BergerABAM

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27 May 2016

Mr. Stephen Posner
Energy Facility Site Evaluation Council
Washington Utilities and Transportation Commission
P.O. Box 43172
Olympia, WA 98504-3172

Subject: Vancouver Energy
EFSEC Application No. 2013-01, Docket No. EF131590
Response to 23 March 2016 EFSEC Review Comments on the Application for Site Certification (ASC)

Dear Mr. Posner:

On behalf of Tesoro Savage Petroleum Terminal LLC (the Applicant), BergerABAM is providing a response to your letter dated 23 March 2016, wherein you provided EFSEC's consultant's (Golder Associates) additional comments on pre-construction and pre-operation plans submitted by the Applicant in 2015.

Attached please find a series of tables where we have provided a response to each of Golder Associates' comments.

These preliminary plans, and the responses to Golder Associates' review, were based on the Applicant's current understanding of Facility design. The Applicant acknowledges that, as customary to EFSEC practice, the Site Certification Agreement (SCA) will set deadlines for submittal of final plans for EFSEC review prior to beginning of construction and operations. The Applicant will prepare such final plans based on final design documents, commitments made throughout EFSEC's review process, as well as final SCA (and other permit approval) conditions. Those final plans will also include the revisions identified in the attached tables.

Please feel free to contact me at 206/431-2373, or irina.makarow@abam.com, if you have additional questions about this submittal. We look forward to further coordination with you, your staff, and your consultants.

Sincerely,

Irina Makarow
Senior Environmental Project Manager

IM:nb
Attachment

cc w/attach: Kelly Flint, Savage Companies
Jay Derr, Van Ness Feldman
Brent Carson, Van Ness Feldman

Construction Safety and Health Manual (CHSM)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
This plan would be required to be complete prior to the start of construction (pre-construction).		The Applicant agrees with the comment.
In section 1, Subsection 1.2, the Occupational Safety and health Administration (OSHA) 1926 standards should be referenced.		The final plan will reference both WISHA and OSHA standards.
In section 2, subsection 2.2.1, the safety team should be staffed based on crew size.		The final plan will identify that safety teams will be staffed based on crew size.
In section 2, subsection 2.4.2.1, the description is for a Behavior Based safety program but no details are offered.		It is anticipated that each contractor and/or subcontractor will implement their own company safety behavior based program for the construction crew(s) over which they have responsibility. The Applicant's safety management team or facility safety manager will initially review the program for each contractor, check that each contractor is subsequently following the program in practice, and also include each contractor in facility construction safety meetings as well. It is therefore unpractical to describe each and every program. However each contractor will implement at a minimum the elements described in the Applicant's CHSM.
In section 5, subsection 5.4 (d), there is a list of recordkeeping items for general safety programs that should be included in other sections. Section 5 should focus on accident reporting.		Section 5.4 (d) will be deleted from the final CHSM because it is redundant with the contents of the CHSM.
In section 6, subsection 6.4(b), asbestos containing material (ACM) should be correctly defined as >1% asbestos	In section 6, subsection 6.4(b), ACM should be correctly defined as >1% asbestos.	The ACM will be corrected to >1% asbestos.
For sections 11, 12 and 33, good thorough programs. In addition, section 33 is often overlooked in construction safety.		Comment noted.

Construction Safety and Health Manual (CHSM)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Section 16, subsection 16.5, there should be no exceptions for workers to not have safety orientation before working onsite. Also in section 6, attachment 12 does not have all required training listed (i.e., Emergency Procedures)		Section 16 will be updated to reflect that all workers will receive safety orientation prior to working on the site. Attachment 12 is preliminary and will be updated to reflect training that will be required for specific construction occupations at the site. Emergency Procedures training will be added to the list.
Section 23 does not appear to be updated to conform with the latest updates to Hazard Communication published by OSHA.	Section 23 should be updated to conform with the latest updates to Hazard Communication published by OSHA and effective May 25, 2012.	Section 23 will be updated to conform to the latest updates to Hazard Communication published by OSHA and effective May 25, 2012.
Section 34 has a checklist (Attachment 19) that lists OSHA standards but not those of Washington Industrial Safety and Health Act (WISHA).		Section 34 Attachment 19 will be updated to reflect WISHA standards.
In section 45, subsection 45.5, the WISHA requirement for protecting excavation is incorrectly stated to be five feet rather than the correct value of four feet. Attachment 31 also lists five feet rather than the correct depth of four feet to require excavation protection.	In section 45, subsection 45.5, the WISHA requirement for protecting excavations should be correctly stated as 4 feet. Attachment 31 should also be changed to the correct depth of 4 feet to require excavation protection.	Section 45.5 and Attachment 31 will be updated to reflect the correct depth of 4 feet for excavation protection.
In section 47, subsection 47.4, it is stated that fall protection is required at four feet but indicates six feet in the following sentence. The Washington state requirement is four feet except for roofing, scaffold or steel erection work for which the requirement is ten feet.	It should be stated in section 47, subsection 47.4, that fall protection is required at four feet except for roofing, scaffold or steel erection work for which the requirement is ten feet.	Subsection 47.4 will be updated to consistently reflect fall protection at four feet, and 10 feet for roofing, scaffold or steel erection work.
There is no program addressing "Hot Work" (work requiring the use of heat, spark or flame-producing equipment).	A "Hot Work" program should be added to the manual.	A "Hot Work" program will be added to the CHSM.
Typographical/Editorial Table of contents is listed alphabetically for most items except at the start and at a few places near the end. This causes a bit of confusion.		Comment noted. The table of contents will be reviewed and edited as appropriate to reduce the potential for confusion.

Construction Security Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
This plan needs to be complete and implemented (including initial training) prior to the start of construction of the facility.		Comment noted. The Applicant will complete and implement this plan prior to the beginning of construction.
The document pages are not marked with the required Sensitive Security Information protective marking and distribution limitation statement. See 49 CFR 1520.13.	Mark all document pages with the required Sensitive Security Information protective marking and distribution limitation statement.	The Construction Security Plan submitted to EFSEC was a version suitable for public distribution. Prior to submittal of this preliminary plan BergerABAM consulted with EFSEC to determine whether any EFSEC staff had the appropriate MTSA security clearance to receive and review a plan with SSI; Ms. Bumpus indicated that no EFSEC or UTC staff had such clearance. The version submitted to EFSEC was therefore limited only to information which could be disclosed publicly. Therefore marking of the pages of the preliminary plan was unnecessary. The final plan will be submitted to the U.S. Coast Guard in compliance with MTSA requirements and will be marked as to its sensitive nature as required. Prior to beginning of construction the Applicant will coordinate with EFSEC staff to determine if any EFSEC staff have the necessary security clearances to receive the plan.
The document contains no identification of specific assets or asset types. This makes it difficult to conduct a proper threat assessment.	Identify specific assets or asset types requiring security consideration.	The Applicant will prepare a Facility Security Assessment (FSA) in accordance with 33 CFR 105 Subpart C. The FSA will identify assets requiring security consideration.
There is no map showing the entire port facility in relation to the proposed Vancouver Energy facility. Also, the plan refers to the "MTSA-regulated footprint of the Port", but no delineation is made. These are critical data given the references in the plan to the port facility boundaries and security features.	Include a map showing the entire port facility in relation to the proposed Vancouver Energy facility and delineate the "MTSA-regulated footprint of the Port".	The Applicant will prepare a Facility Security Plan (FSP) in accordance with 33 CFR 105 Subpart D. This plan will contain maps and Facility plans commensurate with the activities being conducted to secure the premises, and talking into consideration those

Construction Security Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
		areas of the Port which are MTSA-regulated.
The threat assessment in Section 2 does not explicitly consider terrorism or vandalism. It also mentions that the protest threat has been evaluated, but no information is given as to how the assessment was conducted or why the threat has been deemed to be a "low level of severity".	Explicitly assess terrorism and vandalism threats. Document how the protest threat was assessed.	As required by 33 CFR 105.300(c)(2) the Applicant will include an assessment of threats in its FSA, including those related to terrorism and vandalism.
Section 3.1, Site Security lists proposed enhancements; it is silent regarding their status, implementation timeline, or even likelihood of implementation.	Either remove the mention of proposed security enhancements or include information on status and implementation timeline of each.	As noted above, SSI information cannot be disclosed publicly. Specific information regarding security enhancements is considered SSI. Such information will be documented in the Applicant's FSA and FSP.
Site Security descriptions of the individual areas in Sections 3.2, 3.3, and 3.4 are essentially the same. It is therefore unclear whether each area will be staffed 24/7 by separate security officers, or a single officer will be assigned to all of the areas.	Clarify whether each separate construction area will be staffed 24/7 by separate security officers, or a single officer will be assigned to all of the areas.	The Applicant will determine security staffing requirements based on the assessments prepared in its FSA and its FSP. The Applicant will provide the necessary staffing resources to achieve the planned security posture.
Section 3.8, Monitoring is not specific on what type of monitoring is occurring (e.g., in-person visual, CCTV).	Specify the specific monitoring that will occur at the various locations or assets.	The Applicant will determine security monitoring requirements based on the assessments prepared in its FSA and its FSP. The Applicant will provide the necessary monitoring resources to achieve the planned security posture.
Section 3.9, Incident Procedures and Emergency Response is unclear regarding who is to be called/notified for different security emergencies. The contact list in Appendix C is referenced, but all of the contacts likely do not need to be notified for every kind of security incident from bomb threat to suspicious behavior to active shooter.	Provide guidelines/clarification regarding who is to be called/notified for different security emergencies.	The Applicant will refine and supplement as necessary the call out lists in the event of an emergency; these lists will be coordinated with the Applicant's construction emergency response plan, and will take into consideration coordination activities with Port and public security personnel/agencies.

Construction Security Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
In Section 3.9, Incident Procedures and Emergency Response, there is no actual procedure given for a bomb threat beyond taking information from a caller as described in the Appendix D form.	Provide a procedure given for bomb threat response beyond just information gathering and reporting to law enforcement (e.g., have all personnel leave site and report to emergency muster areas).	The Applicant will include bomb threat procedures beyond taking information from the caller into its final construction Emergency Response Plan.

Construction SPCCP (cSPCCP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
	Add "and Figure 4" to page 7, paragraph 2, and correctly title the two figures to which the text refers.	These corrections will be made in the final plan submitted to EFSEC.
This plan needs to be complete and implemented (including initial training) prior to the start of construction of the facility. This includes the staging of any oil-containing equipment at the facility (e.g. vehicles/machinery, fuel tanks).		The plan will be completed prior to construction. The plan will be implemented prior to and during construction. Implementation will be ongoing as construction activities evolve at the site. All employees will be trained prior to their conducting activities at the site.
Section 4 does not discuss Best Management Practices (BMPs) for oil-filled operational equipment (e.g. portable generators, transformers) or motive power equipment used during construction.	In Section 4, discuss BMPs for oil-filled operational equipment and motive power equipment used during construction.	Section 4 will be revised to address BMPs for oil-filled operational equipment. Material delivery, storage and containment BMPs are also addressed in the cSWPPP (Section 3.1.10.3); BMP C153 of the 2012 Stormwater Management Manual for Western Washington will be implemented throughout the construction site.
Section 4.1 leaves the specification of locations for oil and hazardous materials storage to the site superintendent and the SHE&Q manager. This is reasonable given the changing nature of construction. However, the plan gives no specific guidance for these individuals beyond the requirement to be "away from surface waters and stormwater facilities".	In Section 4.1, provide more specific guidance on oil storage and transfer location selection.	Section 4.1 will be revised to provide more specific guidance on oil storage and transfer location selection. The final cSWPPP will identify areas where construction-related oil storage is not permitted.
Section 4.2.5 provides few specific inspection instructions. No inspection checklist is provided to guide the inspectors.	In Section 4.2.5, include an appropriate inspection checklist or refer to one in another plan (e.g., cSWPPP), which provides the necessary guidance.	An inspection checklist will be developed and provided to inspectors.
Section 5.1 does not mention that recovered material destined for disposal (i.e., waste) needs to be characterized according to applicable RCRA and WAC procedures prior to disposal.	In Section 5.1, include (between steps 6 and 7) the requirement to characterize all wastes according to the applicable RCRA and WAC rules.	The requirement to characterize wastes according to applicable RCRA and WAC rules will be added to Section 5.1.

Construction SPCCP (cSPCCP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Section 5.1 implies that all wastes will be landfilled.		The word "landfill" will be removed from item 7 of Section 5.1. To the extent practicable recyclable materials will be segregated and recycled.
In Section 6, no training documentation form is provided or referenced.	In Section 6, include a training documentation form or refer to one in another plan.	The Applicant will document training of construction workers with respect to the cSPCCP. This documentation may be combined with other documentation forms.
	In Section 6, provide a training frequency and procedure for training new site workers.	The Applicant will train construction employees regarding the content and implementation of the cSPCCP prior to their access to active construction areas of the site. Ongoing training will be provided in association with typical construction safety training practices.
The cSPCCP is not mentioned at all in Section 2.10 of the Application for Site Certification (ASC). WAC 463-60-205 requires a general detail description of this plan in the ASC.	Update Section 2.10 of the ASC with a general detail description of the cSPCCP.	Section 2.10.3.1 has been revised and the preliminary cSPCCP is now appended to the ASC.
Typographical/Editorial In Section 3 (page 7, paragraph 2), "Figure 3" is referenced, but no Figure 3 is included. However, the referenced information appears to be contained in a set of two figures titled "Contaminated Media Locations-1" and "Contaminated Media Locations-2".		Typographical errors will be corrected.

Construction Transportation Management Plan (CTMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
The Construction Transportation Management Plan provides detailed procedures for transportation management during construction of the proposed facility. The plan is generally consistent with the construction transportation mitigations proposed in the Application for Site Certification Agreement (the Application). However, the following items typically addressed in a construction transportation management plan are not included in this plan:		Comment noted.
• Response procedures for a transportation incident (e.g., road collision or spill)	Response procedures for a transportation incident (e.g., road collision or spill) should be addressed in this plan or in the Emergency Response Plan (Section 3.1 of Operations Facility Safety Plan).	Response procedures for any incident at the construction site, whether transportation related or not, will be described in the following documents: CHSP (which includes response to emergency situations), cSPCCP, and cSWPPP. Together, these plans provide response preparedness for transportation related incidents that may occur at the construction site.
• Map of parking areas for trucks and employee vehicles	The Construction Transportation Management Plan should include a section on Parking, to address parking arrangement for trucks and employee vehicles. Parking areas should be denoted on a map (e.g., on Figure 2).	Comment noted. The Applicant will identify and manage construction parking areas based on actual construction drawings and activities. Construction employees and contractors will be trained or notified upon arrival to the site of the location of designated parking areas.
• Access control to prevent unauthorized public access to the construction area	The Construction Transportation Management Plan should address access control to prevent unauthorized public access to the construction area.	Comment noted. Sections 3.5 through 3.8 of the Construction Security Plan addresses various measures the Applicant will implement to secure the construction site(s) from unauthorized access. Implementation of the Construction Security Plan

Construction Transportation Management Plan (CTMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
		and of the CTMP will be coordinated.
Section 1.7.1 Construction Trip Generation. The estimated construction trip generation provided in this section is higher than reported in the Application (Section 4.3.3.5) and the Transportation Impact Analysis (Kittelson & Associates, 2014). This document provides estimated total daily trips and peak hour trips that are 54% and 28% higher, respectively, than corresponding estimates provided in the Application.	Address discrepancy in the estimated construction trip generation between the Construction Transportation Management Plan and the Application. As applicable, address any additional impact to future traffic volume and level of service due to the higher trip generation presented in this Plan.	The Applicant has verified the construction trip generation numbers used in the CTMP and how these compare to data presented elsewhere. The Applicant agrees that the numbers do not correspond to the data that appeared in the February 2014 ASC Supplement. Construction trips were revised upwards when the applicant prepared its PDEIS. The PDEIS (Section 4.15.2.1) and KIttelson's 2014 Transportation Impact Analysis (pages 24 and 25) reflect the numbers presented in the CTMP. Kittelson's 2014 analysis addressed the impact of these traffic volumes. The ASC has been revised to reflect the same data.

Construction Wildlife Monitoring Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Plant and wildlife species listing data is 2013 or older.	Update species lists and address as needed.	Species lists will be updated in the final plan. Any new species added will be addressed.
Appendix A – pg A-9, subsection 3.1.14 Bradshaw's Lomatium refers to smooth goldfields		This inconsistency will be corrected.
Appendix A – pg 10, subsection 3.1.23 Hairy-Stemmed Checkermallow does not include a discussion of potential habitat present at the site or vicinity		The presence of potential habitat will be addressed.
Appendix A – pg 11, subsection 3.1.24 Western Ladies Tresses, second paragraph, includes a contradiction "…has not been documented with the County. However, western ladies-tresses have been identified previously by the Port at Parcel 3."		The inconsistency will be corrected.
This plan is for use during construction activities. It was assumed that Washington Department of Fish and Wildlife (WDFW) consultation was completed and the only recommendations from WDFW were to monitor for noise based on accepted thresholds; no pre-construction wildlife or plant surveys were required.		The reviewer's assumption is correct. The Applicant met with WDFW and EFSEC staff regarding the intent of the plan on May 7, 2015. WDFW's recommendations were to monitor for construction noise.
Section 1.1 lists water quality as a temporary wildlife impact. This is covered in the Water Quality Protection and Monitoring Plan, which is mentioned in section 1.3. It would be clearer to say this plan is only addressing noise-related impacts to wildlife during construction activities as other impacts are addressed in other plans (or not of concern as the habitat in the area is currently of poor quality).		A statement will be added that water quality impacts are addressed in the WQPMP.

Construction Wildlife Monitoring Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Typographical/Editorial Figure 2; title is not consistent with table of contents. Figure 3; title is not consistent with table of contents.		Typographical errors will be corrected.

Contaminated Media Management Plan (CMMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
The Draft CMMP should be released with project contractor RFP bid documents and revisited with the successful bidder and then finalized prior to construction with consideration of contractors comments.		Comment noted, and the Applicant agrees that the CMMP will need to be revised based on final construction drawings and methods.
In discussion of MTCA cleanup levels, consistently identify whether they are in reference to unrestricted or industrial and if they are Method A, B or C. If all cleanup levels are unrestricted Method A, a general statement upfront would be sufficient.		The Applicant requests clarification of this comment. The main body of the CMMP refers to the Port's fill acceptance guidelines presented in Appendix B to the plan; the Port's fill acceptance guidelines are based on comparison to MTCA A clean up levels and EPA RSLs.
Last bullet Section 4 should reference the Construction Health & Safety Plan.		The Construction Health and Safety Plan is identified in Section 1.3, Related Documents. Work will be completed in a manner to comply with all applicable pre-construction plans.
Last Bullet of Section 5 should acknowledge 40 hour HAZWOPER training and current 8-hour refresher. (OSHA 29 CFR 1910.120)		The last bullet of the introduction to Section 5 as a whole addresses Hazwoper training requirements, however it will be revised to include reference to the OSHA regulation and will mention that employees will have to be up-to-date with refreshers.
	Section 5.1 bullets should differentiate between above CAP “clean” stockpiled soil and below CAP “contaminated” stockpiled soil handling/sampling requirements.	The bullets in Section 5.1 will be revised to further clarify the difference between "clean soils" located above caps, and "contaminated" soils located below caps.
	Section 5.2 should include bullet to address restricting migration of impacted groundwater e.g. placing bentonite dikes in utility trench to mitigate migration or cross-contamination issues	The Applicant will review its design to consider the installation of trench dams (made of clay) for trenches excavated in the immediate vicinity of the Vanexco cap.

Contaminated Media Management Plan (CMMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Section 5.3, add a bullet for use of a photoionization detector survey for VOCs.		The Applicant requests clarification of this comment. Section 5.3 describes the general procedure for responding to a situation when materials suspected to be contaminated are found outside of "unrestricted" areas. If suspect materials are found, the nature and extent of the contamination will be evaluated, which may include the use of photoionization detector.
	Table 1 indicates there are deed restrictions associated with specific areas; identify the relevant deed restrictions or conditions in the table or elsewhere in the document.	The deed restrictions and environmental restrictive covenants have been described in detail in the Application for Site Certification (see Section 4.1.3). The restrictions define the types of permanent activities which can take place at these locations, whether groundwater wells can be established, and requirements for notice to Ecology if remedial actions are impacted by construction activities. The Applicant has committed to comply with the provisions as they apply to Facility construction and operation. The CMMP is the result of this commitment and provides an action plan to implement proper measures to conduct construction activities in accordance with the restrictions. Adding the restrictions to the CMMP will not provide additional detail as to how activities will be conducted.

Contaminated Media Management Plan (CMMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Appendix A – Depending on the location of contaminated soil management areas addressed in Section 5.2 DWG # 0100-DC-002 and 003, Contaminated Media Locations 1 & 2, General Note 6 appears to be in disagreement with Section 5.2 2nd bullet on handling contaminated or suspect soils.		The Applicant seeks clarification of this comment. It could be the reviewer is referring to the second bullet of section 5.1. With regards to excavation of soils in areas of concern and their stockpiling (or direct placement into trucks), the Applicant will correct drawings and text as necessary to reflect actual work methods at specific locations in the final version of the plan.
Appendix B - Attachments to Appendix B are not included with the text.		The Attachments to Appendix B will be included in the final plan.
Typographical/Editorial Page numbers are missing from document. Tense of document is not consistent Figures – Change colors on figures and in legend. Some of the hues in the color scheme are too similar and may become indistinguishable with copying.		Typographical errors will be corrected, and figure colors will be selected to provide clear instruction in the field.

Cultural Resources Inadvertent Discovery Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
The cultural resources inadvertent discovery plan (CRIDP) describes the procedures to be implemented in the event of the discovery of previously unidentified archaeological resources during construction of the Facility, and in the event ground disturbing activities are required in response to an emergency event during operations. The CRIDP also describes procedures to be implemented in the event of the discovery of human remains (Section 1.1).		Comment noted.
The CRIDP also states that under normal operation activities at the Facility, ground disturbing activities will not be conducted. Therefore, cultural resources monitoring will not be conducted (Section 6).		Comment noted.
Mentions regulatory requirements as per the Washington State Department of Archaeology and Historic Preservation (DAHP), and potentially affected Native American Tribes.		Comment noted.
CRIDP does not include training to be provided to Facility personnel by cultural representatives explaining on what to look for during any inadvertent ground disturbing incident.	Provide training to construction and operations personnel in regards to what might be accidently discovered by ground disturbing incidents, and tasks that need to be followed to insure proper and respectful cultural patronage aspect to any cultural finding.	The Applicant will provide training to construction and operations personnel in regards to potential archeological resources which may be discovered during the course of ground disturbance at the Facility site, and how such finds must be reported and protected pending further investigation by trained archeologists.

Marine Mammal Monitoring Plan (MMMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Proponent will likely need an incidental take authorization from the National Marine Fisheries Service. http://www.nmfs.noaa.gov/pr/permits/incidental/		The Applicant has submitted an application to the USACE for federal approval of the proposed in-water work. The USACE has initiated Section 7 ESA Consultation with the Services and the Corps will review the project under the Marine Mammal Protection Act. The Applicant has proposed mitigation measures (specifically stopping in-water work if marine mammals are present) to avoid impacts to marine mammals, and therefore believes an incidental take permit is not required.
Species not consistent between ASC Supplement Appendix A and the MMMP. • Steller sea lions listed in MMMP and not in Appendix A; they are Federal Species of Concern. • Appendix A does not list harbor seals as State monitored species. • No porpoises (Dall's or harbor) listed in Appendix A.		Inconsistencies will be corrected in the final plan.
Typographical/Editorial Figure 2; title inconsistent with table of contents Figure 3; title inconsistent with table of contents		Typographical errors will be corrected.
	Monitoring should occur after work has ceased, typically for 30 minutes, to look for injured or distressed animals.	The plan will be revised to include monitoring for 30 minutes after work has ceased.
	Clarify that only pinnepeds would be present near enough to the project area to be covered by the MMMP (ASC Supplement Appendix A covers species indirectly affected, which may include cetaceans).	A footnote to Section 1.2 identifies that cetaceans are not likely to be present near the project site.

Marine Mammal Monitoring Plan (MMMP)		
Golder Comment	**Golder Recommendation**	**Applicant Response**
	There is a list of tasks on page 3 that may be loud enough to warrant marine mammal observations. Page 9 states a work stop will only occur if animals sited during pile driving. The MMMP should specify all activities that warrant marine mammal observations and stop work.	The bulleted list in Section 1.1 of plan (page 3) describes the activities during which marine mammal monitoring will be conducted. The statement on page 9 will be updated to reflect monitoring will occur during the activities described in Section 1.1, and not just pile driving.
	List methods for how to communicate stop work if marine mammals are spotted. These typically include radios, cellular phones, and flags.	The methods used to stop work will be listed in the plan.
	A time limit should be noted for how long stop work will occur if marine mammals are spotted.	A process to establish the duration of the stop work will be identified in the plan.
	Include both upstream and downstream observers during monitoring activities.	Upstream and downstream observers will be included in the plan.

Appendix G NPDES Engineering Report		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 7.2.2.4 of NPDES Permit Engineering Report highlights design basis of as 25 year flow.		Comment noted.
Section 2.2.2 of Oil Facility Oil Handling Manual indicates ratable processing of stormwater from the tank basin from a 100 year storm event.		Comment noted.
Section 2.2.3 of Oil Facility Oil Handling Manual indicates a requirement to receive potentially contaminated stormwater from marine terminal.		Comment noted.
There is not a clear connection of processing requirements to the sizing basis for the separator (indicated in calculation as 880 gpm).	Link sizing basis to model used to estimate 25-year storm flow into the oil-water separator.	Basis of Design sizing will be detailed in Section 7.2.2.1 of a revised Engineering Report.

Operations Facility Oil Handling Manual		
Golder Comment	**Golder Recommendation**	**How to Address**
	At a future point in engineering for the project, the sizing of water treatment facilities should consider the emergency (firefighting) conditions.	Waste water generated during emergency response to a fire is specifically exempt from regulation. See Section S5.D2.a-b of Ecology's Industrial Stormwater General Permit[1]: *"2. Conditionally authorized non-stormwater discharges include:* *a. Discharges from firefighting activities."* The applicant will confirm that the downstream stormwater system is capable of conveying water resulting from firefighting activities.
Section 2.2.1 – not clear if rail cars will be drained under inert gas blanket (into rail cars as they are drained).		Rail cars will not be drained under inert gas blanket. Section 2.3.3.1 of the ASC describes the means by which exposure of crude oil to the atmosphere will be avoided.
Section 2.2.2 – the management of sweet and sour (H2S containing) crudes – segregation, tank labelling, change management, etc. – is not delineated.	A general procedure for management, labelling, tracking sour crudes within the facility should be outlined – particularly if the storage tanks are to be multi-purpose tanks.	The Applicant will develop and implement procedures to manage crude quality based on client specifications. The Applicant will track the quality of crude oils stored in each Area 300 tank so that if a release were to occur the type of crude oil released can be quickly identified. Oil handling operations will not differ based on crude oil sulfur content.
Section 2.2.2 – stormwater from the oil storage tank area (300) flows through oil-water separator regardless of contamination (positive observation).		Comment noted.

[1] Available at: http://www.ecy.wa.gov/programs/wq/stormwater/industrial/ISGPFinal2015.pdf

Operations Facility Oil Handling Manual		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 2.2.3 – possibly contaminated stormwater from the marine terminal also delivered to the oil-water separator. Review of oil-water separator calculations did not provide a clear statement of sizing basis (i.e., listing of all sources and required processing rate) – see review of oil-water separator calculations.		The Applicant will address sizing and basis of design during revision of the NPDES Engineering Report.
Section 2.2.4 – the extent of pipeline leak detection systems and connection to emergency shutdown is not defined.		The design philosophy for pipeline leak detection has been explained in the ASC at Section 2.10.2.4. The Operations Oil Facility Handling Manual can include this information.
Section 6.0 – there is no discussion of standby barge and duties in ship loading responsibilities matrix		Barges will not be on "standby" during vessel loading . "Barges" as used in this section refers to articulated tug barges which will be loaded at the terminal.
Section 7.0 – initial actions in spill event does not include evaluation of removal of rail cars (if spill is in unloading shed) and/or unberthing barge/tanker if at marine terminal to mitigate risk in case of fire		Comment noted. As written, and in the experience of the Applicant, emphasis is placed on the elements noted in the bullet list of Section 7.0. The response to any spill event is addressed on a case by case basis. If a spill occurs to water the Applicant also implements the OSCP.
Section 12.0 – sizing case for fire water/fire suppression not identified with respect to site water management, treatment, release – for example, could impact size of oil-water separator noted above.		As noted above, waste water generated during emergency response to a fire is specifically exempt from regulation. The Applicant will confirm adequate capacity in the downstream stormwater system.

Operations Facility Oil Handling Manual		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 21.0 – terminal staff are typically trained to perform specific roles in emergency response events (fire, spill, etc.). Familiarity with plans is highlighted but not specific emergency response training. Training forms and record of spill response drills are included in Appendix G. Note that this training requirement was not seen in Oil Spill Contingency Plan.		The OSCP addresses training in Appendix A - Training and Exercises. The Applicant will also develop and implement an emergency response plan as specified in Section 3.1 of the Operations Facility Safety Program, with training being addressed at Section 4.3 of the emergency response plan.
Rail car movement and sequencing for unloading was not covered by this plan – a review of other documents did not indicate a general procedure for this activity.	A basic rail car management plan should be identified including identifying possible concurrent activities such as car movement while pumping or connecting parallel rail cars. There are potentially three parallel operations within the rail car unloading facility.	Trains will be managed on-site in accordance with a Rail Ops Safety and Maintenance Plan, provided as Section 2.0 to the Operations Facility Safety Program.
The management of barge/ship berthing and unberthing is not discussed in this document including notifications, standby tugs, etc. Pre-booming operations are covered in Appendix K and Appendix M; and unsafe weather for terminal operations is covered in Appendix L. However, the overall general procedures are not defined.	The general procedure for bringing barges/ships into the berth, standby requirements during loading, and unberthing should be defined.	The general procedures have been described in Section 2.3.7.1. Actual operating procedures will be developed based on final Facility design.
Management of suitability for service including drug/alcohol testing for terminal staff is not covered in this plan.		The final plan will include a section addressing the facility's alcohol and drug use awareness and treatment program for all facility personnel as required by WAC 173-180-630 (10).
Safety data sheets (SDSs) were only submitted for crude oil – not diesel fuel (fire water pumps), fire suppression (foam) and other chemicals commonly managed at a terminal site – probably okay for this stage of development.		The Facility will maintain a complete set of SDS on site for all hazardous materials maintained at the site. These will be appended to the final plan.

Operations Oil Spill Contingency Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Section 3 Notification Procedures do not include making notification to any other facilities in the vicinity of or among the sections of the Vancouver Energy facility.	Include making notification to other facilities in the vicinity of or among the sections of the Vancouver Energy facility in Section 3. In particular, notification to the Clark County Jail should be made due to the large concentration of people there.	In the event of a release, the Applicant will also execute the Emergency Response Plan (section 3.1 of the Operations Safety Program). As part of this execution, and depending on the size, location and conditions of release, the Applicant will effectuate notifications to other Facility operations and adjacent Port tenants or private land owners, as indicated in the Stakeholder/Neighboring Facility Contact List.
Section 6.4.1 states that the Rainier, Oregon drinking water intake would not be threatened. However, no reasoning is given for this determination.	Provide a rationale in Section 6.4.1 as to why the Rainier, Oregon drinking water intake would not be threatened.	The Applicant will document a rationale regarding the vulnerability of the Rainier, Oregon drinking water intake.
Section 6.4.6 states that utilities are not expected to be affected by a spill. However, given the nature of the material most likely to spill (crude oil), ignition of the spill may be a significant risk. A fire could likely impact elevated power lines above the area of the spill.	Include the fire risk to utilities in Section 6.4.6.	The OSCP is intended to address responses to spills reaching surface water, and in the case of Vancouver Energy the Columbia River specifically. Each spill situation will engender specific response activities. The reviewer has incorrectly concluded that a fire "could likely impact" elevated power lines. The reviewer has not taken into consideration the relative location of overhead power lines[2].the flammability characteristics of crude oil, the secondary containment measures proposed, and spill response measures which would be implemented[3].

[2] The United States Coast Pilot 7, 2016 (48th) edition) published by U.S. Department of Commerce, National Oceanic and Atmospheric Administration, identifies three power cables strung over the main Columbia Navigational Channel in the vicinity of, or downstream from, the Facility at the following locations: downstream at River Mile (RM) 62.4 (Lord Island); downstream at RM 39.9 (Puget Island); and upstream at RM 104.2 (Hayden island). The clearance of each of these cables above the Columbia River is greater than 200 feet. Overhead power cables are also present at Westport Slough, Coal Creek Slough and Cathlamet Bay, but these do not cross the main navigation channel; their clearance ranges from 30 to 75 feet.
http://www.nauticalcharts.noaa.gov/nsd/coastpilot/files/cp7/CPB7_E48_20160513_1812_WEB.pdf

[3] 1) spill response measures will be implemented in accordance with the OSCP to contain the spill and prevent its migration beyond the vicinity of the Facility, and additional response would be implemented if migration beyond the immediate vicinity occurred;

Operations Oil Spill Contingency Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
		The probability of a spill to the Columbia river during vessel loading operations has been assessed by the Applicant (Appendix P1 to the ASC); the smallest spills which are the most likely, are themselves unlikely to cause a situation endangering elevated power lines downriver from the Facility. The probability of a large spill is remote to start with, and events leading up to a fire causing damage to elevated power lines even more so.
Fire risk is not discussed with any detail. The facility lists Bakken Crude as a possible type of crude oil stored at the facility; Bakken Crude typically has an unusually high vapor pressure for crude oil, which can contribute to a higher than expected fire risk (i.e., lower flash point).	Discuss fire risk factors in greater detail. Mention the potential for higher than usual flammability material to be spilled. Discuss ignition sources normally at the facility and those potentially introduced to the area during a spill response. Discuss safety and mitigation measures.	Please refer to Section 4.1.2.2. The reviewer has incorrectly characterized Bakken crude oil fire risk. While many have expressed concerns about the purported volatility of Bakken crude oil, repeated testing and study have confirmed it is appropriately classified as a class 3 flammable liquid. That classification includes assessment of the flammability of the material. Thus, the reviewer incorrectly assumes a "higher than expected fire risk" than is expected for and within the range of Class 3 flammable liquids (which includes light crude oils) as per the federal HMR and upon which the facility is designed. The Applicant has addressed the risks of fire at the Facility in the May 2016 Revised ASC, including those resulting from an unintended release of crude oil. Each spill situation will engender specific response activities. Spill response

2) if the spill were to migrate beyond the immediate marine terminal location this would occur in the direction of the prevailing river current (i.e. downstream) and thus could not impact the transmission line spanning Hayden Island;
3) spilled materials would have to be present in such concentrations that they could be ignitable, which is unlikely given that the crude oil will weather and volatiles would disperse if the spilled crude oil would travel such a distance to any of the downriver locations where overhead lines are present;
4) an ignition source would have to be present to ignite the spill;
5) the ignited fire would have to occur immediately under the elevated power lines; and
6) the fire would have to be of an intensity to damage the lines located 50 to >200 feet above the surface of the river.

Operations Oil Spill Contingency Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
		measures will consider and prepare for the risk of ignition of a spill.
The lighting discussion in Section 7.2 Site Security Measures does not address lighting for the offsite portion of a spill response effort.	Address lighting for the offsite portion of a spill response effort in Section 7.2.	The off-site portion of a spill response effort would be conducted by third party responders contracted to the Applicant. These are described in Sections 7.1.3 to 7.1.8 of the plan. Each of these would provide the necessary lighting to conduct response activities safely in accordance with WISHA/OSHA requirements. This level of detail is addressed in spill exercises and drills.
Section 7.2 Site Security Measures does not mention the Clark County Jail located between the rail unloading area and the dock area.	Mention in Section 7.2, the Clark County Jail located between the rail unloading area and the dock area.	As noted in Section 7.2 in the event of a spill the plan intends that security personnel develop a site security plan. This plan would address public safety as a priority and plan for appropriate measures for protecting any persons in the vicinity of the response activities, including the workers and residents of the Jail work center. The Jail work center, just like other adjacent port tenant operations, will be identified in the site security plan.
Section 7.2 Site Security Measures and Section 7.4 Decontamination refer to the standard “hot”, “warm”, and “cold” zones as “safety”, “dirty”, and “clean”. This could cause confusion with first responder personnel.	Refer to the response zones using standard incident management terms of “hot”, “warm”, and “cold”.	The Applicant will review the use of the terms and will use those appropriate to the text as intended.
The Risk Matrix Checklist in Appendix D does not appear to be complete. For example, the spill potential and response sections are not filled out for all answers indicating a risk exists.	Complete the Risk Matrix Checklist in Appendix D for all identified risks.	The risk matrix checklist will be updated based on final Facility design so that all hazards have been identified.

Operations Oil Spill Contingency Plan		
Golder Comment	**Golder Recommendation**	**Applicant Response**
Section D.2.4 mentions that it would take 60 seconds from discovery of a spill at the dock area to pumping cessation. Section D.3.6 states that the volume spilled would be less than 100 barrels. No supporting calculation is given.	In Section D.3.6, provide supporting calculations for the estimate of maximum volume spilled of 100 barrels.	The estimate is based on the Applicant's knowledge of oil transfer operations, and reflects historical industry data (see Appendix P3 to the May 2016 ASC).
Appendix G contains inspection checklists for oil containing equipment as well as response equipment. The former should appropriately be in the Operational Spill Prevention, Control, and Countermeasures Plan (oSPCCP).	Include the Appendix G inspection checklists in the Operational Spill Prevention, Control, and Countermeasures Plan (oSPCCP). Note that the same checklists can appear in both the OSCP and the oSPCCP if the facility desires to use a single inspection form for both preventative and response items/equipment.	It is the Applicant's practice to include oil containing equipment in inspection checklists in the OSCP. The Applicant will harmonize all inspection checklists in plans based on final facility design, equipment selection, and operations, maintenance and inspection procedures.

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
This plan is required prior to start-up but lacks specifics in some sections due to uncertainty of final facility layout. Additional procedures should be provided prior to the start of operations stage of the proposed facility.		The Applicant agrees that at this preliminary stage many of the procedures presented in the plan are likely to be revised and refined based on the final design of the Facility. Prior to beginning operations the Applicant will prepare and implement a final OFSP.
Overall the program has very specific and detailed elements for some aspects of an operating facility safety program, but lacks elements that are found in a complete Construction Safety and Health Manual. Examples of missing elements include: • Hearing conservation • Personal protective equipment • Fall protection • Blood borne pathogens • Working over or near water	Examples of missing program elements that need to be added include: • Electrical safety • Heat and cold exposure • Job hazard analysis (JHA) • Hazard communication • Medical monitoring and substance abuse • Education and training • Incident investigation • Hearing conservation • Personal protective equipment • Respiratory protection • Fall protection • Blood borne pathogens • Working over or near water • Confined Space	These program elements, required by OSHA/WISHA, and typical of operation of an industrial facility, will be developed and added to the final OFSP.
The following sections are thorough and detailed and appropriate for this stage of siting: • 4. Distributed Power Training • 5. Locomotive Daily Inspection • 6. Cardinal Rule Training • 11. Rail Bulletins • 13.5 Report of Satisfactory Initial Terminal Air Brake Test		Comment noted.
On Section 3.1 Emergency Response Plan: • While medical emergencies are addressed, the plan does not address medical surveillance to employees according to WAC296-824.	Section 3.1 Emergency Response Plan should include or reference policy and procedures to provide medical surveillance to employees according to WAC296-824.	Medical Surveillance of employees in accordance with WAC 296-824 will be added to the OFSP.

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
• It is unclear whether there would be employees who remain to operate critical operations during an evacuation. It does not include procedures for employees who remain to operate critical operations during an evacuation, in accordance to WAC 296-24-567.	If applicable, Section 3.1 Emergency Response Plan should include procedures for employees who remain to operate critical operations during an evacuation, in accordance to WAC 296-24-567.	The Emergency Response section will be updated to include procedures for employees who remain to operate critical operations during an evacuation, in accordance with WAC 296-24-567.
Subsection 1.4 Regulatory Mandate is missing a reference to WAC 296-24-567.	Section 3.1 subsection 1.4 Regulatory Mandate should reference WAC 296-24-567.	Section 3.1 will be updated to reference WAC 296-24-567.
It is unclear whether there would be a sufficient Initial Response Team to respond to potential emergencies and direct evacuation if needed.	Section 3.1 subsection 1.11 Incident Command Structure and Personnel should specify minimum number of employees to be trained for the Initial Response Team.	Section 3.1 will be updated to specify the minimum number of employees to be trained for the Initial Response Team.
Subsection 2 Emergency Procedures provide detailed procedures for most types of emergencies that could occur at the facility during operations. However, the emergency procedures are incomplete. Example of potential emergencies not addressed include: • Fatality • Pipeline leak or rupture • Storage tank leak or rupture • Boiler incident • Other equipment failure that could result in environmental release or personnel injury • Area risks from outside the facility (e.g., river traffic incident near marine facility)	Section 3.1 subsection 2 Emergency Procedures should address other potential emergencies. It should provide, by inclusion or reference to related documents, response procedures for: o Fatality o Pipeline leak or rupture o Storage tank leak or rupture o Boiler incident o Other equipment failure that could result in environmental release or personnel injury o Area risks from outside the facility (e.g., river traffic incident near marine facility)	Section 3.1 will be revised to include or reference related documents regarding response procedures for: o Fatality o Pipeline leak or rupture o Storage tank leak or rupture o Boiler incident o Other equipment failure that could result in environmental release or personnel injury o Area risks from outside the facility (e.g., river traffic incident near marine facility)

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
Section 3.1 subsection 4.3 Training appropriately requires that emergency response training is conducted initially with refresher training annually. However, it does not require that employees receive training or notification, as appropriate, when changes are made to the Emergency Response Plan and/or related procedures.	Section 3.1 subsection 4.3 Training should require that employees receive training or notification, as appropriate, when changes are made to the Emergency Response Plan and/or related procedures.	Section 3.1 will be updated to reflect that employees will receive training or notification, as appropriate, when changes are made to the Emergency Response Plan and/or related procedures.
On Section 8 Procedures: The plan provides detailed procedures for a number of activities. However, other activities are not addressed, including but not limited to: • Grade crossing • Crude oil transfer to vessel • Waterfront operations • Inspection and maintenance (see below)	Section 8 should provide procedures for other activities are not addressed, including but not limited to: • Grade crossing • Crude oil transfer to vessel • Waterfront operations • Inspection and maintenance, including applicable API and other standards and inspection and maintenance procedures for: – Grounding system – Fail-safe control valves – Emergency shutdown equipment – Storage tanks – Aboveground pipeline	Section 8 will either include or refer to these procedures, many of which are included in other planning documents such as the oil spill contingency plan, the Operations Facility Oil Handling Manual, or actual operational/ maintenance procedures.
It is unclear whether emergency vehicle access could be affected post-construction, during the operations stage of the proposed facility; e.g., due to blockage of grade crossings during train drop-off/pick-up.	Access for emergency vehicles during operation should be provided. This should include, as applicable, access for emergency vehicles during blockage of grade crossing(s) due to train drop-off or pick-up.	Emergency vehicle access will be included in the plan in consultation with local emergency services providers. The access provisions will consider the various scenarios of indexed train positions relative to grade crossings allowing access to the Facility site.

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
The plan does not include or reference equipment safety inspection and maintenance procedures according to applicable API and other standards and to assure equipment is in working condition in case of an emergency. These include, but not limited to, inspection and maintenance procedures for: • Grounding system • Fail-safe control valves • Emergency shutdown equipment • Storage tanks • Aboveground pipeline	[see above]	As noted above, operations, inspection and maintenance procedures will be developed for all equipment on-site in accordance with industry standards and regulatory requirements. These procedures can be referenced in the OFSP.
Subsection 8.2: The Tank Car Inbound Inspection does not include or reference procedures to assure that the correct product and grade are received, e.g., through review of manifest and/or other tracking information.	Section 8, subsection 8.2. The Tank Car Inbound Inspection should include or reference procedures to assure that the correct product and grade are received, e.g., through review of manifest and/or other tracking information.	Section 8 will reference procedures for review of manifest and/or other tracking information for logging receipt of incoming unit trains.
Subsection 8.4: There appears to be a typo in the titles and numbering of procedures on pages 1 and 2 of subsection 8.4. The Working around Tracks and Working around Rail Equipment procedures were assigned the same number and title "02 Working around Tracks."		Typographical errors will be corrected.
Subsection 8.5 Hot Work Permit: There are references to chlorine gas and sulfuric acid lines that may be listed in error (section 2.4 of subdocument) and also specific plant areas in section 2.8 of the subdocument appear to be from another facility.		The plan will be revised to omit references to chlorine gas and sulfuric acid lines as they are not applicable to the Facility.

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
Subsection 8.6 Hydrogen Sulfide Detection: Utilizes terms that indicate that the information is very preliminary and describes what is necessary for a program but not what is necessary for this site.	The Hydrogen Sulfide Detection program should be made specific to the facility. The following changes should be addressed: • Locations of fixed H2S monitors • Listing of areas and job titles that require personal H2S monitoring • All use of "should" needs to be replaced with "will" to indicate program requirements and not development of a future program.	The locations of fixed H2S monitors and the use of personal H2S monitors has been described in Section 4.1.4 of the ASC, and are described in additional detail in Appendix N.1 Fire Protection Basis of Design.
Subsection 8.7 Genie Lift Z45/25 Aerial Lift Certification is a very detailed, thorough program.		Comment noted.
Subsection 8.8: While other procedures are under responsibility of Operations Manager and/or Safety Director, the Train Air Brake Tests and Inspection procedures are the responsibility of Quality Supervisor and Logistics Director. These positions do not seem to appear elsewhere in the Operational Safety Program.	Section 8, subsection 8.8. While other procedures are under responsibility of Operations Manager and/or Safety Director, the Train Air Brake Tests and Inspection procedures are the responsibility of Quality Supervisor and Logistics Director. These positions do not seem to appear elsewhere in the Operational Safety Program. Confirm these are correct titles.	The titles of persons responsible for addressing safety across various areas of the Facility will be verified and corrected as necessary.
In section 13, subsection 13.3 Confined Space Work Permit, there are several suggested changes. • The percentage LEL for Confined Space entry and for Hot Work should be the same. These programs currently reflect 10% and 0% LEL for Confined Space and Hot Work, respectively. • Hydrogen Sulfide threshold is listed as 15% (15,000 ppm) and should be changed to 10 ppm. H2S is listed with the units of percentage (%) and should be parts per million (PPM).	In section 13, subsection 13.3, Confined Space Work Permit, the following should be changed. • Change the requirements for LEL to 0% for both the Confined Space and Hot Work programs. • Hydrogen Sulfide threshold is listed as 15% (15,000 ppm) and should be changed to 10 ppm. H2S should be listed with the units of parts per million (PPM) and not LEL. – Review the form and eliminate or reword questions that may result in a "no" response but result in acceptable conditions. See below. "Natural ventilation	Section 13.3 will be reviewed and revised to be consistent with the final Fire Safety Program basis of design, based on the final designs for the Facility.

Operations Facility Safety Program (OFSP)		
Golder Comment	**Golder Recommendation**	**Applicant's Response**
	only" could be answered "no" as an acceptable condition.	
"No" is an acceptable answer for some portions of the form but no work is allowed when a "no" response is selected.	"Mechanical" could be answered ""no" as an acceptable condition.	Comment noted.
In section 15 Lockout/Tagout Procedure, subsection 15.6, items 1 and 2 describe a program for compressed air that appears to be out of place and from another program. Nonetheless this is generally a very detailed and thorough program.		Comment noted.
Section 16 Fire Protection Plan does not meet requirements for Fire Prevention Plan according to WAC 296-24-567.	A Fire Prevention Plan should be developed in Section 16 that includes, but is not limited to, the following: • Identification of specific fire hazards, • Responsibilities for fire prevention, and • Housekeeping procedures in accordance to WAC 296-24-567. • Hot Work Policy is addressed in Section 8; however the Fire Prevention Plan should also identify and describe control of any other ignition sources in all Areas.	Section 16 will be revised to include a Fire Prevention Plan.
Typographical/Editorial In section 1, subsection 1.4.2 HSSE Organization, there is a typo. In the first line, "to and" ("to" should be deleted).		Typographic errors will be corrected.

Operations SPCCP (oSPCCP)		
Golder Comment	**Golder Recommendation**	**How to Address**
This plan needs to be complete and implemented (including training) prior to the introduction of product (crude oil) into the facility.		Comment noted and the Applicant agrees.
Section 2.1.1 (Area 200) does not mention the 500 gallon diesel tank for the fire pump. Based on information elsewhere in the document, there is indeed such a tank in this area.	Include the 500 gallon diesel tank for the fire pump in Section 2.1.1 (Area 200).	Secondary containment for each of the regulated storage containers is described in Table B-1a. However the Applicant will also identify secondary containment for these containers in Section 2.1.1.
Several places state that secondary containment for the six crude oil tanks is sized for 110% of the largest tank capacity and the rainfall from a 100 year rain event. Washington state regulations generally mention only the 110% capacity, and good engineering practice is either 110% or sufficient freeboard to contain precipitation. Calculated secondary containment capacity is actually larger than required in any case.	Update the secondary containment sizing for the six crude oil tanks. Include the 100-year, 24-hour rain event and demonstrate that this is greater than 110% of the volume of the largest tank.	The reviewer is correct that the calculated secondary containment capacity is actually larger than required by regulation. This is intentional in the Applicant's design.
Where the 500 gallon diesel storage tanks are mentioned, no discussion of secondary containment is given.	Discuss secondary containment for the 500 gallon diesel storage tanks (i.e. double wall).	Secondary containment for each of the regulated storage containers is described in Table B-1a. However the Applicant will also identify secondary containment for these containers in Section 2.1.1.
	Correct the second paragraph of Section 2.1.2 so that the maximum volume of crude oil stored in each tank is 360,000 bbls.	The second paragraph will be corrected.
Section 2.1.3 states that crude oil is transferred to vessels at Berth 13. In Section 2.1, it states that the transfers occur at Berths 13 and 14.	Make the oil transfer to vessel areas described in Section 2.1 and Section 2.1.3 correspond.	The inconsistency will be corrected.

Operations SPCCP (oSPCCP)		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 2.1.5 does not mention the presence of boiler treatment and/or wastewater treatment chemicals and whether they qualify as oils. Such materials are identified on the plot plans in Appendix A, however.	In Section 2.1.5, mention the presence of boiler treatment and/or wastewater treatment chemicals and whether they qualify as oils. Also include these in Table B-1b.	The storage area includes six double-bottom, internal floating-roof ASTs for storing crude oil. The tanks are approximately 50 feet in height and 240 feet in diameter. Each tank has a capacity to store 380,000 bbl of crude oil; the maximum volume of oil to be stored is 380,000 bbl.
Section 2.1.6 identifies areas where railcars containing crude oil may be staged or stored. No spill containment provisions are described.	In Section 2.1.6, discuss spill containment provisions for areas where railcars containing crude oil may be staged or stored.	Spill containment provisions are not proposed for the rail loops where the trains will be staged prior to indexing into Area 200.
Section 2.2.3 does not address boiler treatment and/or wastewater treatment chemicals.	Address boiler treatment and/or wastewater treatment chemicals in Section 2.2.3.	Boiler water treatment chemicals are not oil based and are therefore not subject to federal and state SPCCP regulations. They have however been included in the oSWPPP.
Section 2.2 does not mention any oil-filled equipment (e.g. transformers, portable generators, portable light plants).	Mention oil-filled equipment (e.g. transformers, portable generators, portable light plants) in Section 2.2.	Transformers are considered "other storage containers" described in Section 2.2.2 and are identified in Table B-1b. Nevertheless they will be mentioned in Section 2.2.2.
The first mention of the presence of oil-filled transformers is in Section 2.3.		Comment noted.
Section 3.2 states that new employees will be trained within one week of start of employment. It is unclear whether employees would be allowed to conduct oil handling operations before they receive this training.	Clarify that that new employees will not be allowed to conduct oil handling operations before they receive the required oSPCCP training.	The plan will be revised to specify that new employees will not be allowed to conduct oil handling operations prior to completing oSPCCP training, provided that hands on experience in the presence of trained personnel will be permitted.
Section 3.4 contains the company's drug and alcohol program. This should be kept as a separate document and referenced in the oSPCCP.	Remove the company's drug and alcohol program description and reference it only.	The level of detail included in the plan is intended to fully address the requirements of 173-180-630 (10) (see Appendix C.1).

Operations SPCCP (oSPCCP)		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 4 (Maintenance, Testing, and Inspections) lacks critical detail. In general, where gauging or instrument readings are recorded and/or compared against other values, no action levels are given. There is little description of what conditions to look for when conducting specific inspections, even in the case of the SPCC monthly Equipment Inspection Checklist (Table B-5). There is also no description of how identified problems will be reported, tracked, and corrected. The lack of these details will make training of testing and inspection personnel difficult.	Expand Section 4 (Maintenance, Testing, and Inspections) to describe action levels for gauging or instrument readings, describe what conditions to look for when conducting specific inspections, and describe of how identified problems will be reported, tracked, and corrected.	Maintenance, testing and inspection activities will be fully documented based on final Facility equipment selection, design, and operating procedures. These procedures will be available for inspection by EFSEC and EPA to determine compliance with applicable state and federal oil pollution prevention regulations.
Section 5.1.5 mentions monitoring of double-walled diesel storage tanks and transformers, but is not specific on how such monitoring is to be conducted.	Specify how monitoring of double-walled diesel storage tanks and transformers is to be conducted.	Monitoring of this equipment will be developed and documented based on final equipment selection, design, and operation and maintenance requirements.
Section 5.2.4 does not describe procedures for ensuring that the spill holding tanks are emptied in a timely manner and so continue to provide sufficient spill holding capacity.	Describe procedures for ensuring that the spill holding tanks are emptied in a timely manner.	The total containment capacity of these tanks has been designed to provide sufficient capacity for daily discharges of oily water and unanticipated releases from the rail car unloading area. The Applicant will develop and implement procedures for emptying the Area 200 containment tanks so as to provide sufficient spill holding capacity.
Section 5.3.1 mentions both electric heating and steam heating for the crude oil storage tanks.	Determine what type of heating will be used for the heated crude oil storage tanks and correct Section 5.3.1.	The text in this Section will be corrected to reflect that only electric heating will be used.
Section 5.3.2 states that the containment berm is 6' in height. Table B-2 indicates a berm height of 5', and the containment berm elevation drawing, Figure 4, seems to indicate 5' also, however the resolution on the drawing poor.	Determine the actual height of the crude oil storage berm and correct throughout the document.	The actual height of the crude oil berm will be identified once the final design of the berm has been completed.

Operations SPCCP (oSPCCP)		
Golder Comment	**Golder Recommendation**	**How to Address**
Section 5.4 does not mention any construction features for checking the interstitial space of the double-walled tanks.		Construction features for checking interstitial space of the double walled tanks will not be measurable once the Facility is in operation. Interstitial space will be specified in construction drawings, and the tank manufacturers will provide QA/QC to demonstrate the tanks have been constructed as specified.
Secondary containment calculations in Table B-2 are poorly documented. Length and width measurements are incorrect, actual geometry of area is not considered (corner shown cut off in drawing), interior berm volume is not considered. Data on diesel tanks (double-walled) are not well explained.		Secondary containment calculations will be finalized once final design drawings are completed, and will reflect actual equipment selection and berm construction design.
	Make sure all drawings are sufficiently legible for their intended use and at the intended print size.	Drawings included in the final plan will reflect the final design of the Facility, and will be provided in a legible format.
Figure 2.3, showing the crude oil storage tanks and secondary containment appears to show a break in the berm at/near the pump basin.	Make sure Figure 2.3 shows a contiguous berm around the crude oil storage tanks. If the berm cannot be drawn contiguous due to clarity considerations, make sure it is noted that the berm is contiguous.	Drawings included in the final plan will reflect continuity of the secondary containment berm.
	Properly document secondary containment calculations in Table B-2 and ensure all values are correct. Make sure internal berm volume and actual geometry is considered.	Secondary containment calculations will be finalized once final design drawings are completed, and will reflect actual equipment selection and berm construction design.
Table B-3 – Overview of Potential Spill Scenarios does not contain the required estimates of total quantity released for every spill scenario.	Include actual volumetric estimates of total quantity released for every spill scenario in Table B-3. See 40 CFR 112.7(b).	Volumetric estimates will be updated based on the final design of the Facility.
Typographical/Editorial • In general, the oSPCCP is quite repetitive both between sections and even within the same sections. This makes	Review the entire oSPCCP and remove repetitive information in order to make the document easier to use and maintain. Also	The document was organized in a manner to address EFSEC comments provided to the Applicant in April 2015 (Letter to Mr. Kelly Flint, from Stephen

Operations SPCCP (oSPCCP)		
Golder Comment	**Golder Recommendation**	**How to Address**
for a very wordy document that is difficult to use and maintain. • The first sentence in Section 2.1 does not make sense (possible typographical errors). • The first sentence, fourth paragraph of Section 2.1.1 states that "pump basins…are in belowgrade concrete pump basins". This does not make sense. • The second paragraph of Section 2.1.2 states that the maximum volume of crude oil stored in each tank is 380,000 bbls. Elsewhere, the maximum volume is given as 360,000 bbls due to the presence of the internal floating roof and other tank appurtenances. 380,000 bbls is stated as the maximum shell volume. • There is an apparent typo in the third paragraph of Section 2.1.2. The first sentence reads, "…which is tall sized…". • In Section 5.3.2, the fourth paragraph is incomplete.	correct spelling and grammatical errors.	Posner, Energy Facility Site Evaluation (EFSEC) February 2014 Application for Site Certification (ASC) - Review of Preliminary Draft Spill Prevention Control Countermeasure Plan (Prevention Plan) for the Tesoro Savage Vancouver Energy Project (Project); Application No. 2013-01; Docket: EF-131590. April 3, 2015). Inconsistencies and typographical errors noted by the reviewer will be corrected.

Water Quality Protection and Monitoring Plan (WQPMP)		
Golder Comment	**Golder Recommendation**	**How to Address**
The plan states it is for construction and not operation. It's possible that construction sampling could create a better baseline for operation, particularly if O&G, TPH and/or TOC were measured.	Retitle the Plan to "Construction Water Quality Protection and Monitoring Plan".	The plan will be retitled to "Construction Water Quality Protection and Monitoring Plan".
No mention of water features (or lack thereof) on the site.		The plan will be revised to indicate there are no existing natural water features at the Facility site, with the exception of the Columbia River in Area 400.
It's not clear in Section 2.2.1 whether any overwater cutting or demolition of concrete is proposed, and how concrete dust or cutting spray water will be collected to avoid entering the river.		The plan will be revised to address overwater concrete cutting/demolition.
No reference to agency contacts for the plan, parameters or sample stations. Was input from the Washington Department of Ecology (WDOE) solicited? Are only two parameters sufficient?		The Applicant will arrange with EFSEC the final list of agency contacts for the plan.
The plan measures two parameters, based on designated uses of the Columbia River at that location, but does not explain why other possible parameters tied to those designated uses are not measured.	Explain why other water quality parameters that either have standards or are tied to designated uses of the Columbia River are not included in the monitoring plan. For example: o Primary contact recreation and water supply are designated uses; why not sample for coliform bacteria? One statement listing parameters not sampled, and why, would clarify this. o Sheen could be a water quality parameter; why not collect O&G samples at the surface and note "sheen" observations on the sampling form?	The Applicant will revise the plan to address those parameters which will not be sampled, and the lack of relationship of Facility construction activities to any impact to such parameters. For example, construction activities are not a source of coliform bacteria, therefore there is no need to sample for that parameter.

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Figure 2, Monitoring Locations, does not show any monitoring locations.		Figure 2 identifies the anticipated boundaries of where compliance and early warning stations would be located. The actual sampling location will be selected based on the construction activities being monitored. The sampling locations will be documented.
There is no evidence of a control site for sampling.		Section 3.2.1 identifies the Background Station, i.e. the control station. Figure 2 of the plan will be revised to identify the location of a background station.
The water quality sampling program does not mention the SWPPP and the possibility of stormwater detention ponds and sampling them for pH instead of the Columbia River, where no mixing can be considered for compliance.		The cSWPPP is referenced in Section 1.4. Section 2.3 will be updated to reflect the cSWPPP. The stormwater ponds are monitored for pH under the cSWPPP, however not all construction activities will direct runoff to the ponds. Therefore monitoring in the river will likely be required for certain construction activities that have to potential to exceedance criteria in the river.
	Appendix A could use more detail on the form to reflect the parameters being tested and other influencing factors such as tidal stage, incoming/outgoing, antecedent rainfall, sampling depth, type (grab/composite) and general lab QA methods here or elsewhere, including blanks, spikes, duplicates, preservatives, holding times and chain of custody procedures, if any. Not all would be part of the form but the accuracy of the process could be confirmed by documenting those procedures.	The procedures described by the reviewer will be documented, and the form revised to identify factors such as those identified by the reviewer.