

March 10, 2000

Mr. Donald R. Metzler
U.S. Department of Energy
Grand Junction Office
2597 B³/₄ Road
Grand Junction, CO 81503

SUBJECT: ACCEPTANCE OF THE FINAL PHASE I GROUND-WATER COMPLIANCE
ACTION PLAN FOR THE URANIUM MILL TAILINGS REMEDIAL ACTION
PROJECT SITE AT TUBA CITY, ARIZONA

Dear Mr. Metzler:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the U.S. Department of Energy's (DOE's) Final Phase I Ground-water Compliance Action Plan (GCAP), submitted by cover letter dated August 18, 1999, for the Uranium Mill Tailings Remedial Action (UMTRA) Project site at Tuba City, Arizona.

DOE plans to remediate the site in two phases. Phase I will include installation of extraction wells, injection wells, and an infiltration trench, extraction of ground water from the most contaminated areas of the plume and containment of the down-gradient movement of the plume. Phase II will include the expansion of remediation capacity and monitoring to ensure that aquifer restoration standards are met.

The NRC staff's review focused on the proposed ground-water remediation strategy for compliance with 40 CFR Part 192 and the technical information presented in support of this strategy. DOE has proposed a combination of active remediation strategies to remediate ground-water quality at the Tuba City site. The proposed strategy combines the pumping alternative that uses extraction and injection wells and an infiltration trench with distillation. Aquifer restoration standards (required by 40 CFR 192) have been established for nitrate, molybdenum, selenium, and uranium and aquifer restoration goals (not required by 40 CFR Part 192, but requested by the Navajo Nation) have been established for sulfate, total dissolved solids (TDS), chloride, sodium, pH and corrosivity.

Based on its review, the NRC staff has determined that the final Phase I GCAP satisfies the requirement set forth in the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, and the regulations in 40 CFR 192 for the cleanup of ground-water contamination resulting from the processing of ores for the extraction of uranium. Therefore, NRC staff concurs with the final Phase I GCAP.

D. Metzler

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If you have any questions concerning this subject, please feel free to contact the NRC Project Manager, Melanie Wong, at (301) 415-6262 or e-mail at mcw@nrc.gov.

Sincerely,

/RA/

Thomas H. Essig, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: Technical Evaluation Report

cc: R. Plienness, DOE - GRJ
M. Roanhorse, Navajo Nation
S. Marutzky, MACTEC- ERS

D. Metzler

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