Department of Energy
Albuquerque Operations Office
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Albuquerque, New Mexico 87115

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FEDERAL EXPRESS

Mr. Paul H. Lohaus
Branch Chief, Operations Branch
Division of Low-Level Waste
Management & Decommissioning
Office of Nuclear Materials Safety
and Safeguards
1 White Flint North
11555 Rockville Pike
Rockville, MD 20852

Dear Mr. Lohaus:

On November 20, 1989, revised pages for the Spook Final Remedial Action Plan (RAP) reflecting changes on the cleanup standards for the Spook site were transmitted to your office. A page was inadvertently left out of the transmittal and is enclosed. As with the previously transmitted text, we recommend that this page be incorporated into the Final Spook RAP and made an attachment to PID No. 13-S-03.

Should you have any questions, please contact Chris Watson of my staff at (505) 845-5657.

Sincerely,

Charles A. Brauer

Mark L. Matthews
Acting Project Manager
Uranium Mill Tailings Project Office

Enclosure

cc w/enclosure:
D. Gillen, NRC

cc w/o enclosure:
S. Hill, JEG
K. Agogino, JEG
J. McBee, JEG
R. Murphy, JEG
J. Oldham, MK-F

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4.3.6 Foundation preparation

Design detail - The foundation area for the proposed tailings pile will be prepared as follows:

- o Vegetation will be removed.
- o Loose surface materials will be excavated near the south access ramp in the pit, and will be replaced in lower areas to the north.
- o Surface boulders will be removed.
- o A three-foot-thick foundation layer will be placed and compacted at the bottom of the pit by the state of Wyoming under the AML Program.
- o Excess cut materials and all boulders will be placed and compacted in the adjacent pit areas.

Design rationale - In order to prepare a surface suitable for placement of the tailings and contaminated material and provide a stable foundation, the pit floor must be leveled and stabilized.

4.3.7 Placement of tailings

Design detail - The tailings that presently extend from the top of the high wall to the bottom of the Spook pit will be placed in the disposal area in layers and compacted. Tailings resting against the high wall inside the pit will be cut away down to the foot of the high wall per the design (Figures 4.1 and 4.2). Windblown contamination, contaminated soils underlying the tailings, mill yard soils, and the small ore piles will be placed and compacted in the disposal embankment. Materials with a Ra-226/U-238 ratio greater than 3.0 will be assumed to be tailings. Organic material and demolition debris may be incorporated in parts of the pile. The maximum percentage of organics contained within the embankment will be limited to five percent by volume and the material will be distributed in a manner that will avoid pockets or layers of organic matter. The sequence of placement of the contaminated materials in the tailings embankment is not critical for meeting the EPA criteria and will be at the subcontractor's option.

Design rationale - Tailings will be compacted to 90 percent standard Proctor in order to reduce both primary and long-term settlement. Excessive settlement could lead to deformation of the surface of the pit pile, potentially disrupting and concentrating surface-water flow. The percent compaction is based on laboratory test results which indicate anticipated settlement for calculated loadings.