

1. Removal of the description of the compressor station from the SCA:

Please provide information and/or references to demonstrate that construction of the compressor station outside of EFSEC jurisdiction will undergo environmental review by another agency, if such review has not already occurred. Please provide contact information for the agencies that would be/were involved in that review.

BP Pipelines is considering construction of a compressor station at the head of the Ferndale pipeline on agriculturally zoned land located near Sumas, in unincorporated Whatcom County. Under the Whatcom County Zoning Code, a conditional use permit is likely to be required. See Whatcom County Code 20.40.150. A County building permit will also be required. In connection with these permitting actions, Whatcom County would be required to comply with SEPA and perform the appropriate environmental review.

The compressor station will be powered by electricity. As a result, there will be no air emissions and no air permit required. It is anticipated that the compressor station will be sited so as to avoid any impacts to wetlands.

Whatcom County contact information:

Whatcom County Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226
Phone (360) 676-6907
Robert Martin, Land Use Services Division Manager
Martin Blackman, SEPA Administrator

2. Temporary construction foot print of Phase II:

The Application anticipated several temporary construction areas for the project. If BP proceeds with Phase II, would they need new temporary construction areas? (i.e. new disturbance to habitat or wetlands). If yes, would this be a type of issue that would require additional environmental analysis by EFSEC? In BP's opinion, would this situation require amendment of the SCA?

At this time, BP does not believe that Phase II construction would require any new temporary construction areas. BP anticipates that Laydown Areas 1, 2 and 3 developed during Phase I would provide the necessary construction areas for Phase II, even after completing the restoration plans for Laydown Area 2. If additional temporary working construction areas were required, BP would provide EFSEC with the relevant environmental information and seek approval from the Council.

3. Restoration of wetlands and wetland buffers after completion of Phase I:

The Wetlands Compensatory Plan anticipated that wetlands and wetland buffers impacted by temporary construction areas (specifically the "Restoration Area" per article IV B.1.b of the SCA) would be restored after construction of the project was completed. Will this restoration take place upon the completion of construction of Phase I?

Yes. This restoration will take place after construction of Phase I is completed.

4. Aqueous ammonia storage:

Please provide the anticipated size of the storage tanks, and a description of the proposed measures and BMPs for spill control. Will the switch to aqueous ammonia affect the number of truck deliveries to the project during operation, and if yes, how? In BP's opinion, will this be a significant environmental impact?

The SCA authorizes the Cogeneration Project to use and store anhydrous ammonia. Anhydrous ammonia usage for the 3x1 720MW project was estimated to be 940,000 lbs/year or about 170,000 gallons/year. The original application assumed that delivery of this ammonia would require about 23 truck deliveries using 8,000 gallon tanker.

In the proposed phased approach, the Phase 1 facility would average about 680,000 lbs/year of ammonia. However, the ammonia would be delivered and stored as aqueous ammonia, diluted with water to a concentration of 19%-29.4%. As a result, the project would use between 310,000 and 460,000 gallons/year of aqueous ammonia solution a year, respectively. Delivery of this ammonia solution would require 40-60 truck trips per year, assuming 8,000 gallon tanker trucks were used. The original application assumed that anhydrous ammonia delivery would require approximately 2 truck trips per month. In contrast, aqueous ammonia delivery will require about 4-5 truck trips per month depending upon the ammonia concentration used. The additional 1 ammonia delivery truck every 10-15 days would not be significant considering that an average of 60 trucks currently make deliveries to the refinery each day (ASC Appendix I Attachment A).

In the original application, BP proposed using a horizontal anhydrous ammonia storage tank with a capacity of 12,000 gallons having a diameter of 7 feet and a length of 45 feet (ASC Appendix F Table 5.3-5). BP now proposes to store aqueous ammonia in a tank having a capacity between 25,000 and 37,000 gallons, with an estimated diameter between 13 and 16 feet and a height of about 25 feet. The size and capacity of the tank would depend upon the concentration of ammonia used and the final Phase I design. A spill containment facility such as a concrete wall will be provided around the ammonia storage tank capable of holding the liquid volume of the tank plus rainwater. The truck unloading area will be curbed to prevent the aqueous ammonia from entering the sewer system if a spill were to occur during truck unloading.

5. Construction Traffic:

Whatcom County Planning officials have recently indicated that the County may be implementing a number of road projects in the vicinity of the BP refinery and the Cherry Point Cogeneration facility. Some of these activities may coincide with the construction of Phase I. Please explain how BP proposes to consider and coordinate these County activities with traffic plans that need to be developed for the Cogeneration Project.

SCA section IV.E. requires the certificate holder to prepare a construction traffic management plan and submit it for EFSEC's approval prior to commencing construction. BP will coordinate with Whatcom County in developing that traffic management plan. In particular, BP will coordinate with County officials (Joe Rutan, public works, and John Everett, transportation planner) to address any complications presented by nearby County road projects that may coincide with project construction.

6. Construction Impacts of Phase II:

If construction of Phase II is initiated at a later date, certain temporary construction impacts identified in the final EIS would occur again, even if no new footprint is developed for the project. For example: construction noise; impacts to visual resources due to construction activities; construction traffic; construction air emissions; impacts to stormwater due to erosion or runoff; and consumption of energy

and natural resources. Please describe the significance of environmental impacts for Phase II in each of these areas, as they relate to EFSEC's review of the request to amend the SCA.

If the Cogeneration Project is constructed in two phases, some of the types of impacts associated with construction considered in the original application and EIS would occur twice. However, the extent of those impacts during Phases I and II would likely be less than the extent considered in the original EIS because the construction associated with each phase would be less than construction of the entire project. Although BP has not determined what type of additions and modifications to the Project might be included in Phase II, the following paragraphs discuss the potential impacts associated with Phase II construction.

Construction Noise. The noise associated with construction of Phase II is likely to be less than the noise associated with constructing the entire 720 MW project, which was evaluated in the original application and EIS. As discussed in the EIS, noise associated with construction activities is highly variable and is exempt from Washington State noise standards, with the exception of residential locations between the hours of 10 p.m. and 7 a.m. As required by the SCA, construction contractors will use industry standard noise attenuation controls to mitigate noise impacts, and will limit loud construction activities to daytime hours (7 a.m. to 10 p.m.). Given the Project's location in a heavy impact industrial area, BP does not anticipate significant impacts from noise during construction of Phase II. The potential for impacts to wildlife, including the heron colony, from construction noise were considered during the original siting proceedings and found to be insignificant.

Visual Resources. The visual impact associated with Phase II construction is expected to be minor. The EIS concluded that the visual impacts associated with constructing the entire 720 MW facility would be low to moderate given the small size of the project relative to the larger industrial surroundings. Construction of Phase II is expected to result in a smaller visual disturbance than Phase I due to the smaller amount of earthmoving activities likely required on the already-developed site. Furthermore, the landscaping and tree plantings that will take place between the project site and Grandview Road as part of the Phase I construction will provide some visual screening and for Phase II construction and operation activities.

Construction Traffic. Traffic impacts associated with Phase II constructions are expected to be considerably less than those evaluated in the original application and EIS. At this time, BP does not know what additions and modifications to the project may be included in Phase II, but the project footprint will already have been developed in Phase I and a majority of the facility capacity will have been constructed in Phase I. Phase II construction will result in some construction traffic, but the mitigation measures agreed upon with WSDOT for the original project are expected to be adequate for Phase II construction as well. Prior to commencing construction of Phase II, BP would prepare a construction traffic management plan for EFSEC's approval.

Construction Air Emissions. Air emissions associated with Phase II construction are not expected to be significant. Construction activities may result in some fugitive dust emissions as well as emissions associated with construction equipment and construction-related vehicle traffic. Given the smaller scope of Phase II, these impacts are expected to be considerably less than those considered in the original application and EIS. The mitigation measures identified in the EIS and required by the SCA will be implemented during Phase II construction. The air emissions during construction of Phase II would also be reduced by air emission mitigation strategies implemented for Phase I operations, such as the paving of roads and parking areas.

Construction Stormwater. Stormwater impacts associated with Phase II construction are not expected to be significant. The project site will be developed during Phase I construction. Phase II construction

is not expected to entail substantial soil disturbing activities. Sediment and erosion control BMPs and a Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented if required. BP also expects that the SWPPP and associated facilities implemented for Phase I operations would reduce the potential storm water impacts during construction and operation of Phase II.

Consumption of Energy & Natural Resources. Construction of Phase II is expected to consume only a portion of the energy and natural resources that the EIS estimated would be consumed by construction of the entire 720 MW project.

7. Construction Plans for Phase II:

The current SCA anticipated a “single round” of construction plan submittals to EFSEC for a project that was to be built out in a single phase. Please describe how BP envisions construction plan review for Phase II, and what changes/additions might be needed to the SCA to reflect this requirement.

BP anticipates submitting plans relating to Phase I prior to construction of Phase I, and submitting plans relating to Phase II prior to commencing construction of Phase II. We realize that the red-line of the SCA that BP submitted with its amendment request did not address this issue. We are attaching a revised red-line with proposed changes that would clarify this point.

8. Waste Water Discharge :

Section 7.0 of the description of the amendment (Water Usage and Waste Water Discharge) describes how the volumes of waste water will change with the implementation of Phase I alone. Please state whether the concentrations of regulated pollutants in the waste water for Phase I will be the same or different from the concentrations provided to EFSEC in the Application for Site Certification, and used as a basis to issue the Waste Water Disposal Permit (Attachment 5 to the SCA) . Please also state whether the changes in waste water discharge are expected to cause any adverse effects on the operation of the refinery’s wastewater treatment system. Finally, please confirm that Phase I waste water discharges will continue to meet the conditions laid out in Attachment 5 of the SCA.

Both the quantity and concentrations of regulated pollutants in discharged water from the Phase I facility will be less than or equal to those of the permitted project. The original application assumed that 10-15 cycles would be used and calculated the amount of blowdown to be 131-203 gpm. The Waste Water Disposal Permit was based upon the maximum concentrations at 15 cycles. Under the alternative project description, the Phase I project is expected to use 8-10 cycles of concentration. As a result, wastewater discharge is not expected to adversely affect the operation of the refinery's wastewater treatment system, and Phase I discharges will comply with the conditions set forth in Attachment 5 of the SCA.

¹ See for example the Fact Sheet issued November 2003 for a proposed State Waste Discharge Permit for the Cogeneration Project.