

FEB 23 1990

Mark Matthews, Acting Project Manager
Uranium Mill Tailings Project Office
Albuquerque Operations Office
U.S. Department of Energy
P. O. Box 5400
Albuquerque, NM 87115

Dear Mr. Matthews:

We have completed our review of the revised Radiological Engineering Assessment (REA) for vicinity property number SK-001s transmitted by your letter, dated December 18, 1989. Our review has identified several items (see enclosure) that should be clarified. We are prepared to concur with the recommended remedial action and application of supplemental standards once these items are addressed. Since you intend to defer groundwater cleanup associated with this property to a separate phase of the project and will conduct characterization and evaluation of the groundwater in conjunction with that of the Spook site, the concurrence will be conditional.

Should you have any questions regarding this review, please contact me or Dan Gillen of my staff (FTS 492-0517).

Sincerely,

Paul H. Lohaus, Chief
Operations Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS

Enclosure: As stated

cc: P. Mann (DOE, Alb.)
M. Abrams (DOE, Alb.)
J. Erickson (Wyoming DEQ)

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PDR YES
PDR NO Category: Proprietary or CF Only
ACNW YES NO
SUBJECT ABSTRACT: REVIEW OF SPOOK ACID POND REA

OFC :LLOB *DUG* :LLOB *MF* :LLOB *MF* :LLOB *MF*
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Review of Revised Radiological Engineering Assessment
for Vicinity Property SK-001s

1. Drawings SPK-PS-10-0201 through SPK-PS-10-0204 are referenced throughout the REA, but were not in this submittal. The REA should be revised to include these drawings.
2. There seems to be a discrepancy with the high end of the soil concentrations for Ra-226. Specifically, in Section 3.3 on page 2, the maximum is identified to be 870 pCi/g; in Section 4.3 on page 6, the range is identified to be 1 to 181 pCi/g. Since the data in Table 3.1 support the higher figure, it appears that the 181 pCi/g is a typographical error. The REA should be corrected.
3. The penultimate paragraph on page 4 (Section 4.3) contains the statement, "Therefore, 40 CFR 192.21(a) is applicable." This citation is the risk-of-injury supplemental standard. Since DOE's discussion addresses the supplemental standard for high cost relative to benefits, this is apparently a typographical error and the citation should be 192.21(c).
4. The discussion in Section 4.3 on pages 5 and 6 needs to be reworded to make clear the basis for DOE's postulated structure at the site of the acid pond. The discussion appears to indicate that the basis is because there is the possibility of a future residence constructed on the site, rather than that the basis is to provide a conservative estimate of radon concentrations in an open land area.
5. As part of the discussion regarding the postulated structure, DOE makes allusion to the relatively low cost option of installing a radon vent system, should a structure with a cellar be constructed. In the Addendum to Appendix E, page E-3, the last statement indicates that the deed could be or will be annotated to allow for \$2000.00 for installation of a radon vent system. It is not clear whether such annotation will take place, or who will be providing for the cost of the installation. This may be a speculative argument on DOE's part, but the resulting working levels and indication of land annotation would raise additional concerns. Since the structure is hypothetical, this addendum is not necessary and its deletion should be considered.
6. In Appendix F, on page 1 of the response to NRC's October 19, 1989 comments, DOE did not address the ALARA provision requirement of 192.22(b). DOE's changes to the text in Section 4.3 merely repeats the requirement of 192.22(b) without indicating that its cleanup activities satisfy the ALARA provisions. We note that the last response on page 3 of the response to comments seems to address the ALARA provision better than the REA text

does. Similar discussion addressing ALARA should be provided in the REA text.

7. On page 4 of NRC comments/DOE responses in Appendix F, the first DOE response indicates that "40 CFR 192.12 is not applicable to open lands." This is incorrect and should be revised to state that 40 CFR 192.12(b) is not applicable to open lands.