

U.S. Department of Energy

Grand Junction Office 2597 B³/₄ Road Grand Junction, CO 81503

APR 22 1998

Ms. Charlotte Abrams
High-Level Waste and Uranium Recovery Projects Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
Mail Stop T7J9
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Amendment to Supplemental Standards Application for GJ-05107-CS (Quil rete

Concrete Plant)

Dear Ms. Abrams:

This amendment addresses a deposit of residual radioactive material (RRM) commingled with Resource Conservation and Recovery Act (RCRA) listed waste. The contaminated material is located at the Quikrete packaging plant at 2462 1/2, Highway 6 and 50, in Grand Junction, Colorado. On February 11, 1997, DOE submitted to NRC and CDPHE an application for supplemental standards for the deposit of commingled waste at the subject property. The basis of this recommendation was the high cost of remedial action relative to the long-term benefits for RRM that does not pose a clear present or future hazard (40 CFR 192.21.c). The application discussed regulatory and technical uncertainties associated with treatment and disposal of this material and noted that DOE did not have the authority to manage the material. The application recommended a partial remediation alternative, under which the top 36 inches (approximately 50 cubic yards) of RRM would be removed. Assessment data indicated that this surface material should be free of RCRA-regulated materials. CDPHE and NRC concurred with the proposed remedial action alternative on February 28, 1997 and April 11, 1997, respectively.

The Remedial Action Contractor began excavation of the deposit on February 20, 1998. Between 6 and 36 inches of material was removed before chemical odors and discolored soil were encountered at which time excavation was halted. Soil samples were collected from 24 and 36 inches deep and analyzed for volatile organic compounds. Soil sample analysis results indicated that acetone was present in concentrations of 190 and 33 μ g/kg. Ground level gamma exposure rates on the surface were 14 to 25 μ R/h, after the excavation was backfilled. Approximately 32 cubic yards of RRM were removed to the Cheney Disposal Cell. Radiological soil samples were not collected before the excavation was backfilled.

DOE requests that NRC concur with the implementation of the partial remediation alternative at this property. The implemented alternative achieves the desired level of protectiveness because

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this property is within a commercial and industrial zone and gamma radiation levels were reduced to acceptable levels. Anticipated future improvements in the affected region include landscaping or paving. It is unlikely that future land uses would result in long-term human occupancy near this deposit. Enough material was removed that the property owner can proceed with improvements to the land surface above the commingled material. This implementation of the approved supplemental standards application is in accordance with Section C.5.2.4 (page C-12) of that application, which states, "If—iy commingled waste is discovered in the surface 36 inches, it will be left in place and proposed for supplemental standards."

The radiological and nonradiological data have been forwarded to the CDPHE and the property owner. Please call me at (970) 248-6004 with any questions.

·Sincerely,

Michael K. Tucker

UMTRA Project Manager

cc:

- J. Elmer (MACTEC-ERS)
- J. Hams (CDPHE-Grand Junction)
- J. Deckler (CDPHE-Denver)
- J. McSpadden (Quikrete)

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