

## **Responses to Comments in Letter USR6 from Connie Hoag, United States Resident**

*Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the preceding comment letter.*

- 1-3. These comments are outside the scope of this SEIS.
4. The reverse osmosis process would result in concentrating most of the chemicals in the cooling tower blowdown. Chemical concentrations would typically increase about four-fold as a result of this processing, although a few chemical concentrations would be reduced or eliminated from the waste stream, including iron, and chlorine and CL 2 corrosion inhibitor. Based on the projected chemical analysis of the cooling tower blowdown, wastewater from S2GF would comply with requirements governing admission of waste into the city of Sumas public sewers. The projected concentrations would also comply with the Fraser Valley Regional District ordinance regarding waste strength, which is mandated under the contract between the city of Sumas and the city of Abbotsford. The JAMES treatment plant, where the waste would be processed, is equipped to treat waste for the constituents and concentrations that would be derived from the S2GF waste stream. Should S2GF be approved by the governor of Washington State, it would be required to meet the city of Sumas regulations for discharge to the city public sewer system. The city, likewise, is required to meet the regulations that apply to its sewer discharge, as it is regulated by the appropriate jurisdiction.
5. Laxton and Judson Lakes are beyond the area of any potential drawdown based on pumping test data from the Sumas city well fields. Therefore, there would be no impact on the lakes regardless of whether they are spring fed and perched or in direct hydraulic connection with the water table. The zone of contribution in Figure 3.2-1 shows the groundwater flow path to the city wells rather than the zone that would be affected by pumping the wells. The intent of this figure is to show where the water supply used by the city wells comes from, roughly how long it takes to get there, and the types of land uses that could ultimately affect water quality in those wells, or in any wells that draw water from this part of the aquifer.
6. Recent studies by Environment Canada indicate that much of the aquifer in the area northwest of the city of Sumas wells is contaminated with nitrates at concentrations above the drinking water quality standards of Washington and Canada. The S2GF would not contribute any nitrates to the groundwater. Rather, its financial contribution to the city of Sumas for aquifer protection may help in finding ways to reduce the sources of the contamination.

7. As described on page 2-17 of the Draft SEIS, the peak demand of 802 gpm is estimated based on an 833-gpm cooling water makeup (minus approximately 47 gallons that would be recycled on site) plus a 16-gpm boiler makeup and miscellaneous system demand, for a total of 802 gpm. The peak water usage is based on the design requirements for cooling. The maximum water use for cooling would occur when the air temperature exceeds 59 degrees F.
8. The applicant has committed to providing mitigation for any wells that experience a reduction in water supply resulting from increased pumping that would be required to supply water to the S2GF. While monitoring of wells within the 1-mile radius shown in Figure 3.3-1 provides a starting point for groundwater monitoring, the applicant has also committed to conducting hydrologic testing prior to project startup to evaluate whether there are areas outside of the 1-mile radius where monitoring should be performed to determine if there has been any impact.
9. Please see the response to Comment 8 regarding your concern about drawdown. With regard to water quality, please see the response to Comment 6. With regard to mitigation measures affecting other wells, such impacts are considered very unlikely. Review of proposed mitigation measures by EFSEC would provide an additional safeguard in selecting mitigation measures that would be protective of other water users in the immediate vicinity.
10. Based on the hydrogeologic data available from the pumping tests at the city well fields, no impact on surface water discharge would be expected to result from the additional pumping required for S2GF. The only surface water discharge likely to be affected is a spring that is currently and would continue to be mitigated by the city in compliance with its water right. The water right requires that 18% of the water extracted from a nearby well (which reduces the spring flow by a comparable volume) be returned to Johnson Creek, which is fed in part by this spring.
11. The Final SEIS recommends conditioning the project to levels that would comply with the Oregon State low-frequency noise limits. This standard would apply to all existing dwellings (regardless of the land use zoning at the dwelling) and to all parcels zoned "Residential" (regardless of whether there is an existing dwelling on the parcel). As described in Section 3.4 of the Final SEIS, the document recommends that SE2 be required to complete two noise control mitigation steps before it would be allowed to operate the plant: 1) submit 50% and 90% design packages to confirm it is designing adequate noise control into the facility design; and 2) conduct post-startup monitoring to demonstrate actual compliance with the limits. In that case, it would not be critical that SE2 did not conduct either baseline low-frequency noise measurements or predictive modeling of low-frequency noise as part of the application process.

As described above, the low-frequency noise limit would apply at all existing dwellings, regardless of the land use zoning at the dwelling.

This recommended revised noise mitigation would require SE2 to rigorously demonstrate compliance with the Oregon State low-frequency limits for the 32 Hz and 64 Hz octave bands. Currently, there is little engineering data or relevant regulatory limits on the 16 Hz octave band, so there is no reasonable basis for establishing ambient noise limits for that octave band. The Final SEIS concludes that if SE2 complies with the Oregon State ambient limits at the 32 Hz and 64 Hz octave bands, then it will have reasonably assured there are no significant impacts due to low-frequency noise.

The last paragraph of this comment is outside the scope of this SEIS.

12. This comment is outside the scope of this SEIS.
13. The Final SEIS recommends that the Oregon State limits for low-frequency noise should be established as a special condition in the ASC so that all parties recognize the limit before SE2 begins detailed design of the noise control measures. The ambient limits would apply to all existing dwellings (regardless of the land use zoning at the dwelling) and to all parcels zoned “Residential” (regardless of whether there is an existing dwelling on the parcel).
14. The issues of concern in the first paragraph of this comment are addressed in the SEIS Appendix A, Section 401 Technical Evaluation Memorandum (Section 2.4, Mitigation Site Selection).

The second paragraph of this comment is outside the scope of this SEIS.