MAY 2016 REVISED APPLICATION FOR SITE CERTIFICATION
CHANGE LIST

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

401 Response:	Letter from Irina Makarow to Stephen Posner, 401 Water Quality Certification, Public Comment Response, February 19, 2016
Appendix:	See corresponding Appendix to the May 2016 Revised ASC
ASC 2013:	ASC submitted to EFSEC August 2013
ASC 2014:	Supplement to ASC submitted February 2014
ASC Review:	Changes made in response to EFSEC review of ASC
August 2014 NOC:	Revised NOC Application submitted August 2014
DEIS Letter:	Letter from Kelly Flint to Stephen Posner, DEIS Tesoro Savage Vancouver Energy Project, Application No. 2013-01, January 25, 2016
ER:	Vancouver Energy National Pollutant Discharge Elimination System Permit Engineering Report, October 2015 (section 5.3 of ASC)
NA:	New information based on design refinements, editorial changes, or information not present in other referenced documents
NPDES Letter:	Letter from Irina Makarow to Stephen Posner, Response to 19 February 2016 Letter Regarding Industrial National Pollutant Discharge Elimination System Permit Application Review, May 27, 2016 (section 5.3 of ASC)
PRM:	Letter from Irina Makarow to Stephen Posner, Project Description Update for Draft Environmental Impact Statement (DEIS) Development, May 27, 2015
PDEIS:	Applicant prepared Preliminary Draft EIS submitted to EFSEC July-September 2014; also includes responses to EFSEC DEIS Data Requests as indicated in footnotes
Response to NOC:	Letter from Kelly Flint to Stephen Posner, Response to EFSEC Review Comments on the ASC/NOC Air permit Application for the Vancouver Energy Project, May 6, 2016

ASC Section	Revision	Referenced From
Part 1		
1.1	Updated Applicant information.	See references
1.2	Updated Applicant contact information.	NA
1.3	Updated Applicant's financial assurance commitments.	Appendix E.2
1.4	Updated per revisions to Parts 1, 2, 3, 4 and 5.	See Parts 1 - 5
1.4.1.18	Added decommissioning impacts and mitigation measures.	PDEIS
1.5	Updated per revisions to Parts 1, 2, 3, 4 and 5.	See Parts 1 - 5
1.6	Updated with Applicant's on going consultation activities	NA
Part 2		
2.1.1	Impact Acreages were updated. This revision was included throughout the ASC as applicable.	PRM
2.1.1	Number of people directly employed by businesses at the Port was updated.	See references
2.1.1.1	The status of the BHP Billiton proposal, adjacent to the Facility site, was updated.	PDEIS
Figure 2.1-1	The figure was updated with the most current Facility site boundary.	PRM
Figure 2.1-2	The figure was updated with the most current Facility site boundary.	PRM
2.1.1.2	The reference to the boilers in Area 300 was removed.	PDEIS
2.1.1.2	The current use of Parcel 1A was updated.	See references
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
2.1.1.6	The description of rail improvements at Terminal 5 was revised. This revision was included throughout the ASC as applicable.	PRM
2.1.2.3	Width of the Columbia River at Terminal 4 was revised. This revision was included throughout the ASC as applicable.	PDEIS
2.1.3.1	Revised name of Portland West Hills to Tualatin Mountains. This revision was included throughout the ASC as applicable.	PDEIS
Figure 2.3-1	Revised Figure showing product flow.	PDEIS
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
2.3.1	Clarified the Applicant will neither own nor source the crude oil shipped through the Facility.	PDEIS[1],[2]
2.3.1	Summary of Primary and Ancillary Project Elements were updated. This revision was included throughout the ASC as applicable.	Appendix B

[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
2.3.1	Named the private access road to Old Alcoa Facility Access Road for purposes of the ASC. This revision was included throughout the ASC as applicable.	PDEIS
2.3.1	Revised the parking at the marine terminal area to be located on a reconstructed asphalt and gravel area.	NA
2.3.1.1	Revised capacity of intermediate berms.	PDEIS
2.3.1.1	Revised capacity of stormwater facilities.	ER, Appendix C.2
2.3.1.1	Clarified the transfer pipeline conveyance locations.	PDEIS
2.3.1.1	Clarified Port lease agreement.	Appendix E.2
2.3.1.1	Clarified dredging operations at berths 13 and 14 are a separate operation and not subject to site certification.	ASC 2013
2.3.2	Clarified average of four train arrivals per day.	PDEIS[3]
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
Figure 2.3-3	The figure was updated with the most current Facility site boundary and updated Facility elements.	PRM
Figure 2.3-4	The figure was updated with the most current Facility site boundary and rail track numbers.	PRM
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]
2.3.3.1	Clarified duration of train unloading.	PDEIS[2]
2.3.3.1	Clarified foundation elements of the unloading structure.	PRM
Figure 2.3-5	The figure was updated with the most current rail track numbers.	PRM
Figure 2.3-6	The figure was updated with the most current Facility site boundary.	PRM
Figure 2.3-7	The figure was updated to clarify surface material under tank car.	PRM
Figure 2.3-8	The figure was updated to show the updated track numbering.	PRM
2.3.3	Clarified the collection pans will convey stormwater in addition to inadvertent releases.	PDEIS, ER
2.3.3	Revised the rail car unloading facility combined secondary containment volume. This revision was included throughout the ASC as applicable.	NA
Figure 2.3-9 and Figure 2.3-10	The figure was updated with the most current Facility site boundary.	PRM
2.3.3	The dimensions of the pump basins were revised.	PDEIS
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
Figure 2.3-11	Added new figure to show heated tank cross section.	PDEIS

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

ASC Section	Revision	Referenced From
Figure 2.3-12	A note was added to the Figure to indicate intermediate berms are not shown.	PDEIS
2.3.3	The dimensions of the e-houses were updated.	PDEIS[2]
2.3.3	Dimensions and components of electrical equipment for the unloading facility were refined.	NA
2.3.3	Added DOT 117 rail car or better mitigation measure.	NA
2.3.4	Description of Administrative and Support Buildings foundations was added.	PRM
2.3.5	Added conveyance of crude oil from Area 200 to Area 400. This revision was included throughout the ASC as applicable.	PDEIS
2.3.5	Updated description of the 36-inch diameter pipeline to be electrically heat-traced.	PRM
2.3.5	Updated diameter of the pipeline delivering hydrocarbon vapor.	Appendix B.5
2.3.5	Updated minimum aboveground piping vertical support height.	Appendix B.5
2.3.5	Added the belowground transfer pipeline sections will be catholically protected.	PDEIS
2.3.5	Added information regarding the crude oil transfer rates.	PDEIS[2]
2.3.5	Added information regarding the proving station located at the exit of Area 200.	PRM
Figure 2.3-14	Removed call outs to upland facilities.	NA
2.3.6	Height of storage tanks updated.	PRM
2.3.6	Shell capacity of storage tanks updated.	PRM
2.3.6	Added positioning of storage tanks.	Appendix N.1
2.3.6	Clarified potential heating components of two tanks.	PDEIS
2.3.6	Added the minimum and maximum distances between the tanks and containment berms. This revision was included throughout the ASC as applicable.	Appendix N.1
2.3.6	Revised the height of the intermediate containment berms. This revision was included throughout the ASC as applicable.	PDEIS, PDEIS[2]
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
2.3.6	Stormwater system within the containment area was revised. This revision was included throughout the ASC as applicable.	ER
2.3.6	Tank storage pump basin description and dimensions were revised.	NPDES Letter
2.3.6	E-house footprint has been updated.	PDEIS
2.3.6	Transformer footprint has been updated.	NA
2.3.6	Added information regarding electrical switchgear.	NA
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

ASC Section	Revision	Referenced From
2.3.7.1	Added information regarding marine terminal loading operations.	PDEIS[2]
2.3.7.1	Added additional information regarding the types and capacities of vessels calling at the Facility.	PDEIS[4]
Table 2.3-3	Added table of ATB and tanker vessel dimensions.	Moved from Part 4.
Figure 2.3-13	Added new figure to show Veteran Class Crude Oil Tanker.	PDEIS
2.3.7.1	Added information regarding the operations of vessel arrivals.	PDEIS[2]
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
2.3.7.1	Added information regarding the operations of vessel departures and transit.	PDEIS[2]
2.3.7.2	Clarified walkway dimensions and descriptions. This revision was included throughout the ASC as applicable.	PRM
2.3.7.2	Removed steel tie back wires at the mooring points.	NA
2.3.7.2	Clarified operations to be conducted at each berth.	PRM; PDEIS[2]
2.3.7.2	Added information regarding dockside equipment.	PRM
2.3.7.2	Revised the dimensions and components of the combined fire pump foam, e-house, and control room building.	PRM
2.3.7.2	Revised booming configurations.	PRM
2.3.7.2	Revised MVCU dimensions and clarified system operations.	PRM
2.3.8	Updated natural gas delivery to boiler building.	NA
2.3.8	Revised the boiler system water treatment. This revision was included throughout the ASC as applicable.	NPDES Letter
2.3.8	Revised the boiler plant discharge pretreatment. This revision was included throughout the ASC as applicable.	NPDES Letter
2.3.8.1	Removed the Area 300 Boiler and associated references. This revision was included throughout the ASC as applicable.	PDEIS
2.3.9	Added information regarding decommissioning and lease terms.	PDEIS
2.3.10	Revised estimated capital cost of the Facility. This revision was included throughout the ASC as applicable.	PDEIS.
Figure 2.6-1	The figure was updated with the most current Facility site boundary.	PRM
2.6.3	Maximum daily water use quantity was updated.	NPDES Letter
2.6.3	Added water use for ground improvement installation.	PDEIS
2.6.4	Revised the process water descriptions. This revision was included throughout the ASC as applicable.	NPDES Letter
Table 2.6-1	Revised Table listing process water use and rates.	PDEIS, NPDES Letter
2.6.5	Revised the potable water usage and description.	NPDES Letter

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

ASC Section	Revision	Referenced From
Table 2.6-2	Revised Table listing potable water use and rates.	PDEIS, NPDES Letter
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
2.8.1	Revised description of aquatic discharge systems. This revision was included throughout the ASC as applicable.	NPDES Letter
2.8.1.1	Updated description of Terminal 5 stormwater system.	ER, Appendix C.2
2.8.1.2	Updated description of Terminal 4 stormwater system.	ER, Appendix C.2
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
2.8.1.3	Added information regarding stormwater discharge from the containment area.	ER, Appendix C.2
2.8.1.4	Revised wastewater sources discharging to City sanitary sewer.	PRM
2.8.1.4	Added information regarding alternative disposal options.	NPDES Letter
2.8.1.5	Added information regarding haul off as an alternative disposal option.	NPDES Letter
2.8.2.1	Added information regarding Area 600 process wastewater discharge alternatives.	NPDES Letter
2.8.2.2	Added information regarding Area 300 process wastewater discharge alternatives.	NPDES Letter
2.9.1	Revised process wastewater sources and descriptions.	NPDES Letter
Table 2.9-1	Revised Table listing process wastewater sources.	NPDES Letter
2.9.1	Revised analysis for process wastewater discharge.	NPDES Letter
Table 2.9-2	Revised Table listing estimated chemical makeup of process water discharge	NPDES Letter
2.9.1	Added alternatives for discharge of the boiler plant wastewater.	NPDES Letter
Table 2.9-3	Revised Table listing domestic wastewater quantities.	NPDES Letter
2.9.3	Revised pretreatment processes requirements.	NPDES Letter
2.9.4	Added alternatives for treatment of industrial wastewater.	NPDES Letter
2.9.5	Added alternatives for discharge of industrial wastewater.	NPDES Letter
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
2.9.5	Added compliance information regarding the City of Vancouver wastewater discharges and regulatory provisions.	NA
2.1	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
2.10.1.2	Added WAC 173-184 regulation for advance notice of oil transfer.	PDEIS

ASC Section	Revision	Referenced From
2.10.1.2	Added WAC 463-60-205 regulation for inclusion of construction and operation SPCC plan description.	NA
Table 2.10-1	Updated table with state requirements for advance notice of oil transfer.	PDEIS
Table 2.10-3	Added table.	PDEIS, Appendix B.3
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
2.10.2.2	Revised containment pan description and containment tank capacity.	PRM, PDEIS
2.10.2.3	Updated hydrostatic testing requirements.	PDEIS[2]
2.10.2.3	Added foundation information for storage tanks. This revision was included throughout the ASC as applicable.	PDEIS
2.10.2.4	Added information regarding ultrasonic flow meters.	PRM
2.10.2.4	Added information regarding secondary containment for underground pipe runs, aboveground pipeline construction, and applicable regulations.	PDEIS
2.10.2.4	Clarified catholically protected pipeline.	PDEIS
2.10.2.4	Added information regarding ESD valves.	PDEIS[2]
2.10.2.5	Added information regarding the risk of release from vessel loading operations.	DEIS Letter
2.10.2.6	Added information regarding booming equipment and spill response equipment.	Appendix B.5
2.10.2.6	Revised length of fence boom.	Appendix B.5, PDEIS
Figure 2.10-1	Revised Figure to show updated booming plan and location of spill response equipment.	PRM, PDEIS
2.10.3.1	Revised Facility construction spill prevention, control and contingency plan description	Appendix B.2, PDEIS
Table 2.10-5	Added Table of oils, fuels, and hazardous materials to be stored during construction.	PDEIS
2.10.3.2	Indicated submittal of preliminary spill preparedness and response plans.	NA
Table 2.11-1	Revised Table listing construction source control BMPs	Appendix C.1
2.11.2	Revised annual rainfall amount.	NA
Table 2.11-2	Revised Table listing drainage basin areas.	ER, Appendix C.2
2.11.2	Added regulation for stormwater facilities.	ER
2.11.2.1	Revised description of source control BMPs.	PDEIS, PDEIS[5], ER
Table 2.11-3	Revised Table 2.11-3 listing applicable structural source control and operational BMPs	PRM
2.11.2.3	Provided additional information regarding status of Tier II anti-degradation analysis	NPDES Letter

[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
All sub sections 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
2.12	Added construction emissions from third party batch plant.	PRM
2.12.2	Corrected definition of nitrogen oxide.	NA
2.12.2.1	Added ground improvement activities to construction emissions (temporary batch plant).	PRM
2.12.2.2	Clarified the operation assumptions of the Area 600 boilers.	Response to NOC[6]
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]
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]
2.13	Added Applicant's CO2 emissions mitigation commitment.	PDEIS
Table 2.13-1	Added Table listing Facility stationary source annual GHG emissions.	PDEIS
2.15.1	Revised construction schedule and milestones. This revision was included throughout the ASC as applicable.	NA
2.15.2	Revised construction workforce.	PDEIS
Table 2.15-1	Revised Table listing construction workforce by trade for Phase I.	PDEIS
2.15.3	Revised operation workforce.	PDEIS
Table 2.15-3	Revised Table listing operations staff.	PDEIS
Figure 2.15-1	Revised Figure showing construction milestones	NA
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
2.16.2	Added EFSEC's review comments of the CSHM as revisions to be made to the plan.	Appendix M
2.17	Added additional information regarding construction staging and laydown activities.	PRM
2.17	Added types of construction equipment to be used during construction.	PRM
Figure 2.17-1	Revised Figure showing temporary construction boundary and laydown areas.	PRM

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

ASC Section	Revision	Referenced From
2.17.3	Removed description of foundations and referenced description in Section 2.18.1.4.	NA
2.17.4	Added information regarding soil excavation in Area 300.	PRM
2.17.6	Revised and added information regarding natural gas service lines that will serve the Facility.	Personal communication with NW Natural
2.18.1.4	Added compliance with City and State design standards	DEIS Letter
2.18.1.4	Added descriptions of ground improvement design and potential construction methods.	DEIS Letter, Appendix L.3, PRM
2.18.2.1	Added that ash fall will be addressed in the Construction/Operations Emergency Plan	DEIS Letter
2.19.1	Added information regarding the Port's security force.	Appendix D.4
2.19.2	Added description of Construction Security Plan contents.	Appendix D.4
2.19.2.1	Added description of security measures to be implemented at the site during construction.	Appendix D.4
2.19.2.2	Added description of access control measures to be implemented at the construction sites.	Appendix D.4
2.19.2.3	Added description of entry and exit screenings at the site to be implemented during construction.	Appendix D.4
2.19.2.4	Added description of protocols for the blockage of roadways to be implemented during construction.	Appendix D.4
2.19.2.5	Added description of monitoring and patrols to be implemented during construction.	Appendix D.4
2.19.2.6	Added description of incident procedures and emergency response to be implemented during construction.	Appendix D.4
2.19.3	Added description of Operations Security Plan contents.	Appendix D.3
2.19.4	Added description of Facility Security Plan contents.	Appendix D.3
2.20	Added information regarding additional analyses.	NA
2.22.1	Revised status of the Port of Kalama Northport facility.	NA
2.22.1	Added Port of Portland position on crude-by-rail development, and City of Portland fossil fuel resolution.	PDEIS, See references
2.22.1	Added statement regarding the use of Terminal 5.	PDEIS
2.22.2	Added statement regarding benefit of the covered unloading facility.	PDEIS
2.22.4	Added information regarding wastewater characterization for the proposed discharge streams.	NPDES Letter
2.22.6	Added refinements to the marine terminal modifications	PDEIS
2.22.7	Added information regarding design changes impacting Facility emissions.	PDEIS
Table 2.23-1	Updated Table showing applicable Federal, State, and Local permits and regulations	DEIS
2.23.2.2	Revised status of biological evaluation and ESA consultation activities. This revision was included throughout the ASC as applicable.	NA

ASC Section	Revision	Referenced From
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
2.23.2.5	Added information regarding Migratory Bird Treaty Act.	DEIS
2.23.2.6	Added information regarding Bald and Golden Eagle Protection Act.	DEIS
2.23.2.7	Added information regarding Cultural Resources Inadvertent Discovery Plan.	Appendix A.3
2.23.2.8	Revised Section 10 permit application status. This revision was included throughout the ASC as applicable.	NA
2.23.2.18	Added information regarding CERCLA.	NA
2.23.2.19	Added information regarding Pretreatment Section 307(b).	NA
2.23.3.2	Added information regarding Section 401 Water Quality Certificate.	NA
2.23.3.8	Removed information regarding PSD permit (no longer applicable)	August 2014 NOC
2.23.3.16	Added information regarding Washington State Waste Discharge Permit Program	NA
2.23.4.5	Added information regarding Hazardous Materials Regulatory Fee Certificate.	NA
2.23.4.6	Added information regarding Critical Areas Protection.	PDEIS
2.23.4.7	Added information regarding Archaeological Resource Protection.	NA
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
3.1.2.1	Added Appendix references.	Appendix L.1, L.2, L.3
Figure 3.1-1	Updated project boundaries.	PRM
Figure 3.1-3	Updated figure format.	NA
3.1.3.5	Added conclusions regarding geotechnical investigation of site.	Appendix L
3.1.3.6	Section reorganized to address construction mitigation followed by operation mitigation.	NA
3.1.6	Mitigation introduction revised to discuss geotechnical investigation data sets and conclusions.	Appendix L
3.1.3.6	Added discussion of ground improvement types/methods and deep structural foundations to mitigate liquefaction-induced settlement and lateral spreading deformations. Added reference locations for additional detail.	Appendix L.3, ASC 2.18.4
3.1.3.6	Added upland area Facility design information and criteria.	PDEIS
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

ASC Section	Revision	Referenced From
3.1.3.6	Added additional plans the applicant will implement related seismic events.	DEIS Letter
Figure 3.1-7	Replaced with PDEIS figure	PDEIS
3.1.4.2	Added note concerning determination and documentation of final ground improvements.	DEIS Letter
3.1.5.1	Added description of temporary topographical modification resulting from benching at the Marine Terminal (Area 400).	PRM
3.1.5.2	Added temporary benching will be removed, shoreline restored after construction is finished, no topography impacts and no mitigation required.	PRM
3.1.7.1	Added impacts of temporary benching during ground improvement.	PRM
3.1.7.2	Section reorganized to address Construction and Operation mitigation measures.	NA
3.1.7.2	Added summary of erosion impacts.	ASC 3.1.3.5
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
3.1.7.2	Clarification and mitigation measures related to erosion control and references to oSWPPP.	DEIS Letter, Appendix C.2
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 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	August 2014 NOC
3.2.1.1	Text was moved to this location for clarity.	NA
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
3.2.1.7	Corrected statement regarding direction of prevalent winds.	NA
3.2.3	Clarified that the MVCUs may also result in a visible water vapor plume.	NA
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
3.3.1	Added reference to containment tank.	NA
3.3.1	Updated volume precipitation based on 47.4-acre site.	PRM
3.3.1.1	Reorganized Impacts to discuss construction impacts followed by operation impacts, added cross references to ASC sections.	NA

ASC Section	Revision	Referenced From
3.3.1.1	Added discussion of ground improvement potential impacts (jet grouting).	Appendix L.3
3.3.1.1	Updated nomenclature of Terminal 5 stormwater "lagoons".	NA
3.3.1.1	Removed that discharges from the site will contribute only to Terminal 5 ponds.	NA
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
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
3.3.1.2	Mitigation measures reorganized to address Construction and Operation mitigation measures.	NA
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
3.3.1.2	Added mitigation/BMPs for jet grouting activities to construction mitigation.	Appendix L.3, DEIS Letter
3.3.1.2	Added cSWPPP detail to construction mitigation.	ASC 2.11, Appendix C.1
3.3.1.2	Added NPDES Individual Construction Stormwater Permit reporting and notification details to construction mitigation.	NA
3.3.1.2	Added cSPCCP details to construction mitigation	Appendix B.2, DEIS Letter
3.3.1.2	Revised and reordered the Operation Mitigation discussion.	NA
3.3.1.2	Added details on the permanent stormwater management and treatment system for operations.	DEIS Letter
3.3.1.2	Added that the Applicant will implement secondary structural containment measures to supplement the structural source control BMPs.	DEIS Letter
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
3.3.1.2	Updated API 650 tanks inspection information.	PRM, DEIS Letter
3.3.1.2	Added that the tank farm will be surrounded by a containment berm 6 feet high with a full impervious liner capable of containing 110 percent of the largest tank and a 25-year 24-hour rainfall event.	PRM, Appendix A, Sec 4.3.3.2
3.3.1.2	Edited transmission to transfer pipeline and added Area 500.	NA
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

ASC Section	Revision	Referenced From
3.3.1.2	Added references to ASC sections.	NA
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
3.3.1.2	Added oSWPPP coordination with ESFEC.	DEIS Letter
3.3.1.2	Updated regarding Tier II anti-degradation analysis being completed.	NPDES Letter
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,
Figure 3.3-1	Revised Mapped Floodplains using FEMA data and updated project boundaries per PRM	PRM
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
3.3.3.2	Updated title from Protective Measures to Mitigation Measures.	NA
3.3.3.2	Added construction mitigation for the 100-500-Year Flood	DEIS Letter
3.3.3.2	Clarified that certain facilities will be located in, but elevated above, the 100 year floodplain.	DEIS Letter
3.3.4.1	Added The impacts to groundwater from operations and maintenance activities are expected to be minor.	DEIS Letter
3.3.4.1	Section reorganized and information added regarding wellhead zones	DEIS Letter, ER
3.3.4.1	Clarified location of ground improvements relative to locations of existing contaminated media.	DEIS Letter, Appendix F.1
3.3.4.2	Mitigation measures reorganized to address Construction and Operation mitigation. Mitigation measures added from previous references.	DEIS Letter, Appendix F.1
3.3.5.1	Updated water consumption numbers for process and domestic potable water.	NA
3.3.6	Added reference to Figure 3.3-3	NA
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]
3.4.2	Clarified distinction between vegetation communities and terrestrial habitats.	PDEIS
3.4.2.1	Changed Terrestrial habitat to Terrestrial vegetation communities and referenced Figure 3.4-2	PDEIS
Figure 3.4-2	Added Figure 3.4-2 Terrestrial Vegetation.	PDEIS
3.4.2.1	Added terrestrial habitat types for the project site	PDEIS
Figure 3.4-3	Added Figure 3.4-3 Wildlife Habitats.	PDEIS
3.4.2.1	Clarified characterization of vegetation communities in project vicinity, and discussed presence of specific communities.	PDEIS

ASC Section	Revision	Referenced From
3.4.2.1	Added discussion of specific habitats present at site and in project vicinity.	PDEIS
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
3.4.2.1	Renamed Upland Cottonwood Stands to Westside Lowland Conifer Hardwood Forest	PDEIS
3.4.2.1	Clarified presence of Agricultural, Pasture, and Mixed Environs Lands in vicinity of project.	PDEIS
3.4.2.1	Added descriptions of Aquatic Habitats in the project vicinity	PDEIS
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
3.4.2.1	Added shoreline types discussion and revised Table 3.4.-1 Lower Columbia River GRP Shoreline Types.	PDEIS
3.4.2.1	Added noxious weeds discussion and Table 3.4-1 Noxious Weeds Known to Occur in Clark County.	PDEIS
3.4.2.2	Revised construction impacts in the upland portion of the project including temporary impacts for staging and construction access.	PDEIS
3.4.2.2	Revised construction impacts to ruderal upland grass/forb vegetation.	PDEIS
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
Figure 3.4-4	Revised Figure 3.4-4 CPU Tree Plan	PDEIS
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
3.4.2.2	Added discussion of construction-related noxious weed impacts.	PDEIS
Table 3.4-1i	Deleted Table 3.4-1i Summary of Habitat Acreage Impacts.	PDEIS
Table 3.4-4	Added Table 3.4-4 Summary of Vegetation Community Acreage Impacts.	PDEIS
Table 3.4-5	Added Table 3.4-5 Summary of Habitat Acreage Impacts.	PDEIS
3.4.2.2	Clarified vessel trips per year in first and subsequent years of operation. This correction was made throughout the ASC.	NA
3.4.2.2	Added discussion of Shallow Water Habitat, Exotic Species, Temporary Water Quality Impacts and minor impacts associated with each.	DEIS Letter
3.4.2.2	Added discussion regarding temporary construction noise impacts on habitats.	PDEIS

ASC Section	Revision	Referenced From
3.4.2.2	Added discussion regarding impacts of vegetation maintenance activities.	NA
3.4.2.2	Added discussion regarding overwater coverage impacts.	PDEIS
3.4.2.2	Added discussion of the frequency of marine incidents and spill risk assessment from Appendix P.1	Appendix P.1
3.4.2.2	Added discussion of bank erosion impacts resulting from vessel wakes.	DEIS Letter
3.4.2.2	Added discussion of aquatic invasive species impacts resulting from operation.	401 Response
3.4.2.3	Referenced other sections where mitigation is also discussed.	NA
3.4.2.3	Mitigation measures reorganized to address Construction and Operation mitigation, grammar edits, single word and phrase changes for clarity.	NA
3.4.2.3	Updated acreage of ruderal upland grass/forb impacts.	Appendix H.1
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
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
3.4.2.3	Added compensatory habitat mitigation discussion.	PDEIS, DEIS Letter
3.4.2.3	Added that no purple martin or nest boxes would be directly affected discussion.	DEIS Letter
3.4.2.3	Added mitigation measures to minimize impacts to migratory birds during construction.	DEIS Letter
3.4.2.3	Added BMPs that will be implemented during construction to minimize the spread and establishment of noxious weeds	DEIS Letter
3.4.2.3	Added aquatic invasive species mitigation measures.	401 Response
3.4.2.3	Updated the Temporary Construction Water Quality mitigation discussion. Added detail on WQPMP, in-water work window discussion, and referenced Appendix F.2. Added footnote with further explanation of work window.	DEIS Letter
3.4.2.3	Updated spill prevention and containment discussion. Added detail related to cSPCCP BMPs and procedures. Referenced Appendix B.2	DEIS Letter
3.4.2.3	Added Vegetation Maintenance mitigation.	DEIS Letter
3.4.2.3	Added discussion regarding use of biodegradable firefighting foam.	PDEIS
3.4.2.3	Updated discussion regarding shipping related impacts relative to Bank Erosion, Exotic Species, and Vessel Transit Related Spills.	DEIS Letter
3.4.3.2	Added construction lighting and aquatic Invasive Species impacts discussions.	DEIS Letter

ASC Section	Revision	Referenced From
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 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.	DEIS Letter
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
Table 3.4-6	Revised Table 3.4-6 Special Aquatic Species and Their Potential to Occur within the Project Area	ASC Review
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
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
3.4.3.2	Discussed construction related lighting impacts.	PRM
3.4.3.2	Updated Temporary Construction Noise analysis, including impacts resulting from ground improvement construction.	PDEIS, PRM
3.4.3.2	Added discussion regarding impacts of aquatic invasive species.	401 Response
3.4.3.2	Removed assessment of impacts resulting from non-project related vessel traffic.	NA
3.4.3.2	Updated Operational Water Quality Impacts addressing propeller wash	DEIS Letter
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
3.4.3.2	Added reference to Appendix P.1 regarding low probability of spills resulting from Facility-related vessel calls.	NA
3.4.3.2	Added Spill planning response discussion.	Appendix B.6
3.4.3.2	Added discussion of lighting and overwater coverage impacts.	PDEIS
3.4.3.2	Updated Wake Stranding discussion.	DEIS Letter, Appendices H.5 and H.6
3.4.3.2	Updated Bank Erosion and Exotic Species impacts discussions	DEIS Letter, Appendices H.5 and H.6
3.4.3.3	Reorganized mitigation to discuss construction followed by operation.	NA
3.4.3.3	Updated Direct Habitat Modification discussion - dock modification and in water work window.	DEIS Letter
3.4.3.3	Added mitigation measures for construction lighting impacts.	DEIS Letter
3.4.3.3	Revised Temporary Water Quality mitigation discussion.	DEIS Letter

ASC Section	Revision	Referenced From
3.4.3.3	Added Aquatic Invasive Species mitigation.	DEIS Letter
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
3.4.3.3	Added discussion of BMPs, design measures and spill response planning measures.	ASC 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 established in the Industrial Stormwater General Permit prior to its discharge to the existing Terminal 5 stormwater system.	PRM Appendix A Sec 4.3.2.2 pg. 4-43
3.4.3.3	Added discussion of turbidity impacts resulting from propeller wash.	DEIS Letter
3.4.3.3	Updated discussion regarding impacts of shoreline erosion from vessel wakes on ESA-listed species.	DEIS Letter
3.4.3.3	Added discussion of vessel operator requirements to avoid hull fouling and contaminated ballast water discharge.	401 Response
3,4,3,3	Updated discussion of Cumulative Impacts.	NA
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
3.4.4.2	Updated acreage impacts to habitats affected by Facility construction.	PRM
3.4.4.2	Added that no purple martin or nest boxes would be directly affected by the construction of the proposed project.	NA
3.4.4.2	Added discussion regarding WQPMP.	Appendix F.2
3.4.4.2	Added discussion regarding construction lighting impacts.	NA
3.4.4.2	Updated analysis of construction noise impacts.	PDEIS, Appendix H.4
3.4.4.2	Discussed lighting impacts.	NA
3.4.4.2	Added discussion of invasive species impacts.	401 Response
3.4.4.2	Identified Applicant's vessel traffic risk assessment.	Appendix P.1
3.4.4.2	Revised Bank Erosion information.	DEIS Letter
3.4.4.3	Reorganized mitigation to discuss construction followed by operation.	NA
3.4.4.3	Revised Temporary Construction Noise mitigation	DEIS Letter
3.4.4.3	Added Tree removal and landscape monitoring mitigation criteria.	DEIS Letter
3.4.4.3	Addressed construction nuisance wildlife impacts.	DEIS Letter
3.4.4.3	Addressed construction lighting impacts.	DEIS Letter
3.4.4.3	Updated mitigation for temporary water quality impacts.	DEIS Letter
3.4.4.3	Added discussion regarding special status wildlife and construction noise impacts.	Appendix H.4

ASC Section	Revision	Referenced From
3.4.4.3	Addressed impacts to marine mammals from construction noise.	Appendix H.3
3.4.4.3	Added construction Aquatic Invasive Species mitigation.	Appendix H.1
3.4.4.3	Added mitigation for operation- related nuisance wildlife impacts	DEIS Letter
3.4.4.3	Updated mitigation for operational water quality impacts.	DEIS Letter
3.4.4.3	Addressed mitigation of operation lighting impacts.	DEIS Letter
3.4.4.3	Added operations Aquatic Invasive Species mitigation.	401 Response
3.4.4.3	Added discussion of vessel related invasive species impacts.	401 Response, PDEIS
3.4.4.3	Addressed lack of impact of vessel wakes.	DEIS Letter
3.4.4.3	Added mitigation regarding escort tugs for vessel-related incidents.	NA
3.4.5.1	Updated USACE permitting and ESA Consultation status.	NA
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
3.5.3	Clarified that shallow stormwater swales located in the southwest corner of Parcel 1A are not jurisdictional under city code.	NA
3.5.3	Corrected number of wetland mitigation sites present in the vicinity of the project site and within 300 feet of the project site.	Appendix H.1
3.5.3	Clarified relative location of wetland complexes to project facilities in terms City 300-foot CAO limit.	Appendix H.1
3.5.4	Reorganized mitigation to discuss construction followed by operation.	NA
3.5.4.2	Added discussion regarding spill response measures that would protect wetlands adjacent to Vancouver Lake.	DEIS Letter
3.5.5	Added discussion of construction spill prevention, control and countermeasures.	Appendix B.2
3.5.5	Updated mitigation measures that would protect wetlands from ground improvement water quality impacts.	Appendix H.1, PRM
3.5.5	Added Operational mitigation measures to minimize operational water quality impacts.	NA
3.5.5	Added discussion regarding spill response measures that would protect wetlands adjacent to Vancouver Lake.	DEIS Letter
3.5.5	Added discussion of impacts to wetlands resulting from shipping traffic.	DEIS Letter
3.6.1.1	Clarified that the amount of electricity consumed would be similar to other medium-sized industrial construction projects, and would not be significant in terms of overall regional supply.	PDEIS
3.6.1.1	Added information regarding the amount of electricity and fuels to be used during project construction in response to	ASC Review

ASC Section	Revision	Referenced From
	EFSEC comment on ASC. Added incidental use of propane during construction.	
3.6.1.1	Identified volumes of cement and aggregates that would be used to construct ground improvements.	PRM
3.6.1.1	Updated volume of rail ballast to be used for rail infrastructure improvements.	PDEIS
3.6.1.2	Updated natural gas consumption.	August 2014 NOC
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
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
3.6.2.2	Added that the Facility will use leased, portable power generators (emergency engines) in the event of a power failure.	PRM
3.6.3	Added Clark County gravel resource information.	PDEIS
3.6.3	Added electricity use and supply information.	PDEIS
3.6.3	Added information regarding adequacy of Northwest Natural Gas information regarding natural gas supply.	PDEIS
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
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
4.1.1.1	Added Washington Administrative Code to Noise Standards.	NA
4.1.1.1	Added Jail Work Center to *Existing Sound Levels.*	NA
4.1.1.2	Added Tidewater office building as a potential sensitive receiver.	PDEIS
Figure 4.1-1	Revised Figure 4.1-1 Background Noise Measurement Location and Receptors showing background noise measurement location and receptors.	PDEIS
4.1.1.2	Added consideration of natural attenuation to noise emissions.	PDEIS
Table 4.1-5	Updated Table 4.1-5 Summary of Major Facility Noise Sources listing summary of major Facility noise sources.	PDEIS
4.1.1.2	Updated noise impacts analysis based on PDEIS.	PDEIS
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
Figure 4.1-2	Added Figure 4.1-2 Noise Model Receptor Locations showing noise model receptor locations.	PDEIS
4.1.1.3	Added noise monitoring in accordance with construction wildlife monitoring plan	DEIS Letter

ASC Section	Revision	Referenced From
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
4.1.2.1	Added construction materials consideration to fire risk.	PDEIS
4.1.2.1	Added description of the construction fire prevention plan.	Appendix D.2
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 WISHA WAC 296-155-260 and NFPA requirements.	Appendix D.2
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
4.1.2.1	Added applicability of regulations to construction safety plans	Appendix D.2
4.1.2.2	Updated description of crude oil composition.	PDEIS
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
4.1.2.2	Added discussion of additional parameters potentially influencing the flammability of any specific crude oil in transportation.	DEIS Letter
4.1.2.2	Added Summary of risk assessments completed relative to fires and explosions potentially occurring at the Facility.	Appendix P.3
4.1.2.2	Added Description of types of fire events.	Appendix P.3, DEIS Letter
4.1.2.2	Added discussion of non-explosive nature of crude oil and description of deflagrations	DEIS Letter
4.1.2.2	Added Shipping requirements of crude by rail.	See references
4.1.2.2	Added to examples of risk-based management approaches that will be implemented.	Appendix D.3
4.1.2.2	Added Information regarding fire safety design	Appendix N.1, PRM, DEIS Letter
4.1.2.2	Added information regarding Fire Protection Engineer design requirements.	DEIS Letter
4.1.2.2	Added information regarding boiler requirements.	ASC section 2.23
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
4.1.3.2	Revised construction methods within the restrictive covenant areas.	DEIS Letter
	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
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

ASC Section	Revision	Referenced From
4.1.3.3	Added Description of waste handling resulting from inadvertent releases.	Appendix C.2
4.1.4.2	Renamed cargo tanks to cargo compartments. This revision was made throughout the ASC.	NA
4.1.4.4	Added description of methods of compliance with safety standards during project construction.	PDEIS
4.1.4.4	Updated description of safety monitors (H_2S, LEL, and oxygen (O_2) monitors) to be used during project operation.	Appendix D.3
4.1.4.4	Added description of Operations Facility Safety Program contents including items to address EFSEC review comments.	Appendix M
4.1.6.2	Added additional information regarding the operational emergency response plan.	Appendix D.3
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
4.2.1.1	Revised status of West Vancouver Freight Project elements. This revision was included throughout the ASC as applicable.	See references
Table 4.2-1	Revised Table 4.2-1 showing status of WVFA project elements.	See references
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
4.2.1.1	Updated status of BHP Billiton project.	PDEIS, DEIS Letter
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
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
Figure 4.2-4	Revised Figure 4.2-4 General Comprehensive Land Use Designations format revised	PDEIS
Figure 4.2-5	Updated Figure 4.2-5 Comprehensive Plan updated with the most current Facility site boundary and updated Facility elements.	PRM
4.2.2.1	Clarified distant sources of light.	ASC Review
4.2.2.2	Added references to lighting standards.	PDEIS
4.2.2.4	Added mitigation for temporary construction lighting	DEIS Letter
4.2.2.4	Added paint color of storage tanks.	NA
Figure 4.2-7	Added Figure 4.2-7 Current Aerial Photo showing current aerial photo.	NA
Figure 4.2-8	Revised Figure 4.2-8 Bird's Eye Photo Simulation showing bird's eye photo simulation.	PDEIS
Figure 4.2-9	Revised Figure 4.2-9 Viewpoints and Vicinity revised for consistency with aerial photo.	NA

ASC Section	Revision	Referenced From
4.2.3.5	Added aesthetics mitigation measures during construction.	DEIS Letter
4.2.3.5	Added aesthetics mitigation measures during operation.	DEIS Letter
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
Figure 4.2-7	Added Figure 4.2-7 Public Park and Recreation Facilities in the Immediate Vicinity of Project.	PDEIS
4.2.3.5	Mitigation reorganized to address Construction, Design and Operation mitigation.	DEIS Letter
4.2.3.5	Added that construction activities to be conducted during daylight hours, if night construction is required lights will be directed toward the Facility and use minimum wattage.	DEIS Letter
4.2.3.5	Added operation mitigation for paint colors, lighting and screening.	DEIS Letter
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
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
Figure 4.2-24	Revised Figure 4.2-24 Recreational Facilities added recreational facilities.	NA
4.2.4.4	Added no other mitigation measures will be used.	NA
4.2.5.6	Added description of a geoarcheological survey, findings as requested by DAHP and final conclusions of the survey.	Appendix A.2
4.2.5.6	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
4.2.5.6	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
4.2.5.7	Mitigation reorganized to address Construction and Operation mitigation.	NA
4.2.5.7	Added Description of the inadvertent plan	DEIS Letter
4.2.5.7	Added Protection measures described in the inadvertent discovery plan.	DEIS Letter, Appendix A.3
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
Figure 4.2-25	Revised Figure 4.2-25 Historical Shoreline Configuration – added project boundary.	PDEIS
Figure 4.2-26	Revised Figure 4.2-26 Previous Cultural Resource Studies.	PDEIS

ASC Section	Revision	Referenced From
4.2.6.3	Revised that no impacts are anticipated and therefore no mitigation measures are proposed.	NA
Figure 4.3-1	Revised Figure 4.3-1 Existing Roadway Transportation System	Appendix J.1
4.3.1	Updated NW Gateway Avenue description.	Appendix J.2
Table 4.3-1	Updated Table 4.3-1 Immediate Vicinity of Project	Appendix J.1
Table 4.3-2	Updated Table 4.3-2 LOS Criteria	Appendix J.1
4.3.3	Revised LOS and v/c discussion	Appendix J.1
Table 4.3-3	Updated Table 4.3-3 Existing Intersection Traffic Conditions Summary	Appendix J.1
4.3.3	Updated The Port has constructed modifications to its rail system	See references
4.3.3	Added Reference - C-TRAN 2013	Appendix J.1
4.3.2.2	Updated 2020 baseline traffic volumes for the Terminal 5 bulk potash facility	Appendix J.1
Table 4.3-6	Updated Table 4.3-6 Estimated Trip Generation updated all columns for light industrial	Appendix J.1
Table 4.3-7	Updated Table 4.3-7 Build-Out Year 2020 Total Traffic Conditions Summary updated v/c and LOS	Appendix J.1
4.3.3.2	Updated train arrivals for consistency with project description.	PDEIS
4.3.3.2	Revised WVFA new access has been completed.	See references
4.3.3.3	Described vessels consistently with section 2.3.7.1	NA
4.3.3.3	Updated ATB call information.	PDEIS[4]
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
Table 4.3-10	Table 4.3-10 moved to Section 2.3.7.1	NA
4.3.3.5	Daily trip information revised, Facility construction phases updated	Appendix J.2
Table 4.3-11	Updated data.	Appendix J.1
4.3.3.5	Updated status of BHP Billiton proposal at Terminal 5.	NA
4.3.4	Updated status of WVFA.	NA
4.3.5	Mitigation reorganized to address Construction and Operation mitigation.	NA
4.3.5	Added Construction mitigation for barge movement.	DEIS Letter
4.3.5	Added Operation mitigation for yield control signage.	Appendix J.1
4.3.5	Added Operation mitigation for Terminal 5 rail.	PDEIS
4.3.6	Added Operation mitigation for maintenance of landscaping, signs and aboveground utilities.	DEIS Letter
4.4.1.1	Updated Construction completion date.	NA
4.4.1.6	Updated Tax information.	Appendix K

ASC Section	Revision	Referenced From
Table 4.4-27	Replaced Table 4.4-27 Impact on Local Workforce with Economic Impacts of Construction on Study Area	Appendix K
Table 4.4-28	Deleted old data in Table 4.4-28 Economic Impacts in Construction Study Area.	Appendix K
4.4.2.1	Revised Construction Impact discussion.	Appendix K
4.4.2.2	Revised Operation Impact discussion.	Appendix K
Table 4.4-28	Added Table 4.4-28 Direct Employment from Operation at Startup and Full Build-Out.	Appendix K, PDEIS
4.4.2.3	Updated Housing Impact discussion.	PDEIS
4.4.3.1	Revised value of total state B & O tax associated with construction.	Appendix K
4.4.3.1	Revised value of state and local taxes generated by construction.	Appendix K
Table 4.4-30	Added Table 4.4-30 Construction and Operation Taxes.	PDEIS
4.4.3.2	Operations-related tax discussion was updated.	PDEIS
Part 5		
All sub sections of Section 5.1	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 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.	August 2014 NOC, Response to NOC[6]
5.1.2.1.2	Information regarding the submerged fill configuration for vessel loading was added.	Response to NOC
5.1.2.1.2	The hydrogen sulfide treatment system was identified.	NA
5.1.2.1.2	The Applicant confirmed the level of VOC destruction achievable by the MVCUs.	Response to NOC
5.1.2.1.3	The Facility throughput and number of storage tank turnovers was updated.	Response to NOC
5.1.2.1.3	The assumptions regarding the electrical heating of two of the storage tanks were clarified; the methods to estimate heated tank emissions were added. The oil storage tank emission rates were updated in table 5.1-6.	Response to NOC Response to NOC[6]
5.1.2.1.5	The emissions from components were updated.	Response to NOC[6]
5.1.2.16	Clarification was added regarding exemption of emissions from mobile sources used in transportation.	NA
5.1.2.1.7	Annual Area 600 Boiler emissions were incorrect in the August 2014 submittal and are corrected in this revision.	Corrected information
5.1.2.1.7	Facility-wide emissions summaries were updated as a result of refined assumptions identified above and below. Emission rates for and emissions of Benzene, Cyclohexane,	Response to NOC[6]

ASC Section	Revision	Referenced From
	Ethylbenzene, Formaldehyde, Hexane, Hydrogen Sulfide, Toluene, and Xylene (-m, -o, and -p) were updated based on updated emissions factors. Two additional TAPs (Formaldehyde and Hydrogen Sulfide) were identified as exceeding the ASIL and required modelling.	
5.1.2.2.1	Annual emission rates for TAPs from Area 600 Boilers were updated.	Response to NOC[6]
5.1.2.2.2	Formaldehyde emission rates were updated for the MVCUs. Hydrogen Sulfide emissions were included in the table.	Response to NOC[6]
5.1.2.2.3	Oil storage tank emission rates were updated based on refined information regarding emissions from heated storage tanks.	Response to NOC[6]
5.1.2.2.5	Fugitive Component Leak emissions were updated based on the composite speciation profile derived from the composite fugitive unheated crude oil storage tanks.	Response to NOC[6]
5.1.4.4.1	The August 2014 version incorrectly showed the maximum overall annual average PM2.5 concentration for comparison to the ASIL in Tables 5.1-21 and 5.1-22. It was corrected to show the maximum annual average concentrations at each receptor averaged over the five modeled years, as stated in the text.	Corrected information
5.1.4.4.2	Hydrogen Sulfide and Formaldehyde maximum predicted TAP concentrations were added, and Benzene predicted concentrations were updated.	Response to NOC[6]
5.1 - Attachment 2	Updated to reflect the emissions calculations supporting the additional information in response to the March 14, 2016 EFSEC letter.	Response to NOC[6]
5.1 - Attachment 3	Additional equipment specifications added supporting the additional information in response to the March 14, 2016 EFSEC letter.	Response to NOC[6]
5.3	October 2015 NPDES Permit Engineering Report was included as an attachment to this section.	ER
5.3	Letter responding to EFSEC information request dated February 19, 2016 was added.	NPDES Letter