

Tesoro Savage CBR  
Agency Scoping Comment  
#017



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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December 18, 2013

Stephen Posner, EFSEC Interim Manager  
Energy Facility Site Evaluation Council  
PO Box 43172  
Olympia, WA 98504-3172

RECEIVED  
DEC 24 2013  
ENERGY FACILITY SITE  
EVALUATION COUNCIL

Dear Mr. Posner:

Thank you for the opportunity to comment on the determination of significance scoping notice for the Tesoro Savage Vancouver Energy Distribution Terminal project (Application No. 2013-01 & Docket No. EF-131590) located at the Port of Vancouver within the City of Vancouver as proposed by Tesoro Savage Petroleum Terminal LLC. The Department of Ecology (Ecology) reviewed the information provided by EFSEC and has the following comments regarding the scope of what the environmental impact study (EIS) should evaluate:

**AIR QUALITY: Julie Oliver (360) 407-6823**

The air quality impacts of the projected emissions from the proposal need to be evaluated for their impacts on ambient air quality for criteria, toxic, and hazardous air pollutants and for the potential impacts of the project on the ozone in the Portland-Vancouver ozone maintenance area. An air quality permit for all toxic, criteria, and hazardous air pollutants to be emitted by the project must be obtained.

**AIR QUALITY/GREENHOUSE GAS: Gail Sandlin (360) 407-6860**

As stated in the EFSEC documents, the EIS will evaluate climate and energy impacts. Ecology agrees climate and energy impacts should be a part of the scope, therefore, no comment at this time.

**FLOODPLAINS MANAGEMENT: Donovan Gray (360) 407-7253**

Parts of the proposed site may lie in a 100 year floodplain. A floodway has also been designated for the Columbia River in the project vicinity. Work in a 100 year floodplain requires a floodplain development permit. Development in a floodway will require a floodway (aka 'no-rise') analysis. The proponent must ensure at a minimum that the proposed new structures are constructed to current flood protection standards and the existing structures in the vicinity are kept reasonably safe from flooding.

**SHORELANDS & ENVIRONMENTAL ASSISTANCE/FEDERAL PERMIT  
MANAGER: Lori Ochoa (360) 407-6926**

Temporary and permanent impacts to wetlands and waterbodies from placement of the pipelines, roads, rail lines, and other structures should be identified and evaluated. Water crossing methodologies should be described and evaluated. The adequacy of the storage tank containment area should be evaluated due to the proximity to adjacent wetlands.

If any soil densification measures are proposed, the method, amount to be used, and location should be identified and evaluated.

If there are contaminated soils on site that will be disturbed, a description of how they will be identified and managed should be included.

A 401 Water Quality Certification from Ecology may be required for this project. Please identify the elements of the Vancouver Shoreline Master Program that will be relevant to the proposal, with expected actions taken to insure compliance.

**SPILLS PREVENTION, PREPAREDNESS & RESPONSE:**

**Linda Pilkey-Jarvis (360) 407-7447**

Because this proposal has several transportation components to it and represents a significant change, the impacts of the facility, vessel and rail operations should all be evaluated in the EIS.

**Spill Risk from the Oil Handling and Transfer Operations** - The proposal indicates that oil will be transferred at a rate of 40,000 barrels an hour, which is 1.68 million gallons an hour or 28,000 gallons a minute. This is a substantial rate of transfer (high pressure) that could result in a large spill within a short time period before a shut down can occur. In order to fully assess the impact from oil spills during transfers the EIS should:

- Assess oil transfer protocols that could prevent or reduce the risk of a spill at the terminals during transfer operations.
- Provide appropriate analysis to ensure oil transfers can be effectively pre-boomed at the terminal in strong currents and poor weather conditions. Consider further voluntary spill reduction strategies during these conditions, such as reduced pressures/flow rates or halting transfer operations.
- Evaluate the adequacy of vessel anchorage areas on the river (which are already limited) as tank vessels may need to anchor till there is room at the facility docks before transfers occur.

**Evaluating the Adequacy of Response Equipment on the River**— Washington's regulatory oil spill planning standards set the types and quantities of oil spill response equipment that must be pre-staged by both the facility and vessel sides of the transfer. These standards were developed in the past when facilities and tank vessels transiting the Columbia River did not carry crude oil at the volumes identified for the proposal. The capability to recover from crude oil spills on the river needs to be examined in the EIS.

- The worst case spill volume for this facility as identified in the application is 380,000 barrels or 16 million gallons (the volume of the largest tank). WAC 173-182-355 applies to the facility.

The adequacy of equipment on the river for both the facility and vessel should be evaluated together and the EIS should:

- As required by state and federal law, assess necessary and appropriate spill response and equipment coverage needed for a worst case spill at the facility and for the vessels that transit to the site.
- As required by state law, assess the need for response equipment to be staged at the terminal while oil transfers are occurring as protection measure in the event of a spill.

Geographical Response Plans (GRPs) - GRPs are geographic-specific response plans for oil spills to water. They include response strategies tailored to a specific beach, shore, or waterway and minimize impact on sensitive resources threatened by the spill. The strategies for the river are scheduled to be updated. The EIS should:

- Discuss the Lower Columbia River GRP process. Assess response strategies and equipment necessary to respond to crude oil spills that could be generated from rail transport, at the land based facility and from vessels as a result of the project.

**Spill Risk from Increased Vessel Traffic Calling on the Facility** - The EIS should assess the potential impacts on the river's navigational and traffic management system as a result of the increased vessel traffic generated by this project. The application states the terminal can handle vessels with a capacity of up to 600,000 barrels. The Columbia River and its bar present difficult navigational challenges for large deep draft vessels. This new operation involving the transport of crude oil will result in a significant change in the volume and type of oil moved on the Columbia River.

Year	Tank ship calls*	Projected Increase
2011	87	N/A
2012	88	N/A
Projected for 2016	140 new tank vessel calls	Additional 280 inbound and outbound or 159% increase
Full build out of the facility	365 new tank vessel calls	Additional 730 inbound and outbound or 414% increase

\* Currently tank ships on the Columbia River do not carry crude oil as cargo for the 105 mile distance to the Vancouver/Portland Terminals.

The consequences of a catastrophic spill from a laden crude oil tank ship represent one of the highest risks in Washington waters. As vessel traffic increases, additional prevention measures to mitigate the risk of an allision, collision or grounding that could lead to a major oil spill should be considered in the EIS. Information needed in the EIS to address this change in risk includes:

- Size and cargo carrying capacity of vessels that will transit the Columbia River to and from the proposed terminal.
- Increased vessel traffic from this proposal including number and size of ships relative to the existing conditions in the waterways.
- How vessels will be managed offshore and in river if the bar is closed to vessel traffic due to weather and sea state conditions.

**Addressing the Columbia River channel depth limitations** - The Columbia River channel is currently maintained to a depth of 43 feet and a width of 600 feet. Vessels with a fresh water draft of less than 36 feet are generally able to transit the river at any time. Vessels with drafts of 36 feet or greater require much greater voyage planning to take advantage of tides and river conditions to ensure adequate under keel clearance.

- The EIS should identify the size and cargo capacity of vessels that would transit the Columbia River to the proposed terminal and consider the risks associated with the channel depth limitations.

- The EIS should evaluate mitigation measures related to procedures for voyage planning, load limitations and passing protocols for outbound laden tank ships and other vessels to ensure adequate keel clearance during all transits.

**Consider the Need for Tug Escorts** – The EIS should evaluate use of tug escorts to reduce the risk of oil spills. Washington State and federal law currently require tug escorts for tank ships traveling to Washington’s northern refineries through Rosario Strait. This requirement applies to all tankers of 40,000 dead weight tonnage (DWT) or greater when laden (loaded) with oil. The tug horsepower must equal or exceed 5 percent of the ship's dead weight tonnage. These requirements apply to all liquid cargoes, whether or not petroleum-based. Laden tankers greater than 125,000 DWT are prohibited from navigating in these regulated waters. These requirements apply to the navigable waters of Washington State east of a line extending from Discovery Island Light south to New Dungeness Light but do not apply to the Columbia River.

The proposed expansions of two marine terminals in Grays Harbor are also proposing to have all laden tankers escorted by two oceangoing size tugs throughout transit in Washington waters, including seaward to the 3-mile limit. This is an excellent mitigating measure that will greatly increase the safety net in this area and reduce the risk of major oil spill.

The proposal states that “each vessel is expected to use the services of two ship-assist tugboats for arrival and departure at the terminal.” In order to fully assess the impact on navigation safety and risks created from the proposal as a result of the increased vessel traffic the EIS should:

- Assess the availability and capability of tugs on the Columbia River to respond and control disabled vessels in the river and offshore.
- Identify the locations where the tugs will escort the tank vessels. If this does not include all Washington waters, assess the need for a dedicated tug escorts for outbound laden tank vessels past the mouth of the Columbia River as a mitigating measure to reduce risk of an allision, collision or grounding that could lead to a major oil spill.

**Evaluate the additional risk from Rail Transport associated with the Facility** - Since Ecology is preempted from regulating rail transport systems, the EIS should assess the potential for oil spills from this mode of transport. The analysis should include measures to mitigate the risk of spills and identify potential response strategies for environmentally sensitive areas along the route. Mitigation could also include staging of appropriate response equipment if a spill were to occur. In order to fully assess the impact of rail transport the EIS should:

- Provide an analysis of spill risk for this mode of transport.
- Identify possible spill risk mitigation measures and response strategies that might be included as mitigation to the project.

**WATER QUALITY/INDUSTRIAL OPERATIONS UNIT: Gary Lee (360) 407-6291**

- An individual national pollutant discharge elimination system (NPDES) permit issued by Ecology is required for discharging contaminated stormwater from the tank farm secondary system and other areas to the waters of the state. Stormwater from those areas must be collected and treated in compliance with the permit limits and conditions. An engineering report for the wastewater treatment system prepared in accordance with Chapter 173-240 WAC must be submitted with the NPDES permits application package.

- Discharge of Boiler blowdown (Area 600 and 700 Boiler Building) must comply with all the applicable water quality regulations. Authorization from the local sewer district must be obtained prior to the discharge.
- P2-102, "If installed underground, the piping will be placed in casings with incorporated leak detection (as shown in Figure 2.3-8)." Figure 2.3-8 shows a pipeline casing but it does not indicate how leak detection will be accomplished and capability of the system. Information on the pipeline leak detection system/procedures that complies with requirements specified in Section 173-180-340 WAC should be included.
- The trench that contains production collection line and other ancillary piping is not lined as shown in Figure 2.3-6. It is recommended that the trench be equipped with an impervious liner to contain spilled product.

If you have any questions, please contact Gary Lee with the Southwest Regional Office, Water Quality program at the phone number given above.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above. Again, thank you for the opportunity to provide our comments.

Sincerely,



Sally Toteff  
SWRO Regional Director  
Department of Ecology

(SM:13-4881)

cc: Donovan Gray, Shorelands and Environmental Assistance Program  
Gary Lee, Water Quality Program  
Lori Ochoa, Shorelands and Environmental Assistance Program  
Julie Oliver, Air Quality Program  
Gail Sandlin, Air Quality Program  
Linda Pilkey-Jarvis – Spill Prevention, Preparedness and Response Program

