

WHATCOM COUNTY

Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226-9097
360-778-5900, TTY 800-833-6384
360-778-5901 Fax



Mark Personius, AICP
Director

Revised SEPA Distribution List
SEP2019-00033
Date of Issuance: August 20, 2019

Please review this determination. If you have further comments, questions or would like a copy of the SEPA checklist, phone the responsible official at (360) 676-6907. Please submit your response by the comment date noted on the attached notice of determination.

WA State Department of Archaeology and Historic Preservation via email
Stephanie Jolivette, stephanie.jolivetter@dahp.wa.gov

SEPA Unit, WA State Department of Ecology, Olympia via email
sepaunit@ecy.wa.gov

WA State Department of Fish and Wildlife
Wendy D. Cole via email wendy.cole@dfw.wa.gov

WA State Department of Natural Resources via email
Rochelle Goss, sepacenter@dnr.wa.gov
Brenda Werden, Brenda.werden@dnr.wa.gov

SEPA Unit, WA State Department of Transportation, Burlington via email
Roland Storme, stormer@wsdot.wa.gov
Johnson, Judith JohnsJu@wsdot.wa.gov

US Army Corp of Engineers
Randal Perry via email - randel.j.perry@usace.army.mil

Lummi Nation Natural Resources
Merle Jefferson, Sr. via email - merlej@lummi-nsn.gov
Tamela Smart - tamelas@lummi-nsn.gov

Nooksack Indian Tribe
George Swanaset, JR via email - george.swanasetjr@nooksack-nsn.gov
Trevor Delgado via email - tdelgado@nooksack-nsn.gov

Northwest Clean Air Agency
Agata McIntyre, P.E. via email - agatam@nwcleanairwa.gov

Whatcom County Council via email
council@co.whatcom.wa.us

Applicant
Phillips 66 c/o Ken Morrill via email - Kenneth.j.morrill@p66.com

Other and/or Parties of Record

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Mark Personius, AICP
Director

Revised SEPA Mitigated Determination of Nonsignificance (MDNS)¹

File: SEP2019-00033

Project Description: A new 300,000 barrel external floating roof crude oil storage tank and an 80,000 barrel external floating roof fuel oil tank will be installed in the tank farm of the refinery in order to provide additional operating flexibility needed to comply with the pending International Maritime Organization (IMO) regulatory requirements.

Beginning January 1, 2020, the IMO will enforce a new 0.5% global sulfur cap on marine fuels, lowering the cap from the present 3.5% limit.

After the IMO sulfur specification change in 2020, the Ferndale refinery will have to produce and sell low sulfur fuel oil (0.5 wt%) in addition to the current higher sulfur fuel oil. In order to cater to both markets and to optimize the fuel oil blending process, the low sulfur fuel oil produced by low sulfur crudes need to be segregated from higher sulfur fuel oil which is produced from higher sulfur crudes. This product segregation is currently not possible within the existing crude and fuel oil storage tanks.

The proposal includes 1,000 cubic yards (CY) of fill and 110,000 CY of grade/excavation. 67,000 CY of fill materials will be taken to Zell and Delta Line Road and 43,000 CY will be taken to the Axton Pit and Singer Pit. The applicant is proposing 55 to 60 dump truck and trailer loads per day, Monday through Friday 7:00 AM - 4:30 PM for approximately 65 to 75 working days.

Please refer to full project description in the SEPA checklist for more information².

Proponent: P66 Ferndale Refinery c/o Ken Morrill

Address and Parcel #: 3901 Unick Road, Ferndale, WA 98248 APN#: 390133197340

Lead Agency: Whatcom County Planning & Development Services (c/o Amy Keenan and Tom Brissenden)

Zoning: HII **Comp Plan:** Major/Port Industrial UGA **Shoreline Jurisdiction:** N/A

The lead agency for this proposal has determined that with proper mitigation, no significant adverse environmental impacts are likely. Pursuant to RCW 43.21C.030(2)(c), an environmental impact statement (EIS) is not required. This decision was made following review of a completed SEPA environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this revised MDNS pursuant to WAC 197-11-340(2)(f).

¹ Per WAC 197-11-340 the SEPA checklist and MDNS conditions for the subject SEPA determination have been modified based on public comment. The SEPA environmental checklist was revised on 8/15/19. The revisions provide additional clarifying information regarding public comments that were received regarding the following questions: A.7., A.10., B.2.a, B.5.b., B.8.d. and B.14.e.

² The project proponent revised the SEPA checklist on May 15, 2019 and again August 15, 2019 clarifying that the project will not materially affect the amount of fuel oil throughput processed at the refinery or the number of train trips or marine vessels utilizing the Phillips 66 marine terminal in any particular future time period.

Responsible Official: Mark Personius, mpersoni@whatcomcounty.us

Title: Director

Telephone: 360-778-5900

Address: 5280 Northwest Drive
Bellingham, WA 98226

Date of Issuance: August 20, 2019

Signature: _____



An aggrieved agency or person may appeal this determination to the Whatcom County Hearing Examiner. Application for appeal must be filed on a form provided by and submitted to the Whatcom County Current Planning Division located at 5280 Northwest Drive, Bellingham, WA 98226, during the ten days following the comment period, concluding August 30, 2019.

You should be prepared to make a specific factual objection. Contact Whatcom County Current Planning Division for information about the procedures for SEPA appeals.

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Mark Personius, AICP
Director

SEP2019-00033

Revised Mitigated Determination of Non-significance (MDNS)

Revised Mitigating Conditions:

Adverse Impacts by the proposed development can be caused at the commencement of construction. Therefore, the Whatcom County SEPA Official finds that, pursuant to Substantive Authority, as allowed by WCC 16.08, the following SEPA mitigating conditions shall be required as a condition of the underlying permit:

- a. The applicant estimates up to 3,750 truckloads of material (110,000 cu yards) shall be removed from the site in order to construct the tanks. A traffic control plan must be submitted prior to construction of the tanks.
- b. Maximum permissible environmental noise shall meet requirements of WAC 173-60. In accordance with WAC 173-60-080 a variance will be required prior to construction outside of normal construction hours or if construction noise will exceed thresholds in WAC 173-60.
- c. General inadvertent discovery: Should archaeological resources (e.g. shell midden, faunal remains, stone tools) be observed during project activities, all work in the immediate vicinity should stop, and the area should be secured. The Washington State Department of Archaeology and Historic Preservation (Gretchen Kaehler, Local Government Archaeologist 360-586-3088) and the Lummi Nation Tribal Historic Preservation Office (Lena Tso, THPO 360-312-2257; Tamela Smart, Deputy THPO 360-312-2253) should be contacted immediately in order to help assess the situation and to determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources is required.
- d. Human skeletal remains: If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

- e. The two new storage tanks to be permitted under SEPA 2019-00033 shall be utilized primarily for separation and storage of low sulphur crude oil intended for production of IMO compliant low sulphur marine fuels. To ensure compliance with Ordinance 2019-049, the tanks shall not be utilized for storage of crude oil to be exported, unrefined, from the marine terminal.

- f. According to the SEPA checklist prepared by the applicant, there is no material increase in marine vessel traffic expected as a consequence of the proposed project. Therefore, there are no likely significant adverse impacts to the habitat of the southern resident killer whale. To ensure there is no significant increase in marine vessel traffic resulting from the proposed project and, therefore, no likely significant adverse impacts to the habitat of endangered southern resident killer whales, the applicant shall monitor and report annually to PDS on the vessel trip activity at the marine terminal for inbound and outbound transport of inputs/outputs for processing marine fuel oils.

The applicant shall utilize the Department of Ecology Advanced Notice of Transfer System (ANTS) to track and report marine fuel oil shipments by vessel. Vessel trips to/from the marine terminal that cumulatively exceed the range of average annual marine fuel oil vessel activity identified in the 2017-2019 period (as identified in ANTS) may be subject to additional SEPA review.

- g. Prior to final commercial building permit inspection and authorized use of the two new storage tanks, the applicant shall provide documentation that the Department of Ecology has verified compliance of the operator's oil spill contingency plan with the requirements of Chapter 173-182 WAC.

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Mark Personius, AICP
Director

**Revised SEPA Mitigated Determination of Nonsignificance (MDNS)
Legal Notice**

To be published one time only on: **August 20, 2019**

CHARGE TO: Whatcom County Planning & Development Services
5280 Northwest Drive
Bellingham, Washington 98226
Acct #451232

WHATCOM COUNTY GIVES PUBLIC NOTICE THAT THE FOLLOWING REVISED¹ SEPA THRESHOLD OF MITIGATED DETERMINATION OF NON-SIGNIFICANCE (MDNS) HAS BEEN ISSUED TODAY SUBJECT TO THE 10 DAY APPEAL PERIOD CONCLUDING ON AUGUST 30, 2019.

File: SEP2019-00033

Project Description: A new 300,000 barrel external floating roof crude oil storage tank and an 80,000 barrel external floating roof fuel oil tank will be installed in the tank farm of the refinery in order to provide additional operating flexibility needed to comply with the pending International Maritime Organization (IMO) regulatory requirements.

Beginning January 1, 2020, the IMO will enforce a new 0.5% global sulfur cap on marine fuels, lowering the cap from the present 3.5% limit.

After the IMO sulfur specification change in 2020, the Ferndale refinery will have to produce and sell low sulfur fuel oil (0.5 wt%) in addition to the current higher sulfur fuel oil. In order to cater to both markets and to optimize the fuel oil blending process, the low sulfur fuel oil produced by low sulfur crudes need to be segregated from higher sulfur fuel oil which is produced from higher sulfur crudes. This product segregation is currently not possible within the existing crude and fuel oil storage tanks.

The proposal includes 1,000 cubic yards (CY) of fill and 110,000 CY of grade/excavation. 67,000 CY of fill materials will be taken to Zell and Delta Line Road and 43,000 CY will be taken to the Axton Pit and Singer Pit. The applicant is proposing 55 to 60 dump truck and trailer loads per day, Monday through Friday 7:00 AM - 4:30 PM for approximately 65 to 75 working days.

Proponent: P66 Ferndale Refinery c/o Ken Morrill

Lead Agency: Whatcom County Planning & Development Services

Address and Parcel #: 3901 Unick Road, Ferndale, WA 98248 APN#: 390133197340

Zoning: HII **Comp Plan:** Major/Port Industrial UGA **Shoreline Jurisdiction:** N/A

ANY PERSON OR AGENCY MAY APPEAL THE COUNTY'S COMPLIANCE WITH WAC 197-11 BY FILING AN APPEAL WITH THE WHATCOM COUNTY CURRENT PLANNING DIVISION LOCATED AT 5280 NORTHWEST DRIVE, BELLINGHAM, WA 98226. APPEALS MUST BE MADE WITHIN 10 DAYS AFTER THE END OF THE COMMENT PERIOD.

¹ Per WAC 197-11-340 the SEPA checklist and MDNS conditions for the subject SEPA determination have been modified based on public comment. The SEPA environmental checklist was revised on 8/15/19. The revisions provide additional clarifying information regarding public comments that were received regarding the following questions: A.7., A.10., B.2.a, B.5.b., B.8.d. and B.14.e.

REV 2 8/15/19 AUG 16 2019

RECEIVED

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements -that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

Logistics Flexibility Project (New Crude Tank and Fuel Oil Tank)

2. Name of applicant:

Phillips 66 Ferndale Refinery

Reviewed by Tom Briskin
8/16 TJB

3. Address and phone number of applicant and contact person:

**P66 Ferndale Refinery, 3901 Unick Road, Ferndale, WA 98248
Ken Morrill, 360 380-7107**

4. Date checklist prepared:

February 2019

5. Agency requesting checklist:

Whatcom County Planning and Development Services

6. Proposed timing or schedule (including phasing, if applicable):

Commence Construction 2nd quarter 2019. Commission in 2020

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

**No. There are no further activities related to this proposal
The Renewable Diesel project is a separate project from a
different project proponent and environmental impacts will be
reviewed separately at the time of application**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

**A Notice of Construction (NOC) application with air emission information will be
submitted to NWCAA.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No applications are known to be pending.

10. List any government approvals or permits that will be needed for your proposal, if known.

NWCAA Notice of Construction (NOC application approved and OAC 1322 issued)

Whatcom County Land Disturbance Permit

Whatcom County Planning and Development Services Building Permit

**This proposal is in compliance with the refineries existing
NPDES storm water permits.**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

**A new 300,000 barrel external floating roof crude oil storage tank and a 80,000 barrel
external floating roof fuel oil tank will be installed in the tank farm of the refinery in**

order to provide additional operating flexibility needed to comply with the pending International Maritime Organization (IMO) regulatory requirements.

NOAR 5/9/19 Provide detailed explanation of the IMO's fuel specification changes

Beginning January 1, 2020, the International Maritime Organization (IMO) will enforce a new 0.5% global sulfur cap on marine fuels, lowering the cap from the present 3.5% limit. Although Ferndale Refinery is not regulated by the IMO, we support the new regulations in favor of reducing emissions from the marine shipping industry.

NOAR 5/9/19 Please explain why the changes in the IMO standards require the construction of additional storage tanks versus the use of the refinery's existing storage infrastructure?

After the IMO sulfur specification change in 2020, Ferndale will have to produce and sell low sulfur fuel oil (0.5 wt%) in addition to the current higher sulfur fuel oil. High sulfur fuel oil can be used by ships that are fitted with sulfur scrubbing technology. In order to cater to both markets and to optimize the fuel oil blending process, the low sulfur fuel oil produced by low sulfur crudes need to be segregated from higher sulfur fuel oil which is produced from higher sulfur crudes. This product segregation is currently not possible within the existing crude and fuel oil storage tanks.

Ferndale Refinery has ongoing operations that continuously receive and process a variety of crude oils, each with different properties. Phillips 66 has limited storage capacity and already combines these various crudes in existing storage tanks. As market conditions change, the refinery will continue to import a variety of crudes and export a heavy fuel oil product using the refinery's existing storage infrastructure.

The additional crude storage tank is needed to segregate the lower sulfur crude for processing and the additional fuel oil tank is needed to segregate the low sulfur fuel oil product to maintain quality standards meet the new fuel specifications.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located in the tank farm of the Phillips 66 Ferndale Refinery at 3901 Unick Road in Ferndale, Washington in Whatcom County. The project is located within Section 33 of township 39N Range 1E Willamette Meridian.

B. Environmental Elements

1. Earth

a. General description of the site:

Generally flat and rolling

b. What is the steepest slope on the site (approximate percent slope)?

Less than 1 percent

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The USDA Natural Resource Conservation Service Soil Survey of the Whatcom County Area Washington mapped four soil types: Birchbay Silt Loam, Whitehorn Silt Loam, Andic Xerochrepts and Urban Land.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Construction of the new tanks will require removal of granular fill materials used to preload and consolidate existing native soils in preparation for a future tank. New structural fill will be required for tank foundations. Estimated quantities include removal of approximately 112,100 cys of clean soils and import of approximately 1,000 cys of structural fill from any of several permitted gravel suppliers in Whatcom County.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes. Erosion could occur during construction, however the impacts would be mitigated with site Best Management Practices (BMP) and the potential erosion will be contained inside existing tank area dike walls.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Less than 10%. The estimated foot print for the combined tanks is 46,000 sf.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Design and implementation of a temporary erosion and sediment control plan

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, combustion byproducts from mobile sources (for example, dump trucks, backhoes, concrete mixers, cranes, and generators) and fugitive dust may be

temporarily emitted as a result of construction activities. Emissions associated with construction will be short-term and are not anticipated to result in air quality impacts.

During operation, the tanks will emit approximately 6 tons per year of volatile organic compounds (VOC), including emissions resulting from roof landings and tank cleanings. A small portion of the VOC emissions will be in the form of compounds regulated as toxic air pollutants in Washington.

The identified VOC emissions are specific to the two new tanks. This includes the net increase (or change) of total VOC emissions after construction of the fuel storage tanks and demolition of existing tanks.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of odor will affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

During construction, the following procedures will be used to reduce or control emissions: wet soils to minimize dust, cover stockpiled materials, wash truck and equipment wheels before leaving site, and sweep roadway when dust from track-out accumulates.

During operation, the tanks will be equipped with external floating roofs. The crude tank roof will be constructed with primary and secondary seals, and will comply with the design requirements of New Source Performance Standards (NSPS) Subpart Kb, which regulates VOC emissions from liquid storage tanks.

A Notice of Construction Application will be submitted to NWCAA who will issue an Order of Approval to Construct based upon the application. The application will include information related to the New Source Performance Standards, Maximum Achievable Control Technology, and National Emissions Standards for Hazardous Air Pollutants. Additionally, the application will evaluate the project for implementation of Best Available Control Technology, and document compliance with Washington's toxic air pollutant program in WAC 173-460.

3. Water

a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground as a result of this project

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Once the project is completed, storm water from the tank containment area will be routed to existing sumps and discharged to the refinery's oily-water sewer system for treatment.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Treated water and runoff from the site would eventually drain to the Strait of Georgia, located west of the project site

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No. The new tanks will be constructed in existing tank farms with controlled drainage

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

A temporary erosion and sediment control plan, which will include measures such as filter fabric fencing, will be submitted to the permitting agencies for approval.

4. Plants

a. Check the types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Surface grass and scotch broom will be removed and stockpiled on site prior to excavation.

c. List threatened and endangered species known to be on or near the site.

None known

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None proposed

e. List all noxious weeds and invasive species known to be on or near the site.

Cytisus scoparius (scotch broom)

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Birds: Hawks, Heron, Osprey, Songbirds

Mammals: Deer, Coyote

b. List any threatened and endangered species known to be on or near the site.

None are on the site.

Threatened and endangered species in Puget Sound, West of the project site include Southern Resident Killer Whale, Cherry Point Herring Stock and Salmon species Steelhead trout (*Oncorhynchus mykiss*) Bull trout (*Salvelinus confluentus*), Chinook Salmon (*Oncorhynchus tshawytscha*)

c. Is the site part of a migration route? If so, explain.

Yes. The entire region is part of the Pacific Flyway for migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

Ferndale Refinery has created new wildlife habitat in its wetland mitigation area at the southwest corner of the property.

e. List any invasive animal species known to be on or near the site.

None known

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The completed project will use a small amount of additional electricity for area lighting and operating pumps and motor operated valves.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

Tank wall insulation to reduce heat transfer.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Existing spill prevention plans for tanks and process piping will be followed. If a release occurs, the product will be contained on site.

- 1) Describe any known or possible contamination at the site from present or past uses.

Groundwater monitoring wells were installed on the west side of L Street (near the intersection of 4th Street) in 1998 in response to a previous release. These wells serve as point of compliance monitoring wells for the ongoing monitored natural attenuation cleanup. There is no evidence of significant hydrocarbon migration from the spill site to the project site.

A small portion of oily water sewer exists at the northwest corner of 4th and L Streets. The oily water sewer will be part of correction action under the Resource Conservation and Recovery Act (RCRA) corrective action program. There is a possibility of impacts to soil due to the presence of the oily water sewer in this location.

In 2010, a release of diesel occurred from the pipeway in the northwest corner of 4th and L Streets. The diesel contaminated soil was removed from the site and soil samples collected after soil removal confirmed that all contaminated soil was removed during the remediation.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There is an existing underground OPL gas pipeline to the south of the proposed site.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During operations and maintenance

- Crude Oil
- Fuel Oil

- Tank cleaning agent, CC eliminator- containing alcohols ethoxylated, amine oxide surfactant and water
- Abrasive blasting media- non crystalline silica containing media

During development and construction

- Gases utilized in welding processes such as but not limited to: Acetylene, oxygen, and argon
- Welding fumes/metals generated during welding operations such as but not limited to: manganese, molybdenum, zinc oxide, tungsten, iron, cobalt, chromium
- Generator/compressor fuel
- Carbon Monoxide from equipment, forklifts, vehicles, generators, compressors
- Industrial Coating materials containing epoxy resin, used to coat tank

4) Describe special emergency services that might be required.

Emergency services provided by the refinery remain unchanged and are not affected by this proposal.

5) Proposed measures to reduce or control environmental health hazards, if any:

**Industry Standard -established safe work practices and policies will be followed to reduce or control environmental health hazards.
Industry Standard health, safety, and environmental management policies would be implemented and followed to reduce hazards.
Specific plans related to spill prevention and stormwater are in place and will be amended to include the new tanks.
Atmospheric tanks and pressure piping, tested per applicable regulations
Storage tank risks will be mitigated with full tank containment, foam blanketing fire suppression, and vent gasses will be reduced with floating roofs.**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise levels in the area are typical for refinery operation and will not be affected by the project. Temporary construction noises will be within the range of existing background.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

There would be a short term increase in noise from construction equipment. There would be no increase in long term noise created as the site already experiences operational noises.

3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment would be equipped with mufflers. No measures are proposed during operations of the proposed facility

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is currently used as a refinery. Adjacent properties are vacant properties belonging to the refinery and other heavy industry

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No. The refinery was constructed in 1954 and has not been used for agricultural purposes since that time.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No. There is no surrounding working farm or forest land that would affect or be affected by the proposal.

c. Describe any structures on the site.

Commercial buildings and process equipment needed to refine crude oil.

d. Will any structures be demolished? If so, what?

Yes. 2 existing oil storage tanks adjacent to the proposed fuel oil tank will be demolished

The two tanks slated for removal are inoperable and not currently in use. The capacity of these 2 tanks is 10,000 BBL each.

e. What is the current zoning classification of the site?

The Whatcom County Title 20 Zoning classifies the site as Heavy Industrial (HI).

f. What is the current comprehensive plan designation of the site?

The project site is located within the Major / Port Industrial Urban Growth Area The Whatcom County Zoning Designations map indicates that the site is zoned as Heavy

Impact Industrial (HII).

~~g.~~ If applicable, what is the current shoreline master program designation of the site?

Does not apply.

~~h.~~ Has any part of the site been classified as a critical area by the city or county? If so, specify.

The refinery maintains a conservation area near the southwest corner of the property for wetland mitigation and habitat conservation. The proposed project does not impact the site conservation areas

~~i.~~ Approximately how many people would reside or work in the completed project?

No one resides on the site or would reside on the site during project construction or operation. The completed project will not require additional workers.

~~j.~~ Approximately how many people would the completed project displace?

None

~~k.~~ Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply

~~l.~~ Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is located within the Cherry Point Major Port/Industrial Urban Growth Area, and is zoned as Heavy Impact Industrial. The proposed project is a permitted use in this zone based on the Whatcom County Zoning Ordinance.

~~m.~~ Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Not applicable. There are no nearby agricultural or forest lands of commercial long-term significance that the proposed project might affect

~~9.~~ **Housing**

~~a.~~ Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

- c. Proposed measures to reduce or control housing impacts, if any:

Not Applicable

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

48 ft tall – painted steel plate

- b. What views in the immediate vicinity would be altered or obstructed?

None

- b. Proposed measures to reduce or control aesthetic impacts, if any:

Not Applicable

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Construction work may require temporary lighting. New lighting associated with the project would be installed as needed for worker safety and operations. Lights on the completed facility would be operated at night.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Light or glare from the finished project would not be a safety hazard or interfere with views

- c. What existing off-site sources of light or glare may affect your proposal?

None

- d. Proposed measures to reduce or control light and glare impacts, if any:

None are warranted or proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Strait of Georgia is located to the west of the project and the refinery park is nearby. Both are used for recreational purposes.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None are required

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

A search on the National Historic Landmarks list returned no results.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None Known

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The majority of the soils being removed were placed in the project site for pre-load purposes over the past 15 years, which would have no impact to cultural and historic resources.

Archaeological surveys near the project site and Cultural Resources Inventory Report prepared by URS Corporation indicate no impact to cultural and historic resources.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Not Required

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Public Roads serving Ferndale Refinery include:

- Unick Road bordering the North side (County maintained). The primary commercial vehicle access point for the Refinery is on Unick Road.
- Lake Terrell Road bordering the East side (County maintained). The Refinery does maintain an access point to Lake Terrell Road, however it is not the commercial vehicle access point.
- Slater Road bordering the South side (County maintained). The Refinery does maintain an access point to Slater Road, however it is not the commercial vehicle access point.

Slater Road provides access to Interstate Highway 5, via a (6) mile drive East to the mile post 260 interchange (WSDOT maintained).

NOAR 5/9/19 ○ Please specify the construction haul route (i.e. roads to be used for construction traffic).

Haul roads will include: Unick Rd, Lake Terrell Rd, Rainbow Rd, Kickerville Rd, Grandview Rd. N. Enterprise Rd, Zell Rd

NOAR 5/9/19 ○ How many construction truck trips will occur each day?
50 to 60 Loads per day

NOAR 5/9/19 ○ What are the days and hours of hauling?
Monday through Friday, 7:00 AM to 4:30 PM

NOAR 5/9/19 ○ How long will the haul route be in effect?
Approximately 60 working days

NOAR 5/9/19 ○ Will the vehicles be standard diesel dump trucks; with or without a pup trailer?
Standard diesel dump trucks, with a pup trailer.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The Whatcom Transit Authority does not provide public transit service to the immediate Refinery area. The nearest Whatcom Transit Authority bus stop is located on Church Road, 4 miles northeast of the Refinery.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The completed project will not require additional parking spaces. The project will not provide or eliminate any parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The project does not include any changes to site access, roads, or other public transportation facilities.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project does not require additional water, rail, or air transportation, as the project is focused on improving existing quality not capacity. The project will enable Ferndale Refinery to meet 2020 International Maritime Organization (IMO) fuel standards. Please see the SEPA Narrative for more details.

NOAR 5/9/19 ○ Specifically, will this proposal increase the number of trips (by marine vessel, road vehicle or rail) of unrefined fuel currently brought to the refinery? Will the proposal increase the number of trips (by marine vessel, road vehicle or rail) of refined fuel exported from the refinery?

The low sulfur crude and and low sulfur fuel oil products will be transported over water via the marine terminal. We do not anticipate any increase in rail or truck traffic associated with the IMO 2020 fuel specification changes. More specifically, we will produce and export less heavy fuel oil when we begin exporting the IMO 2020 fuel so the net effect on marine vessel traffic will not be increased.

NOAR 5/9/19 ○ A 2013 Whatcom County SEPA mitigated determination (SEP2013-00005) limits rail imports to the refinery "to one unit train every other day, on average on an annual basis, to existing rail traffic on the BNSF Custer spur." Will the proposal increase the frequency of rail traffic of either unrefined fuels entering the site or refined fuels leaving the site by rail? If not, will this proposal increase the average amount of rail cars per unit train?

We do not anticipate any increase in rail or truck traffic associated with the IMO 2020 fuel specification changes.

NOAR 5/9/19 ○ Will the refinery's existing storage tanks (not associated with the IMO project) facilitate an increase of additional fuels brought to or exported from the refinery with the additional on-site storage?

This project does not increase the overall throughput of the refinery processing capacity, so the total volume of crude we import and total volume of the product we export is not expected to change. The premise of the project is to import low sulfur crudes so that we can produce low sulfur marine fuels.

NOAR 5/9/19 ○ Explain whether this proposal will inherently require additional upgrades to other supporting infrastructure such as, but not limited to, increased marine shipments, pipeline expansion and/or restructuring.

We will produce and export less heavy fuel oil when we begin exporting the IMO 2020 fuel so the net effect on marine vessel traffic should be minimal. Low sulfur crudes will be received at the marine terminal and we do not use the pipeline for fuel oil transport. An additional analyzer will be needed to support the blending of the marine fuel with ultra-low

sulfur diesel meet the final IMO 2020 fuel specification.

Crude oil from the new storage tanks will not be loaded onto a marine vessel without refining.

There will be no changes in the number of vessels that bunker at the marine terminal and no changes in bunkering practices as a result of this project.

Regarding changes in the size and type (crude vs refined) of ships anticipated in relation to this project: Refinery operations are dynamic and dependent on numerous factors. Such factors include, but are not limited to, the following: feedstock supply and availability; feedstock changes; economic market conditions; equipment turnaround cycles based on expected periodic maintenance and replacement; unexpected maintenance and equipment outages; demand for refinery products, both in terms of quantity and variability; and numerous other factors. Marine vessel traffic to the Phillips 66 marine terminal is impacted by all of these factors. Marine vessel traffic is also impacted by weather, ship location, ship capacity, shipping contracts and market conditions associated with securing and maintaining those contracts, and vessel type. Further, marine vessel traffic will increase or decrease depending on numerous other factors, including the cost and availability of both short- and long-term alternative transportation logistics, which includes pipelines, trucking, and rail. This project doesn't materially change any of these conditions.

Therefore, although we can provide you with the following data showing the number of marine vessels that have previously utilized the Phillips 66 marine terminal in a given point of time, for the reasons stated above it would be wholly speculative to attempt to predict the number of marine vessels that will call upon the Phillips 66 marine terminal in any particular future time period.

The following table summarizes the number of vessels and barges handling crude and fuel oil across the Phillips 66 marine terminal from April 2017 through May 2019. (Note: Jan - Mar 2017 the refinery was shut down for maintenance)

	Ave/Month					
	Barges	Ships	Total Vessels	Barge	Ship	Total
Apr -Dec 2017	141	45	186	15.7	5.0	20.7
2018	169	47	216	14.1	3.9	18.0
May 2019 YTD	55	13	68	11.0	2.6	13.6
Total Period	365	105	470	14.0	4.0	18.1

Regarding future impacts to our marine terminal operations: Although we cannot predict with any appreciable certainty the number of marine vessels that will call upon the Phillips 66 marine terminal in the future, we can say with complete certainty that the Logistics Flexibility project will not materially affect the number of marine vessels utilizing the Phillips 66 marine terminal in any particular future time period. This is because the Logistics Flexibility project will not increase refinery throughput capacity.

Refinery operations will continue in the same manner and quantity as they did preceding implementation of the project. This project does not materially affect the number of marine vessels because the project marginally increases storage capacity and does not affect refinery operating capacity. After this project is completed, operation of the facility will remain consistent with operations prior to this project.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The completed project does not generate additional vehicular trips per day, as the project is focused on improving existing quality not capacity. The project will enable Ferndale Refinery to meet 2020 International Maritime Organization (IMO) fuel standards. Please see the SEPA Narrative for more details.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The completed project does not impact agricultural and forest practices on roads, as the completed project will not generate any additional vehicular trips per day. The project is focused on improving existing quality not capacity. Please see the SEPA Narrative for more details.

- h. Proposed measures to reduce or control transportation impacts, if any:

None are proposed.

The completed project does not generate any additional vehicular trips per day, as the project is focused on improving existing quality not capacity. Please see the SEPA Narrative for more

details.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None are proposed

16. Utilities

a. Utilities currently available at the site:

Electricity, natural gas, PUD water, steam, refuse service, telephone, cable, sanitary sewer, septic system and waste water treatment plant currently available at the Ferndale Refinery.

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electrical service provided by Puget Sound Energy.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee Ken Morrill

Position and Agency/Organization Phillips 66 Project Manager

Date Submitted: 4/12/19 ammended 5/15/19 and 8/15/19

 8/16/19

D. Supplemental sheet for nonproject actions

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.



- Vicinity Map

 Subject Area
 -APN# 390133 197340

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June 2019

