



Skagit County Planning & Development Services

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General Project Information

Shell Puget Sound Refinery (PSR) proposes to build a rail spur from the existing adjacent Burlington Northern Santa Fe (BNSF) mainline onto Shell PSR property with equipment to pump oil from rail cars into the refinery. The crude brought in by rail would replace some supply currently brought in by ship and would serve to maintain current production, not increase capacity.

The property has a Skagit County Comprehensive Plan designation of Anacortes - Urban Development. It is located within the Anacortes Urban Growth Area and is identified as a Heavy Manufacturing District under the Anacortes Municipal Code. The proposal is a permitted use under Anacortes Municipal Code 17.15.020. The Skagit County shoreline designation is Rural.

Shell PSR anticipates that it would receive approximately one unit train per day. Each unit train would include approximately four locomotives, and approximately 102 oil tank rail cars containing crude oil. The facility is being designed to receive a maximum of six unit trains per week, for a total of approximately 612 incoming fully loaded oil cars and 612 outgoing empty tank cars on a weekly basis.

The project scope generally includes the following components:

- Arrival/departure rail track
- Unloading area with two tracks and a concrete containment pad
- Bad order railcar tracks with repair facilities, personnel operations building and appurtenant facilities and limited parking
- Perimeter inspection/security road
- Pumps and below and above-ground pipelines to connect the proposed project to the existing storage tanks
- New road connections
- Relocation of segments of the Olympic Pipeline, the Kinder Morgan Pipeline, and Puget Sound Energy (PSE) power lines
- New electrical power substation
- Oil/water separator facilities and containment for a single-car spill
- Stormwater facilities

The rail extension for the crude unloading facility would extend from the existing BNSF rail line and spur (near South March Point Road) in a northwesterly direction approximately 5,500 feet to North Texas Road. The rail facility would consist of approximately 8,000 feet of unloading tracks with a concrete unloading pad, approximately 1,300 feet of track for temporary storage of rail cars that are taken out of service for repair and maintenance, and about 7,200 feet of train-staging track.

Rail ingress and egress would be provided via a connection to the existing BNSF mainline located to the southeast, which would require modifications to the BNSF rail configuration. The rail project has been

designed to avoid blocking East March Point Road, at the BNSF mainline crossing, during unloading by providing adequate rail track to move the train onto the Shell PSR site, beyond March Point Road.

The crude oil transfer station would include vent headers, a containment area, drain connections and collection header, and tank car grounding. An operations shelter, storage shed, electrical structure and a small employee parking lot would also be constructed in proximity to the crude oil transfer facility.

The proposed project would also include various site preparation activities including, but not limited to, clearing and grading; installation and construction of associated infrastructure improvements, such as stormwater infrastructure; and extension of existing services and utilities, including electricity, sanitary sewer, potable water, etc. Two existing pipelines and some PSE power lines would have segments relocated. Two ponds are proposed to provide permanent storm water control. An oil/water separator pond would also be provided on the west side of the rail adjacent to the new facilities.

Analysis

The SEPA threshold determination is the formal decision as to whether the proposal is likely to cause a significant adverse environmental impact for which mitigation cannot be identified. Where County regulations have been adopted to address an environmental impact, it is presumed that such regulations are adequate to achieve sufficient mitigation (WAC 197-11-660(1)(e)). Therefore, when requiring project mitigation based on adverse environmental impacts, the County would first consider whether a regulation has been adopted for the purpose of mitigating the environmental impact in question.

County staff has had the opportunity to visit the subject property to review the proposed rail spur location. Staff has also reviewed the following documents:

- 1) Shoreline Substantial Development Permit Application
- 2) Joint Aquatic Resources Permit Application (JARPA) – revised March 19, 2014
- 3) State Environmental Policy Act (SEPA) checklist (also known as the environmental checklist)
- 4) Floodplain Development Permit Application
- 5) Wetland Delineation Report and Critical Areas Assessment
- 6) Shell PSR Mitigation Bank Use Plan
- 7) Forest Practice Conversion Application
- 8) Drinking Well Summary
- 9) Clean Water Act Section 404(B)(1) Alternatives Analysis
- 10) Biological Evaluation and Essential Fish Habitat Analysis – revised April 18, 2014

In addition, a Cultural Resources Inventory Report has been completed and reviewed by local tribes. The recommendations of that report have been approved and will be included as conditions of associated permits.

Staff requested and received additional information from Shell PSR regarding the public comments received during the initial Shoreline permit comment period.

It will be necessary to further analyze certain aspects of the proposal to determine if the project complies with all the applicable County codes and policies. That analysis is most appropriately addressed with the grading and building permit review for the project. Those permits will review detailed stormwater, drainage, building and fire code requirements. Below is an analysis of several key environmental elements identified by staff or brought up by the public.

Energy Facility Siting Evaluation Council (EFSEC) jurisdiction

An informational letter was sent to EFSEC by Shell PSR on September 25, 2013. No formal reply was received. An email was also sent to EFSEC by URS on behalf of Shell PSR on February 25, 2014. Stephen Posner of EFSEC replied on February 26, 2014 acknowledging that Skagit County is acting as SEPA lead agency for this project and will continue to do so.

Washington State Department of Ecology jurisdiction

The Washington State Department of Ecology (WDOE) has been involved in the review of this project since its initial stages. Shell PSR is working with Ecology to obtain a 401 Water Quality Certification and Coastal Zone Management Consistency Determination. This approval is required prior to start of project construction.

Safety of Rail Bridge over Swinomish Channel

Safety of rail lines fall under the jurisdiction of the Federal Railroad Administration (FRA), a division of the United States Department of Transportation. The Rail & Infrastructure Integrity Division of the FRA is responsible for promoting an understanding of and compliance with Federal standards concerning rail maintenance and bridge management (49 CFR parts 213 and 237).

Potential Impact on Bald Eagle nesting

Shell PSR has applied for and must obtain an Eagle Non-Purposeful Take Permit and Eagle Nest Take Permit from the United States Fish and Wildlife Service (FWS) prior to disturbance of any bald eagle nest. Any mitigation required as a condition of that permit will be enforced by FWS.

Potential Impact on Great Blue Heronry

Great blue herons are included on the Washington State Department of Fish & Wildlife (WDFW) Priority Habitats and Species (PHS) list. WDFW has no required permitting process for projects that may affect PHS species or habitat. Great blue herons are also considered a Priority Species under PHS Criteria #2, which refers to “vulnerable aggregations”. Under Skagit County Code, great blue heron nest sites are designated as a habitat of local importance (SCC 14.24.500(4)(a)). SCC 14.24.520(2) requires a site assessment and habitat mitigation plan for any activity that may have an adverse effect on a habitat of local importance. At the federal level, great blue herons are not listed under the Endangered Species Act but are protected under the federal Migratory Bird Treaty Act.

The March Point Heronry is located between State Route 20 and South March Point Road. Padilla Bay is located north of South March Point Road. The heronry is located approximately 1,350 feet southeast of where the Burlington Northern Santa Fe (BNSF) rail line meets Shell-owned property. A steel fabrication facility lies between much of the colony and the Shell refinery. The steel fabrication facility was constructed in 2007. In 2012, 357 great blue heron nests were counted on Skagit Land Trust (SLT) property.

Shell reviewed WDFW’s Management Recommendations for Washington’s Priority Habitats and Species – Great Blue Heron. This report includes recommended buffers for nesting colonies. The largest buffers recommended are 656 feet for unusually loud activities (exceeding 92 decibels) and 1,320 feet for blasting during breeding season (approximately March – August). Neither blasting nor noise exceeding 92 decibels is expected to occur during the project, so no seasonal buffer would need to be applied. Project features will not be located within 1,350 feet of the heronry. No project features or construction activity will be located between the heronry and Padilla Bay.

Biologists for Shell, including a PhD-level avian biologist, have been on the project site numerous times between January 2013 and March 2014 and have never encountered concentrated use by great blue

herons. They have consistently been seen in small numbers near the tidal marsh at the northwest corner of East March Point road and South March Point Road. As part of this proposal, the tidal marsh will be fenced from cattle use and the estuary buffer planted with native woody plants. It appears that the project site does not provide prime foraging habitat or pre-nesting habitat for this species, especially in comparison to the resources available in Padilla Bay.

The portion of the heronry colony on Skagit Land Trust property has been monitored for over 20 years. The overall trend is that the number of great blue heron nests has increased. This increase has occurred over the time that the steel fabrication facility began operations immediately adjacent to the colony. In addition, the adjacent BNSF line has experienced additional rail traffic from the trains to Tesoro, which has not led to abandonment of the colony. Given that these activities have not resulted in a decline, there does not appear to be evidence that increased rail activity from Shell trains will lead to a direct decline in the colony.

Fire & Spill Response Plan

Shell PSR maintains teams of trained personnel to respond to all emergencies within the refinery. The teams are trained to respond to spills both on land and on water, fires, medical, rescue, and hazardous material release. They are trained in accordance with all federal, state, and local rules and regulations. The Shell PSR Emergency Response Teams are the first responders to all incidents within the refinery boundaries.

Shell maintains a Refinery Emergency Response Plan, as well as individual plans for Oil Spill Response, Fire Fighting, and Emergency Notification and evacuation procedures.

Shell is a member of the Western State Petroleum Association (WSPA) and is part of the Mutual Assistance Emergency Response program which is organized by WSPA. In the event an emergency arises that requires additional resources (e.g., to fight a fire or manage a spill), Shell may contact a WSPA member for assistance. WSPA members presently include: Shell PSR, Tesoro Anacortes Refinery, Phillips 66 Ferndale Refinery, BP Cherry Point Refinery, and U.S. Oil and Refining Co.

Shell is also a member of Community Awareness Emergency Response. This organization allows Shell to communicate with and assist local public emergency response and fire-fighting organizations.

Overall, Shell has a trained and experienced team to respond to oil spills, hazardous material release, fires, and injuries. They are part of an expanded organization of other professionals who can assist if necessary in emergency situations to protect lives, property, and the public.

Greenhouse Gas Emissions

The Northwest Clean Air Agency (NWCAA) is one of seven regional air quality control agencies located throughout Washington State. It was established in 1967 after passage of the Washington State Clean Air Act (RCW 70.94). The agency is responsible for enforcing federal, state and local air pollution regulations in Island, Skagit and Whatcom counties.

Shell PSR is required to have an Air Operating Permit because the refinery has the potential to emit more than 100 tons per year of particulate matter, nitrogen oxides, sulfur dioxide, volatile organic compounds and carbon monoxide; 10 tons per year of a single hazardous air pollutant and 25 tons per year of combined hazardous air pollutants; and 100,000 tons per year carbon dioxide equivalents and 100 tons per year greenhouse gases. These air pollutants are defined as regulated air pollutants in Chapter 173-401 of the Washington Administrative Code (WAC).

The Air Operating Permit compiles existing air quality requirements into one document and establishes monitoring, recordkeeping and reporting procedures to assure compliance with those requirements.

The current proposal does not include an increase in the amount of crude being brought to the refinery. The crude brought in by rail would replace some supply currently brought in by ship and would serve to maintain current production, not increase refinery capacity. Since refinery production will remain at current levels, the greenhouse gas emissions will not change.

NWCAA also requires an Order of Approval to Construct. This will need to be obtained prior to start of project construction.

Safety of Rail Curve in Burlington

Safety of rail lines fall under the jurisdiction of the Federal Railroad Administration (FRA), a division of the United States Department of Transportation.

Wetland Impacts – Indirect impacts on Padilla Bay, Use of Mitigation Bank Credits

The impacts analysis in the Wetland Mitigation Bank Use Plan for the proposal addresses the potential for both direct and indirect impacts from wetland fill or excavation. No direct impacts are anticipated to occur within Padilla Bay. The new rail cut will be 1,000 to 2,000 feet from the bay, which is separated from Shell property by East March Point Road. Indirect impacts to Padilla Bay are assessed in terms of the potential to impair water quality, hydrology, and habitat.

Water Quality: Most wetlands naturally provide a measure of water quality improvement. The wetlands that will be impacted by this project generally rate low or moderate for this function. Water quality functions of the remaining undisturbed wetlands between the rail and Padilla Bay should not be altered significantly.

The project site is currently used for cattle grazing, and runoff from the wet pastures flows untreated into several ditches or the onsite stream and then into Padilla Bay. Cattle also currently have direct access to many of these drainages. Grazing will be eliminated from the project site and project-related runoff will be routed through drainage ditches into the stormwater settling ponds. Although grazing will likely continue outside of the project area, overall water quality impacts from grazing should be reduced due to new fencing and planting around the onsite stream and associated estuary in the southern part of the property.

Hydrology: Wetlands can attenuate downstream flooding through storage and gradual release of flood waters. The wetlands in the project area all rate low for this function and have little opportunity to perform this function due to their proximity to the bay. The small amount of storage that is currently provided by the impacted wetlands will be offset by the new stormwater system, which is designed to detain, treat, and discharge storm flows in a manner that reproduces pre-construction hydrology.

Wetlands at the project site are not known to provide significant groundwater recharge that would result in freshwater seepage into Padilla Bay. This is an important hydrologic function of some coastal wetlands, but recent and past investigations in the project vicinity indicate the presence at depth of a thick, dense clay layer that precludes vertical movement of surface water into deeper water bearing layers. Delivery of fresh water into the bay by surface flow is still an important function of the wetlands and will continue after completion of the project through discharge from the remaining wetlands and from the new stormwater ponds.

Habitat: Fish and wildlife use of the impacted wetlands is addressed in the Wetland Mitigation Bank Use Plan and in the Biological Assessment and Essential Fish Habitat Analysis prepared for this project. Over 77 percent of the wetland impact area is grazed pasture that provides low level of habitat function. Habitat connectivity with Padilla Bay is currently constrained by the presence of East March Point Road next to the bay and the other roads, railroads, and developed areas in the project vicinity. This project would result in further fragmentation of some wetland habitats due to the presence of the rail cut. The elimination and impairment of these wetlands is not expected to significantly impact habitat quality or the use of Padilla Bay. None of these habitats is of extremely high value or extremely rare within the project area.

A large area of wetlands will continue to exist between the new rail and Padilla Bay. This includes a large forested wetland in the northern part of the property that extends from the new rail to East March Point Road. As part of this project, the salt marsh in the southeast corner of the Shell property will be restored in areas currently impacted by cattle. A 200 foot buffer around the salt marsh will be fenced to exclude cattle and restored to a forested and scrub-shrub wetland.

Marine Vessel Traffic

The intent of this project is to provide Shell PSR with an alternative source of domestic crude. The project will not increase crude capacity of the refinery. This project would therefore be expected to lead to less crude oil marine vessel traffic. In addition, this project will not materially affect the volumes of products produced at the refinery and therefore will not impact the current level of production. Decisions regarding modes of transportation for crude oil, products, and intermediate feedstocks are based on safety, environmental compliance, and economic considerations – the project will not impact this decision making process.

March Point aka Whitmarsh Landfill

The proposed project location is greater than 1000 feet from the March Point aka Whitmarsh Landfill. There will be no impact on or interference with the cleanup of this location.

Tank Car Safety

The safety of tank cars falls under federal jurisdiction, more specifically the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Federal Railroad Administration (FRA).

Conclusion

Based on the review of the project site, all available information, and the adopted codes and policies of Skagit County, staff concludes there are no probable significant adverse impacts created by the project that cannot be mitigated as proposed or as conditioned.

This determination is based on adopted goals, policies, and regulations of Skagit County.