2016	
3.4.3.2	Clarified for consistency with JARPA submitted to USACE that the project proposes to remove 15 steel piles (eleven 18-inch steel pipe piles and four 12 3/4-inch steel pipe piles) restoring approximately 23 square feet of benthic habitat at the project site.	NA	5-27-2016	
3.4.3.2	Revised that temporary piles will only be placed for short period of time (on the order of hours or days) and any temporary loss of productivity will be minor and the area is expected to recolonize following removal.	ASC Review	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.3.2	Discussed construction related lighting impacts.	PRM	5-27-2015	
3.4.3.2	Updated Temporary Construction Noise analysis, including impacts resulting from ground improvement construction.	PDEIS, PRM	7-28-2014 5-27-2015	
3.4.3.2	Added discussion regarding impacts of aquatic invasive species.	401 Response	2-19-2016	
3.4.3.2	Removed assessment of impacts resulting from non-project related vessel traffic.	NA	5-27-2016	
3.4.3.2	Updated Operational Water Quality Impacts addressing propeller wash	DEIS Letter	1-25-2016	
3.4.3.2	Updated Facility size from 44.9 acres to 47.4 and acres of impervious surface from 38.2 to 44.4 acres.	PRM	5-27-2015	
3.4.3.2	Added reference to Appendix P.1 regarding low probability of spills resulting from Facility-related vessel calls.	NA	1-25-2016	
3.4.3.2	Added Spill planning response discussion.	Appendix B.6	1-25-2015	
3.4.3.2	Added discussion of lighting and overwater coverage impacts.	PDEIS	7-28-2014	
3.4.3.2	Updated Wake Stranding discussion.	DEIS Letter, Appendices H.5 and H.6	1-25-2016	
3.4.3.2	Updated Bank Erosion and Exotic Species impacts discussions	DEIS Letter, Appendices H.5 and H.6	1-25-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.3.2	Added updated reference	Appendix H.5	10-6-2016	Added report titled "Wake Stranding in the Lower Columbia River," by Grette Associates (Revised May 2016).
3.4.3.3	Reorganized mitigation to discuss construction followed by operation.	NA	5-27-2016	
3.4.3.3	Updated Direct Habitat Modification discussion - dock modification and in water work window.	DEIS Letter	1-25-2016	
3.4.3.3	Added mitigation measures for construction lighting impacts.	DEIS Letter	1-25-2016	
3.4.3.3	Revised Temporary Water Quality mitigation discussion.	DEIS Letter	1-25-2016	
3.4.3.3	Added Aquatic Invasive Species mitigation.	DEIS Letter	1-25-2016	
3.4.3.3	Added Temporary Construction Noise discussion including details on in-water work window, implementation of an MMMP for vibratory installation and removal of temporary piles, and upland impact pile driving associated with Area 400 improvements to minimize the exposure of fish to temporarily increased underwater noise levels	ASC 2014	2-25-2014	
3.4.3.3	Added discussion of BMPs, design measures and spill response planning measures.	ASC 2014	2-25-2014	
3.4.3.3	Revised: Stormwater from Areas 200, 500, and 600 and the rail improvements will be treated to meet the water quality benchmarks	PRM Appendix A Section 4.3.2.2, pg. 4-43	5-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	established in the Industrial Stormwater General Permit prior to its discharge to the existing Terminal 5 stormwater system.			
3.4.3.3	Added discussion of turbidity impacts resulting from propeller wash.	DEIS Letter	1-25-2016	
3.4.3.3	Updated discussion regarding impacts of shoreline erosion from vessel wakes on ESA-listed species.	DEIS Letter	1-25-2016	
3.4.3.3	Added discussion of vessel operator requirements to avoid hull fouling and contaminated ballast water discharge.	401 Response	2-19-2016	
3.4.3.3	Updated discussion of Cumulative Impacts.	NA	5-27-2016	Editorial change to reflect the anticipated conclusion to be made by the Services that the project "may affect, but is not likely to adversely affect" fish or fish habitat resources.
3.4.3.3	Clarified the containment capabilities at Berth 13		10-6-2016	See 2.3.7.2 - Added information regarding containment capabilities at the dock
Table 3.4-8	Added Table 3.4-8 Special Status Aquatic Species and Their Potential to Occur within the Project Site or Vicinity	ASC Review	5-27-2016	See explanation for Table 3.4-6 above.
3.4.4.2	Updated acreage impacts to habitats affected by Facility construction.	PRM	5-27-2015	
3.4.4.2	Added that no purple martin or nest boxes would be directly affected by the construction of the proposed project.	DEIS Letter	1-25-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.4.2	Added discussion regarding WQPMP.	Appendix F.2		
3.4.4.2	Added discussion regarding construction lighting impacts.	NA	5-27-2016	
3.4.4.2	Updated analysis of construction noise impacts.	PDEIS, Appendix H.4	7-28-2014	
3.4.4.2	Discussed lighting impacts.	NA	5-27-2016	
3.4.4.2	Added discussion of invasive species impacts.	401 Response	2-19-2016	
3.4.4.2	Identified Applicant's vessel traffic risk assessment.	Appendix P.1	1-25-2016	
3.4.4.2	Revised Bank Erosion information.	DEIS Letter	1-25-2016	
3.4.4.3	Reorganized mitigation to discuss construction followed by operation.	NA	5-27-2016	
3.4.4.3	Revised Temporary Construction Noise mitigation	DEIS Letter	1-25-2016	
3.4.4.3	Added Tree removal and landscape monitoring mitigation criteria.	DEIS Letter	1-25-2016	
3.4.4.3	Addressed construction nuisance wildlife impacts.	DEIS Letter	1-25-2016	
3.4.4.3	Addressed construction lighting impacts.	DEIS Letter	1-25-2016	
3.4.4.3	Updated mitigation for temporary water quality impacts.	DEIS Letter	1-25-2016	
3.4.4.3	Added discussion regarding special status wildlife and construction noise impacts.	Appendix H.4	6-12-2015	
3.4.4.3	Addressed impacts to marine mammals from construction noise.	Appendix H.3	4-28-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.4.4.3	Added construction Aquatic Invasive Species mitigation.	Appendix H.1; 401 Response	2-19-2016	
3.4.4.3	Added mitigation for operation-related nuisance wildlife impacts	DEIS Letter	1-25-2016	
3.4.4.3	Updated mitigation for operational water quality impacts.	DEIS Letter	1-25-2016	
3.4.4.3	Addressed mitigation of operation lighting impacts.	DEIS Letter	1-25-2016	
3.4.4.3	Added operations Aquatic Invasive Species mitigation.	401 Response	2-19-2016	
3.4.4.3	Added discussion of vessel related invasive species impacts.	401 Response, PDEIS	2-19-2016	
3.4.4.3	Addressed lack of impact of vessel wakes.	DEIS Letter	1-25-2016	
3.4.4.3	Added mitigation regarding escort tugs for vessel-related incidents.	NA	5-27-2016	
3.4.5.1	Updated USACE permitting and ESA Consultation status.	NA	5-27-2016	
3.5.1	Clarified that Areas within 300 feet of the project site were visually assessed for the presence of wetlands in accordance with the City of Vancouver's Critical Areas Protection Ordinance (VMC Chapter 20.740).	Appendix H.1	5-27-2016	
3.5.3	Clarified that shallow stormwater swales located in the southwest corner of Parcel 1A are not jurisdictional under city code.	NA	5-27-2016	
3.5.3	Corrected number of wetland mitigation sites present in the	Appendix H.1	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	vicinity of the project site and within 300 feet of the project site.			
3.5.3	Clarified relative location of wetland complexes to project facilities in terms City 300-foot CAO limit.	Appendix H.1	5-27-2016	
3.5.4	Reorganized mitigation to discuss construction followed by operation.	NA	5-27-2016	
3.5.4.2	Added discussion regarding spill response measures that would protect wetlands adjacent to Vancouver Lake.	DEIS Letter	1-25-2016	
3.5.5	Added discussion of construction spill prevention, control and countermeasures.	Appendix B.2	4-30-2015	
3.5.5	Updated mitigation measures that would protect wetlands from ground improvement water quality impacts.	Appendix H.1, PRM Appendix M	5-27-2015 5-27-2016	
3.5.5	Added Operational mitigation measures to minimize operational water quality impacts.	NA	5-27-2016	
3.5.5	Added discussion regarding spill response measures that would protect wetlands adjacent to Vancouver Lake.	DEIS Letter	1-25-2016	
3.5.5	Added discussion of impacts to wetlands resulting from shipping traffic.	DEIS Letter	1-25-2016	
3.6.1.1	Clarified that the amount of electricity consumed would be similar to other medium-sized industrial construction projects,	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	and would not be significant in terms of overall regional supply.			
3.6.1.1	Added information regarding the amount of electricity and fuels to be used during project construction in response to EFSEC comment on ASC. Added incidental use of propane during construction.	ASC Review, PDEIS	7-28, 2014	
3.6.1.1	Identified volumes of cement and aggregates that would be used to construct ground improvements.	PRM	5-27-2015	
3.6.1.1	Updated volume of rail ballast to be used for rail infrastructure improvements.	PDEIS	7-28-2014	
3.6.1.2	Updated natural gas consumption.	August 2014 NOC	8-11-2014	
3.6.1.2	Clarified that gas service is expected to be interruptible; if gas supply is lost, operations where it is in use will be shut down.	Personal communication with NW Natural	5-27-2016	
3.6.1.2	Added that the Facility will use leased, portable power generators (emergency engines) in the event of a power failure. These generators would be fueled with ultra-low sulfur diesel or biodiesel.	PRM	5-27-2015	
3.6.2.2	Added that the Facility will use leased, portable power generators (emergency engines) in the event of a power failure.	PRM	5-27-2015	
3.6.3	Added Clark County gravel resource information.	PDEIS	7-28-2014	
3.6.3	Added electricity use and supply information.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
3.6.3	Added information regarding adequacy of Northwest Natural Gas information regarding natural gas supply.	PDEIS	7-28-2014	
3.6.4	Added that the Applicant will construct buildings compliant with the 2012 Washington State Energy Code (or current version at the time the project is permitted).	DEIS Letter	1-25-2016	
Part 4				
Table 4.1-1	Replaced Table 4.1-1 Common Sound Levels/Sources and Subjective Human Responses listing of common sound levels/sources and subjective human responses.	PDEIS	7-28-2014	
4.1.1.1	Added Washington Administrative Code to Noise Standards.	NA	5-27-2016	
4.1.1.1	Added Jail Work Center to <i>Existing Sound Levels</i> .	NA	5-27-2016	
4.1.1.2	Added Tidewater office building as a potential sensitive receiver.	PDEIS	7-28-2014	
Figure 4.1-1	Revised Figure 4.1-1 Background Noise Measurement Location and Receptors showing background noise measurement location and receptors.	PDEIS	7-28-2014	
4.1.1.2	Added consideration of natural attenuation to noise emissions.	PDEIS	7-28-2014	
Table 4.1-5	Updated Table 4.1-5 Summary of Major Facility Noise Sources listing summary of major Facility noise sources.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.1.1.2	Updated noise impacts analysis based on PDEIS.	PDEIS	7-28-2014	
Table 4.1-6	Revised Table 4.1-6 Modeled A-Weighted Model-Calculated Hourly Facility Sound Level listing Modeled A-Weighted model-calculated hourly Facility sound levels.	PDEIS	7-28-2014	
Figure 4.1-2	Added Figure 4.1-2 Noise Model Receptor Locations showing noise model receptor locations.	PDEIS	7-28-2014	
4.1.1.3	Added noise monitoring in accordance with construction wildlife monitoring plan	DEIS Letter	1-25-2016	
4.1.1.3	Added procurement process for equipment contributing to noise emissions will take into consideration analyses to ensure the overall noise emissions from the Facility do not exceed Washington State noise thresholds.	ASC 2014	2-25-2014	
4.1.2.1	Added construction materials consideration to fire risk.	PDEIS	7-28-2014	
4.1.2.1	Added description of the construction fire prevention plan.	Appendix D.2	4-30-2015	
4.1.2.1	Added status of Construction Safety and Health Manual status and that Applicant will develop a construction emergency response plan to ensure compliance with	Appendix D.2	4-30-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	WISHA WAC 296-155-260 and NFPA requirements.			
4.1.2.1	Added summary of the main elements of the preliminary construction fire prevention plan presented in Appendix D.3.	Appendix D.2	4-30-2015	
4.1.2.1	Added applicability of regulations to construction safety plans	Appendix D.2	4-30-2015	
4.1.2.2	Updated description of crude oil composition.	PDEIS	7-28-2014	
Table 4.1-9	Updated Table 4.1-9 NFPA 704 Table 6.2 Degrees of Flammability Hazards showing NFPA 704 Table 6.2 degrees of flammability hazards	PDEIS	7-28-2014	
4.1.2.2	Added discussion of additional parameters potentially influencing the flammability of any specific crude oil in transportation.	DEIS Letter	1-25-2016	
4.1.2.2	Added Summary of risk assessments completed relative to fires and explosions potentially occurring at the Facility.	Appendix P.3	5-27-2016	
4.1.2.2	Added Description of types of fire events.	Appendix P.3, DEIS Letter	1-25-2016 5-27-2016	
4.1.2.2	Added discussion of non-explosive nature of crude oil and description of deflagrations	DEIS Letter	1-25-2016	
4.1.2.2	Added Shipping requirements of crude by rail.	See references	5-27-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.1.2.2	Added to examples of risk-based management approaches that will be implemented.	Appendix D.3	4-30-2015	
4.1.2.2	Added Information regarding fire safety design	Appendix N.1, PRM, DEIS Letter	2-26-2015 5-27-2015 1-25-2016	
4.1.2.2	Added information regarding Fire Protection Engineer design requirements.	DEIS Letter	1-25-2016	
4.1.2.2	Added information regarding boiler requirements.	ASC section 2.23	2-25-2016	
4.1.2.2	Added mitigation measure in response to VFD emergency response gap presented in Appendix B of the DEIS		10-6-2016	Provided fire department connections on the Facility side of the fire protection systems; and provided a description of the training to be provided to emergency responders. Provided a description of the emergency response drills to be performed and potential grants that may fund first responder planning, preparedness and equipment needs identified during the drills.
4.1.2.2	Added mitigation measure to install waterline loop.		10-6-2016	The Applicant has committed to fund and install a 12-inch waterline loop to ensure sufficient fire-fighting water pressure at the Facility.
4.1.2.2	Revised Fire Protection Plan		10-6-2016	Editorial change to the title of the Fire Protection Plan and commitment to review the preliminary plan prior to beginning of Facility operation to ensure compliance with applicable regulations.
4.1.2.2	Added mitigation measure in response to VFD emergency response gap presented in Appendix B of the DEIS		10-6-2016	Provided a description of the training to be provided to emergency responders including funding and backfill pay for the training. Provided a description of the emergency response drills to be performed and potential grants that may fund first responder planning,

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
				preparedness and equipment needs identified during the drills.
4.1.3.1	Revised number and description of locations at the Facility that are subject to the Ecology consent decree and environmental restrictive covenants. This revision was included throughout the ASC as applicable.	Appendix F.1	8-4-2015	
4.1.3.2	Revised construction methods within the restrictive covenant areas.	DEIS Letter	1-25-2016	
	Updated that one additional train loop will be constructed within the SPL Storage Area, North/NN2 cap, and shoreline restrictive covenant area and ingot plant cap.	Appendix F.1	8-4-2015	
4.1.3.2	Revised that if not exceeding state water quality levels, dewatering water will be managed in accordance with the NPDES Construction Stormwater Permit requirements.	NA	5-27-2016	
4.1.3.3	Added Description of waste handling resulting from inadvertent releases.	Appendix C.2	10-15-2015	
4.1.3.3	Clarified description of Area 600 boiler plane effluent		10-6-2016	Added text to clarify the effluent water would meet the pretreatment requirements to discharge to the City of Vancouver's sanitary sewer and would not be classified as a dangerous waste if hauled off site.
4.1.4.1	Added safety standards compliance mitigation measure.		10-6-2016	The applicant will provide employees with fire retardant clothing in accordance with applicable state regulations.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.1.4.2	Renamed cargo tanks to cargo compartments. This revision was made throughout the ASC.	NA	5-27-2016	
4.1.4.4	Added description of methods of compliance with safety standards during project construction.	PDEIS	7-28-2014	
4.1.4.4	Updated description of safety monitors (H ₂ S, LEL, and oxygen (O ₂) monitors) to be used during project operation.	Appendix D.3	4-30-2015	
4.1.4.4	Added description of Operations Facility Safety Program contents including items to address EFSEC review comments.	Appendix M	5-27-2016	
4.1.6.1	Updated reference.		10-6-2016	Provided a citation for the most recent version of the Clark County Hazardous Materials Emergency Response Plan (2014).
4.1.6.2	Added additional information regarding the operational emergency response plan.	Appendix D.3	4-30-2015	
4.1.6.2	Added that a copy of this emergency response plan will be provided to the City and the Clark Regional Emergency Services Agency	PDEIS	7-28-2014	
4.1.6.2	Added emergency response mitigation measures		10-6-2016	Added crude oil advance notice requirements and a statement of compliance upon Facility operations. See item 4.1.2.2 - Added mitigation measure in response to VFD emergency response gap presented in Appendix B of the DEIS

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.2.1.1	Revised status of West Vancouver Freight Project elements. This revision was included throughout the ASC as applicable.	See references	5-27-2016	
Table 4.2-1	Revised Table 4.2-1 showing status of WVFA project elements.	See references	5-27-2016	
Figure 4.2-1	Revised Figure 4.2-1 WVFA Rail Construction Project elements showing status and elements of the WVFA rail construction project	See references	5-27-2016	
4.2.1.1	Updated status of BHP Billiton project.	PDEIS, DEIS Letter	7-28-2014 1-25-2016	
Figure 4.2-2	Updated Figure 4.2-2 BHP Billiton Proposed Site with the most current Facility site boundary and updated Facility elements.	PRM	5-27-2015	
Figure 4.2-3	Revised Figure 4.2-3 City of Vancouver Zoning in Site Vicinity with the most current Facility site boundary and updated Facility elements.	PRM	5-27-2015	
Figure 4.2-4	Revised Figure 4.2-4 General Comprehensive Land Use Designations format revised	PDEIS	7-28-2014	
Figure 4.2-5	Updated Figure 4.2-5 Comprehensive Plan updated with the most current Facility site boundary and updated Facility elements.	PRM	5-27-2015	
4.2.2.1	Clarified distant sources of light.	ASC Review	5-27-2016	
4.2.2.2	Added references to lighting standards.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.2.2.4	Added mitigation for temporary construction lighting	DEIS Letter	1-25-2016	
4.2.2.4	Added paint color of storage tanks.	NA	5-27-2016	
Figure 4.2-7	Added Figure 4.2-7 Current Aerial Photo showing current aerial photo.	NA	5-27-2016	
Figure 4.2-8	Revised Figure 4.2-8 Bird's Eye Photo Simulation showing bird's eye photo simulation.	PDEIS	7-28-2014	
Figure 4.2-9	Revised Figure 4.2-9 Viewpoints and Vicinity revised for consistency with aerial photo.	NA	5-27-2016	
4.2.3.5	Added aesthetics mitigation measures during construction.	DEIS Letter	1-25-2016	
4.2.3.5	Added aesthetics mitigation measures during operation.	DEIS Letter	1-25-2016	
Table 4.2-7	Revised Table 4.2-7 Public Park and Recreation Facilities in the Immediate Vicinity of Project showing public park and recreation facilities in the immediate vicinity of Project.	NA	5-27-2016	
Figure 4.2-7	Added Figure 4.2-7 Public Park and Recreation Facilities in the Immediate Vicinity of Project.	PDEIS	7-28-2014	
4.2.3.5	Mitigation reorganized to address Construction, Design and Operation mitigation.	DEIS Letter	1-25-2016	
4.2.3.5	Added that construction activities to be conducted during daylight hours, if night construction is required lights will be directed	DEIS Letter	1-25-2016	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	toward the Facility and use minimum wattage.			
4.2.3.5	Added operation mitigation for paint colors, lighting and screening.	DEIS Letter	1-25-2016	
Table 4.2-7	Revised Table 4.2-7 Public Park and Recreation Facilities in the Immediate Vicinity of Project resulting from reorganization of County and City recreational facilities.	NA	5-27-2016	
4.2.4.1	Added that while schools are not designated recreation facilities, many schools offer play equipment and soccer fields for public use.	NA	5-27-2016	
Figure 4.2-24	Revised Figure 4.2-24 Recreational Facilities added recreational facilities.	NA	5-27-2016	
4.2.4.4	Added no other mitigation measures will be used.	NA	5-27-2016	
4.2.4.4	Added Construction Communication Plan mitigation measure.		10-6-2016	See item 2.16.6 above.
4.2.5.6	Added description of a geoarcheological survey, findings as requested by DAHP and final conclusions of the survey.	Appendix A.2	4-27-2015	
4.2.5.6	Updated that all of the study area and the surrounding area have been studied extensively for cultural resources through previous surveys and the project-specific survey completed in 2014.	Appendix A.2	4-27-2015	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.2.5.6	Added If the depth of impact will exceed 3.05 m (10 feet) below surface in the vicinity of the dune ridge in Area 500, which would be a change from the current design plan, monitoring during construction in this portion of Area 500 would be appropriate.	Appendix A.2	4-27-2015	
4.2.5.6	Added discussion of Facility-related vessel transit impacts to historic and cultural resources	Appendix A.4	10-6-2016	Provided a description of the methodology and findings of the shoreline erosion study.
4.2.5.7	Mitigation reorganized to address Construction and Operation mitigation.	NA	5-27-2016	
4.2.5.7	Added Description of the inadvertent plan	DEIS Letter	1-25-2016	
4.2.5.7	Added Protection measures described in the inadvertent discovery plan.	DEIS Letter, Appendix A.3	1-25-2016 4-30-2015	
4.2.5.7	Added The inadvertent discovery plan will be used in the event ground disturbing activities are required in response to an emergency event during operations.	DEIS Letter	1-25-2016	
4.2.5.7	Added discussion regarding mitigation for Facility-related vessel transit impacts to historic and cultural resources		10-6-2016	Mitigation measures proposed in the DEIS would not be effective at the proposed locations because the shoreline modifications reduces the likelihood of featuring intact cultural resources and the minimal slopes (less than 5 percent) would not likely be impacted by wave energy. Therefore mitigation measures are not warranted nor proposed.

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
Figure 4.2-25	Revised Figure 4.2-25 Historical Shoreline Configuration – added project boundary.	PDEIS	7-28-2014	
Figure 4.2-26	Revised Figure 4.2-26 Previous Cultural Resource Studies.	PDEIS	7-28-2014	
4.2.6.3	Revised that no impacts are anticipated and therefore no mitigation measures are proposed.	NA	5-27-2016	
Figure 4.3-1	Revised Figure 4.3-1 Existing Roadway Transportation System	Appendix J.1	7-28-2014	
4.3.1	Updated NW Gateway Avenue description.	Appendix J.2	4-30-2015	
Table 4.3-1	Updated Table 4.3-1 Immediate Vicinity of Project	Appendix J.1	7-28-2014	
Table 4.3-2	Updated Table 4.3-2 LOS Criteria	Appendix J.1	7-28-2014	
4.3.3	Revised LOS and v/c discussion	Appendix J.1	7-28-2014	
Table 4.3-3	Updated Table 4.3-3 Existing Intersection Traffic Conditions Summary	Appendix J.1	7-28-2014	
4.3.3	Updated The Port has constructed modifications to its rail system	See references	5-27-2016	
4.3.3	Added Reference - C-TRAN 2013	Appendix J.1	7-28-2014	
4.3.2.2	Updated 2020 baseline traffic volumes for the Terminal 5 bulk potash facility	Appendix J.1	7-28-2014	
Table 4.3-6	Updated Table 4.3-6 Estimated Trip Generation updated all columns for light industrial	Appendix J.1	7-28-2014	
Table 4.3-7	Updated Table 4.3-7 Build-Out Year 2020 Total Traffic Conditions	Appendix J.1	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
	Summary updated v/c and LOS			
4.3.3.2	Updated train arrivals for consistency with project description.	PDEIS	7-28-2014	
4.3.3.2	Revised WVFA new access has been completed.	See references	5-27-2016	
4.3.3.3	Described vessels consistently with section 2.3.7.1	NA	2-25-2014	
4.3.3.3	Updated ATB call information.	PDEIS ⁴	5-8-2015	
4.3.3.3	Updated discussion regarding historic range of vessel trips on Columbia River and recent changes in arrivals at Port of Portland.	PDEIS	7-28-2014	
Table 4.3-10	Table 4.3-10 moved to Section 2.3.7.1	NA	5-27-2016	
4.3.3.5	Daily trip information revised, Facility construction phases updated	Appendix J.2	4-30-2015	
Table 4.3-11	Updated data.	Appendix J.1	7-28-2014	
4.3.3.5	Updated status of BHP Billiton proposal at Terminal 5.	NA	7-28-2014	
4.3.4	Updated status of WVFA.	NA	5-27-2016	
4.3.5	Mitigation reorganized to address Construction and Operation mitigation.	NA	5-27-2016	
4.3.5	Added Construction mitigation for barge movement.	DEIS Letter	1-25-2016	
4.3.5	Added Operation mitigation for yield control signage.	Appendix J.1	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information (PD) indicates the Project Description was revised)
4.3.5	Added Operation mitigation for Terminal 5 rail.	PDEIS	7-28-2014	
4.3.6	Added Operation mitigation for maintenance of landscaping, signs and aboveground utilities.	DEIS Letter	1-25-2016	
4.4.1.1	Updated Construction completion date.	NA	5-27-2016	
4.4.1.6	Updated Tax information.	Appendix K	7-28-2014	
Table 4.4-27	Replaced Table 4.4-27 Impact on Local Workforce with Economic Impacts of Construction on Study Area	Appendix K	7-28-2014	
Table 4.4-28	Deleted old data in Table 4.4-28 Economic Impacts in Construction Study Area.	Appendix K	7-28-2014	
4.4.2.1	Revised Construction Impact discussion.	Appendix K	7-28-2014	
4.4.2.2	Revised Operation Impact discussion.	Appendix K	7-28-2014	
Table 4.4-28	Added Table 4.4-28 Direct Employment from Operation at Startup and Full Build-Out.	Appendix K, PDEIS	7-28-2014	
4.4.2.3	Updated Housing Impact discussion.	PDEIS	7-28-2014	
4.4.3.1	Revised value of total state B & O tax associated with construction.	Appendix K	7-28-2014	
4.4.3.1	Revised value of state and local taxes generated by construction.	Appendix K	7-28-2014	
Table 4.4-30	Added Table 4.4-30 Construction and Operation Taxes.	PDEIS	7-28-2014	

ASC Section	Revision	Referenced From	Date Originally Submitted to EFSEC	Description of October 6, 2016 Information <i>(PD) indicates the Project Description was revised)</i>
4.4.3.2	Operations-related tax discussion was updated.	PDEIS	7-28-2014	