Request for Additional Information
Western Nuclear, Inc., Split Rock Mill Site

Comment No. 1. Provide additional information justifying that the value requested (0.05 milligrams per liter (mg/L)) for selenium is as low as is reasonably achievable (ALARA).

Basis: 10 CFR 40, Appendix A, Criterion 5B(6), states: The Commission will establish a site-specific alternate concentration limit for a hazardous constituent as provided in paragraph 5B(5) of this criterion if it finds that the proposed limit is ALARA.

Discussion: Additional information should be provided as follows:

> A discussion focused specifically on selenium that discusses a cost-benefit analysis of cleaning up to a lower limit. The discussion on alternatives provided on February 7, 2009, (e.g., references to the original October 29, 1999, Groundwater Characterization and Evaluation Report and August 29, 2006, U.S. Nuclear Regulatory Commission (NRC) Environmental Assessment) does not specifically discuss the currently requested selenium limit as being ALARA.

Comment No. 2. Provide updated information identifying the recent surface water and groundwater users within 5 miles of the site.

Basis: 10 CFR 40, Appendix A, Criterion 5B(6)(a), refers to the Commission considering the proximity and withdrawal rates of groundwater users as part of its review.

Discussion: Additional information should be provided as follows:

> List the current surface and groundwater users within 5 miles of the site, the type of use, and the withdrawal rates. If there has been no change in surface water users from the NRC's August 29, 2006, Environmental Assessment, please state so. Please provide references, if applicable.

Comment No. 3. Confirm that selenium is not expected to travel outside of the impoundment above the requested value (0.05 mg/L) given that values at well WN-42A have, in the recent past, approached this value.

Basis: 10 CFR 40, Appendix A, Criterion 5B(6), discusses that site-specific alternate concentration limits will be established if the constituent will not pose a substantial present or potential hazard as long as the alternate concentration limit is not exceeded.

Discussion: In Western Nuclear, Inc.'s (WNI's) license amendment request dated December 1, 2008, it is stated that, "Concern has been raised about the concentration of selenium in well WN-42A which is a monitoring well down-gradient from [Point of Compliance] POC well 5. Values in WN-42A have been as high as 0.042 mg/l. Recent samples taken in April 21, 2008, had a selenium concentration of 0.028 mg/l. Given the

recent sample value it is believed that well WN 42A and all other wells will continue to have selenium values less than the proposed standard of 0.05 mg/l." Given that the February 26, 2009, Groundwater and Surface Water Sampling Report lists well WN-42A as having a selenium concentration of 0.036 mg/L, please demonstrate that well WN-42A will not exceed the requested ACL value of 0.05 mg/L in the future. Additional information should be provided as follows:

(1) Demonstrate through a model, or other empirical method, that the selenium values for well WN-42A will not exceed the value of 0.05 mg/L. It is acceptable to submit the model discussed in the December 1, 2008, license amendment request.

(2) In the referenced October 29, 1999, Groundwater Characterization and Evaluation Report, it is stated that, "concentrations of the constituents are not anticipated to exceed these protective values beyond the edge of the tailings reclamation cover in the future," in regards to selenium. The protective value was listed in Table 17 of the October 29, 1999, report as 0.05 mg/L. However, Table 3 of the same report lists the highest concentration of selenium beyond the tailings area as 0.061 mg/L. A clarification of this point is requested.

Comment No. 4. Is the fact that wells SWAB-1 and SWAB-12 contain insufficient water to provide a valid sample, as stated in your February 26, 2009, Surface Water and Groundwater Monitoring Report, change WNI's conclusions on aquifer flow and transport?

Basis: 10 CFR 40, Appendix A, Criterion 5D, discusses the need for a corrective action program after the Commission finds that standards have been exceeded.

Discussion: Given that an alternate concentration limit was set for uranium on September 28, 2006, and both wells SWAB-1 and SWAB-12 are potentially in the path of the expected plume, WNI should state whether or not conclusions obtained through transport modeling are still valid, and will not be adversely affected by wells SWAB-1 and SWAB-12 having insufficient water to provide a valid sample. Additionally, since well SWAB-12 is the closest well to the point of exposure and Jeffrey City, Wyoming, WNI should assess whether this well is functioning properly, and that groundwater is being properly protected. Additional information should be provided as follows:

(1) Discuss whether the insufficient water to sample wells SWAB-1 and SWAB-12 is detrimental to transport models.

(2) Empirical information supporting the response to (1).

(3) Discuss whether well SWAB-12 is constructed at the proper depth and its current condition is functional, or information showing that repairs to the well are planned or have been made.

Comment No. 5. Clarification is requested on your March 9, 2009 letter that requested to keep the standard for beryllium at the point of compliance wells at 0.05 mg/L.

Basis: In your previously submitted October 29, 1999, Groundwater Characterization and Evaluation Report, it discusses the fact that the value of 0.01 mg/L for beryllium is essentially at background.

Discussion: Given that background for beryllium has previously been stated by Western Nuclear Inc., as being 0.01 mg/L, please provide additional justification as to why 0.05 mg/L is an acceptable value, or modify your request to match previous statements.