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