



U.S. Department of Energy

200 Grand Avenue
Grand Junction, CO 81501

April 20, 2010

Mr. Richard Chang, Engineer/Project Manager
FSME Division of Waste Management and Environmental Protection
U.S. Nuclear Regulatory Commission
Mail Stop T8F5
Washington, DC 20555-0001

Subject: Moab Uranium Mill Tailings Remedial Action (UMTRA) Project Remedial Action Plan

Dear Mr. Chang:

The Department of Energy (DOE) recently identified a discrepancy in the designed thickness of a portion of the cover as presented in the final Remedial Action Plan (RAP). The plan received conditional concurrence in July 2008. The discrepancy pertains to the thickness of the planned disposal cover over a 14-foot-wide section of the residual radioactive material (RRM) located on the eastern, western, and southern edges of the cover (See Figure 1).

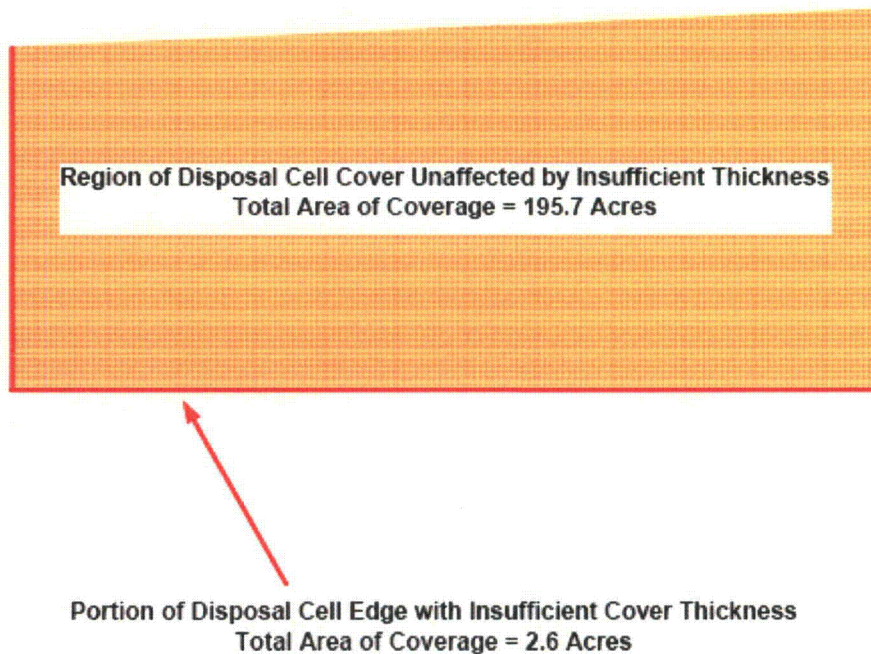


Figure 1. Location of portion of disposal cell with insufficient cover.

As designed, the sloping cell cover creates a section that is less than the intended full cover thickness as shown on drawing E-02-C-501 section B (see Figure 2).

Approximately 2,400 linear feet of RRM has been placed to the design elevation which when the cover materials are placed will have approximately 6 feet of total cover thickness rather than the intended 8.5 feet. In this area the frost protection layer would be reduced.

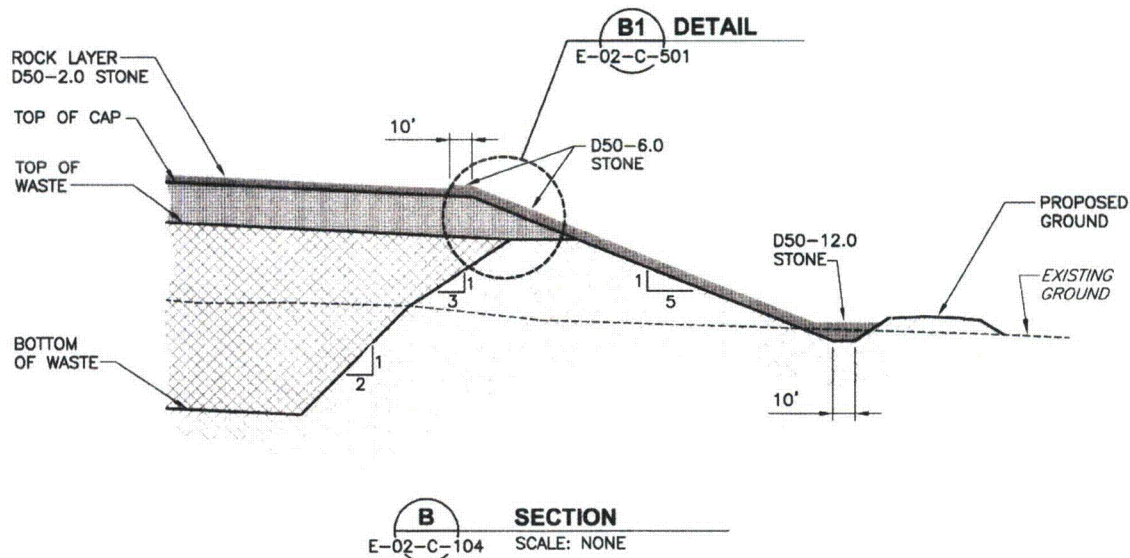


Figure 2. Radon barrier at edge of cell as per E-02-C-501.

To evaluate the impact on radon emanation of the cell cover having a reduced thickness, the DOE has performed an evaluation of the radon emanation assuming a reduced frost protection layer. The evaluation showed that though the radon flux exceed the Nuclear Regulatory Commission (NRC) radon limit of 20 pCi/m²/sec in the area of concern, the overall average flux from the eventual completed cell did not change and is under the NRC limit.

As a result, the DOE is requesting concurrence to leave the RRM already placed to the design elevation. As a best management practice, the DOE may reduce the thickness of RRM placed along the yet-to-be-filled portion of the cell, which would allow an associated increase in the thickness of the final cover to the design of 8.5 feet as shown in Figure 3. Along with this request, we would like to leave the existing drawing set in the RAP as submitted. Appropriate adjustment to the cell as-built drawings will be made and submitted with the completion report.

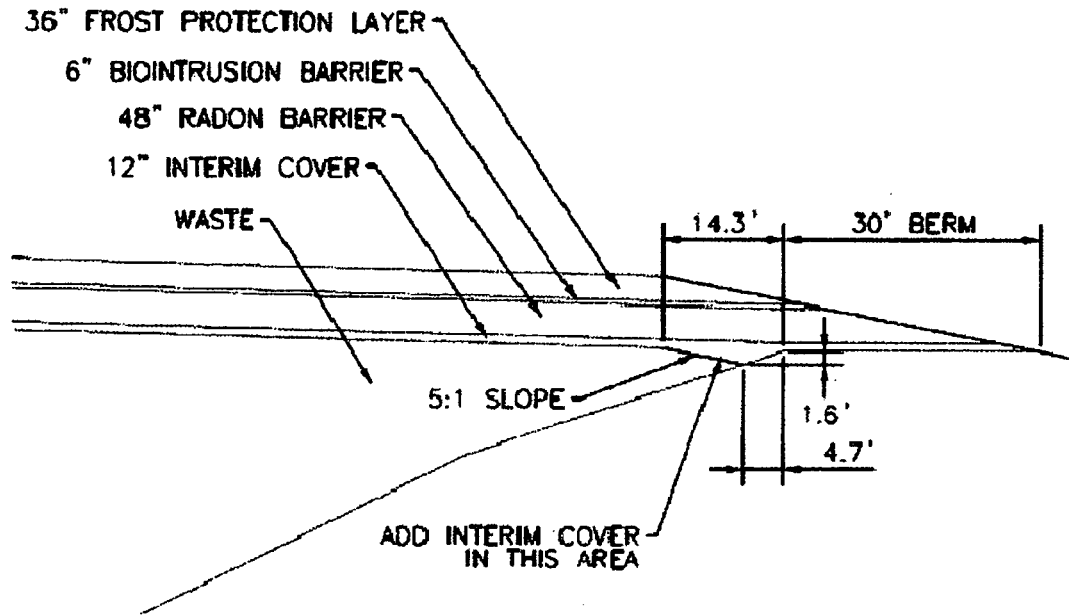


Figure 3. Profile showing reduced RRM placement and additional interim cover.

Thank you for consideration of our request. If you have any questions or require additional information, please contact me at (970) 257-2115.

Sincerely,

Donald R. Metzler
Moab Federal Project Director

- cc:
- K. Conway, NRC (e)
- J. Berwick, DOE (e)
- K. Wethington, DOE (e)
- L. Brede, RAC (e)
- J. Ritchey, TAC (e)
- Project File MOA 2.12 (C. Smith)