

October 13, 2009

Douglas Mandeville, Project Manager
Uranium Recovery Licensing Branch
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection,
Office of Federal and State Materials and Environmental Management Programs,
US Nuclear Regulatory Commission
Two White Flint North, MS T8 F5
11545 Rockville Pike
Rockville, MD 20852

RE: ADDITIONAL INFORMATION REQUESTED FOR THE MOORE RANCH
IN SITU URANIUM RECOVERY PROJECT LICENSE APPLICATION
ENVIRONMENTAL REPORT

Dear Mr. Mandeville:

By letter dated March 23, 2009, the U.S. Nuclear Regulatory Commission (NRC) staff provided a request for additional information (RAI) to complete review of the license application Environmental Report for the Moore Ranch In Situ Uranium Recovery Project. By this letter, Energy Metals Corporation (US) dba Uranium One Americas (Uranium One) is submitting responses to the following RAI's:

Surface Water and Wetlands

1. TR Section 2.7.3. Surface Waters
2. TR Section 2.8.5.2 - Wetlands

Each response provides the RAI question prepared by NRC with any clarifications provided by Staff, the answer prepared by Uranium One, and the proposed changes to the License Application. A summary of the proposed changes to the Technical and Environmental report are as follows:

Environmental Report:

Wetlands

Remove ER Figures: 3.5.5-2 Wetlands Map
3.5.5-3 through 3.5.5-8 (dated 9-4-07)

Insert ER Figures: 3.5.5-2A (new - dated 9-1-09)
3.5.5-2B (new - dated 9-1-09)
3.5.5-3 through 3.5.5-8 (updated 9-1-09)

Remove ER Table 3.5-14 (dated 9/07)

Insert ER Table 3.5-14 (updated 9/09)
3.5-15 (new table - dated 9/09)

Surface Water Quality

Remove Tables: 3.4.2-5 through 3.4.2-15

Insert Tables: 3.4.2-5 through 3.4.2-18 (updated - 9/09)

Technical Report:

Wetlands

Remove TR Figures: 2.8.5-2 Wetland Map
2.8.5-3 through 2.8.5-8 (dated 9-4-07)

Insert TR Figures 2.8.5-2A (new - dated 9-1-09)
2.8.5-2B (new - dated 9-1-09)
2.8.5-3 through 2.8.5-8 (updated 9-1-09)

Remove TR Table 2.8-14 (dated 9/07)

Insert TR Tables 2.8-14 (dated 9/09)
2.8-14a (new - dated 9/09)

Surface Water Quality

Remove TR Table 2.7.3-1 through 2.7.3-11 (dated – 9/07)

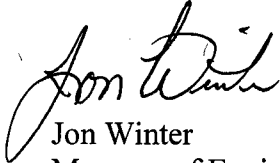
Insert TR Table 2.7.3-1 through 2.7.3-11c (updated 9-1-09)

The response to RAI question in Groundwater, Section ER 4.4.2.3.2 – Wellfield Spills is being addressed through modeling and will be submitted under separate cover upon completion.

Changes to text and table of content (TOC) for the added tables and figures listed above will be incorporated into the revisions to both the Environmental and Technical Reports.

If you should have any questions on these responses, please contact me by phone at (307) 234-8235 ext. 331 or by email at jon.winter@uranium1.com.

Sincerely,
Uranium One Americas



Jon Winter
Manager of Environmental and Regulatory Affairs, Wyoming

Enclosures: RAI Response Summary
ER Figures 3.5.5-2A, 3.5.5-2B, and 3.5.5-3, through 3.5.5-8
ER Tables 3.5-14 and 3.5-15
ER Tables 3.4.2-5 through 3.4.2-18
TR Figures 2.8.5-2A, 2.8.5-2B and 2.8.5-3 through 2.8.5-8
TR Tables 2.8-14 and 2.8-14a
TR Tables 2.7.3-1 through 2.7.3-11c

cc: Behram Shroff, NRC (without enclosures)

TR 2.8.5.2 Wetlands

RAI Question

The information on wetlands provides a brief overview of their geophysical condition. However, this section lacks completeness in terms of data needed to document field conditions and to satisfy regulatory requirements. Wetlands were assigned Cowardin classifications, but no map was provided showing the differing wetlands. Please identify on a map the Cowardin classification for each wetland and surface water feature. For purposes of determining impacts, provide an inventory and specify on a map exactly which areas are vegetated wetlands (palustrine emergent wetland) and which areas are un-vegetated (palustrine unconsolidated bottom or palustrine open water) systems.

Answer:

Wetlands Maps presented in Section 2.8.5 have been revised. Maps now depict the Cowardin classifications and which features are palustrine emergent wetlands, palustrine unconsolidated bottom or palustrine open water systems.

Proposed Revisions to License Application

Wetlands maps in the Technical Report and Environmental Report have been revised to reflect the comments above. New or replaced wetlands maps include; TR Figures 2.8.5-2A (new), 2.8.5-2B (new), 2.8.5-3, through 2.8.5-8.. ER Figures 3.5.5-2A (new), 3.5.5-2B (new), 3.5.5-3, through 3.5.5-8.

Wetland Tables in the Technical Report and Environmental Report have been revised to reflect the comments above. New or replacement wetland tables include; TR Table 2.8.14 (replacement) 2.8.14a (new). ER Table 3.5-14(Replacement), 3.5-15 (new)

TR 2.7.3.1, No. 1 & 2 Surface Water Quality

RAI Question

Information is incomplete on surface water quality to fully understand existing site conditions.

1. The ER states on page 3.4-17 that “no information on surface water was available for sites MRSW-10 and MRSW-11.” This information is needed to assess environmental impacts to surface water surrounding the project.

Answer:

Surface water quality data has been updated in ER Tables 3.4.2-5 through 3.4.2-18 to include data for MRSW 10 and 11. Updated TR Tables 2.7.3-1 through 2.7.3-11c to include MRSW 10 and 11.

Proposed Revisions to License Application

ER surface water quality Tables 3.4.2-5 through 3.4.2-18 have been revised and will be incorporated into the revised Environmental Report.

2. Reference is made in the TR regarding water quality sampling data collected in the third quarter of 2007. Please provide these results with a summary statement.

Answer:

See response to Question #1 above.

Proposed Revisions to License Application

See response to Question #1 above.

ER 4.4.2.3.2 Wellfield Spills

RAI Question

While the ER discusses the measures that will be taken in an effort to minimize the potential for a wellfield spill or other unintended release, analysis of the potential impact of any such release on shallow groundwater quality has not been provided. An analysis of the potential impact of a release at the surface on shallow groundwater should be provided. This analysis should include considerations such as depth to the water table, the permeability of the materials in the unsaturated zone, the potential adsorption of constituents in unsaturated zone materials, and the volume of any potential releases.

Answer::

Modeling exercise to address this question is currently being developed and will be submitted upon completion.

Proposed Revisions to License Application