



State of Utah

Department of  
Environmental Quality

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April 28, 2006

Mr. Harold Roberts  
Vice President – Corporate Development  
International Uranium (USA) Corporation  
1050 Seventeenth Street, Suite 950  
Denver, CO 80265

Re: January 31, 2006 IUC Submittal Regarding Tailings Cell 4A Lining System Design  
Report: **Request for Additional Information – Completeness Review.**

Dear Mr. Roberts,

We have reviewed your January 31, 2006 submittal, which included January, 2006 report by GeoSyntec Consultants, referenced above. This completeness review was conducted by the URS Corporation on behalf of the DRC.

From this review we have found a number of information items that need to be addressed and resolved. The purpose of this letter is to bring these issues to your attention, so that the review can continue forward.

The open issues can be summarized as follows:

1. NRC Criterion 5(A) Concerns – additional information is needed to show how the proposed design satisfies the requirements or 10 CFR 40 Appendix A, Criterion 5(A), which are required by reference in the DRC regulations found in UAC R313-24-4.
2. Best Available Technology Requirements – additional information is needed to demonstrate that the proposed design meets the Best Available Technology (BAT) requirements under the Utah Ground Water Quality Protection Regulations (UAC R317-6-1.3 and R317-6-6.4A). In general these information needs include, but are not limited to:
  - a. Allowable Leakage Rate – additional justification is needed to determine the maximum allowable flow rate from the Leak Detection System (LDS), which will require additional

calculations, based on site specific conditions. Reference to appropriate guidance documents has been provided in the attached URS comments. In these calculations please ensure that they are based on a maximum LDS head of 1-foot.

- b. Secondary (Composite) Liner Stability – the proposed design includes a composite liner (HDPE membrane and geosynthetic clay liner [GCL]) beneath the LDS. Please provide additional information regarding the hydraulic performance and stability of the GCL in the presence of the high acid content of the leachates. In the event that IUC is unable to make a satisfactory demonstration, the GCL may be replaced with an engineered clay that is at least 1-foot thick and has a maximum field permeability of  $1.0E-7$  cm/sec.

The basic concepts for these BAT issues were derived from the references cited in the URS Completeness Review, and have been applied previously by DRC to another uranium mill in Utah (see December 28, 1998 Draft Ground Water Quality Discharge Permit and Statement of Basis (SOB) for the Plateau Resources Limited mill near Ticaboo, Utah).

Please revise your January 31, 2006 submittal to resolve the questions and issues outlined in the attached April 28, 2006 URS Completeness Review.

After receipt of the revised submittal, we will be happy to renegotiate the schedule outlined in the April 18, 2006 Memorandum of Agreement, if necessary.

If you have any questions or concerns regarding this Completeness Review, please call me at 801-536-4262. We would also be happy to meet with you or your consultants to discuss these issues further.

Sincerely,

Loren B. Morton

LBM:lm

attachment

cc: Britt Quimby, URS

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File: IUC Cell 4A Re-lining Project