



**THE  
NAVAJO  
NATION**

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**PRESIDENT**  
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July 15, 2003

United States Nuclear Regulator Commission  
Document Control Desk  
Washington, DC 20555-0001

**Attention: Susan M. Frant, Office of Nuclear Material Safety and Safeguards**

**RE: Comments on Nuclear Regulatory Commission Review of Shiprock Remedial Activities**

This is in response to Nuclear Regulatory Commission's (NRC) analysis of the Final Groundwater Compliance Action Plan (GCAP) at the Shiprock, New Mexico UMTRA Site (The Site). The letter dated May 12, 2003 was address to Don Metzler, US Department of Energy (DOE).

The final sentence in the second paragraph of the Floodplain Technical Evaluation appears inconsistent with the results in the GCAP, namely: "Groundwater modeling based on active pumping and subsequent natural flushing of the floodplain predicts that the COCs will be within acceptable levels within 60 years." Clarification should be made that the active pumping discussed is from the slurry wall sumps. Based on the study generated by Navajo UMTRA's consultant titled Results of Groundwater Modeling at the Shiprock UMTRA Site (Knight Piesold, 2002), the model does not predict that pumping the floodplain well with natural flushing will meet regulatory requirements within 100 years. Knight Piesold's report was prepared by Larry Breckenridge and Cory Conrad, both Navajo UMTRA's groundwater modelers, and Mark Kautsky, the primary DOE groundwater modeler based on a month of intensive cooperative effort. The modeling results showed that the only way the floodplain could meet regulatory requirements was with the creation of a slurry wall at the base of the escarpment. Furthermore, the slurry wall must remain in place indefinitely and must be breached to the north so that the remaining long-term groundwater discharge from the terrace can mix with underflow from Bob Lee Wash.

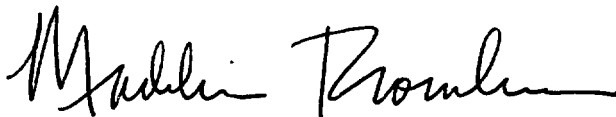
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Although Navajo UMTRA is pleased with the current progress on site including the current Phase I monitoring activities, we must restate to the NRC and DOE that the current Phase I has not been predicted to meet regulatory requirements.

The "observational approach" adopted by the DOE is also acceptable to Navajo UMTRA; however, in the interests of accurate long-term planning, the slurry wall should remain the likely and necessary remedial alternative. Only if the current Phase I efforts yield extraordinary results, and these results are predicted by a revised model to meet regulatory requirements, removal of the slurry wall from the long-term plans can be addressed.

If there are any questions, please contact Terri Lameman, Hydrologist or Levon Benally, Environmental Specialist at 928-871-6982.

Sincerely,

A handwritten signature in black ink, appearing to read "Madeline Roanhorse". The signature is fluid and cursive, with the first name being more prominent.

Madeline Roanhorse, Department Manager  
Navajo AML Reclamation / UMTRA Department

cc: D. Metzler, DOE – GJO