



Department of Energy
 Albuquerque Operations Office
 P. O. Box 5400
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WM-48

RETURN ORIGINAL TO PDR, HQ.

OCT 17 1989



Mr. Edward F. Hawkins
 Licensing Branch 1
 Uranium Recovery Field Office
 Nuclear Regulatory Commission, Region IV
 P.O. Box 25325
 Denver, CO 80225

Dear Ed,

Enclosed is a proposed Remedial Action Plan Modification (RAP Mod.) No. 2, Revision O, for the Durango, Colorado, site (Enclosure 1) for your concurrence. This RAP Mod. is to apply Supplemental Standards to steeply-sloping areas contained within the boundaries of the processing site which are contaminated with windblown tailings. The removal of this contaminated material is not justified due to the steepness of the slopes upon which the material is found. Because of this steepness:

1. It would be extremely dangerous to attempt to remove the material by ordinary construction methods.
2. If the material were removed, the removal operation would cause serious environmental harm.
3. The possibility is remote that anyone will come into contact with the contaminated material if it is left in place.
4. The cost of removal of the material would be extremely high.

The Colorado Department of Health, the owner of the processing site, has concurred in the recommendation that remediation not be performed in these areas. Supplemental standards should be applied to the residual material, based upon the criteria given in 40 CFR 192.21(a) and -(b).

Should you have any questions, please contact Elizabeth Damler of my staff at (505) 846-1224.

Sincerely,

Mark L. Matthews

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

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 PDR WASTE
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 PDC

Enclosure

cc w/o enclosure:
 D. Gillen, NRC, HQ
 C. Watson, UMTRA
 J. Oldham, MK-F
 M. Jackson, IEG

DESIGNATED ORIGINAL

By *Mary C. Hood*

DF

90-0049

PROPOSED MODIFICATION NO. 2
TO DURANGO, COLORADO, FINAL
REMEDIAL ACTION PLAN
REVISION 0, 10/04/89

A. Description

The purpose of this Modification is to establish Supplemental Standards for certain steeply-sloping areas of the UMTRA Processing Site in Durango, Colorado. The two areas are: (1) on the slopes of Smelter Mountain above the footprints of the old tailings piles and the tailings pile access roads, with a small area just to the south of the old tailings piles, between the UMTRA haul road and the Animas River, and (2) on the slope of Smelter Mountain above the UMTRAP haul road, just above the area of the raffinate ponds.

As required by 40 CFR 192.22(a), Ra-226 has been excavated to a level that is as low as is reasonably achievable (ALARA). Excavation of windblown Ra-226 from the areas for which Supplemental Standards are here sought would not be reasonable under the circumstances which exist. Therefore, it is requested that Supplemental Standards be applied for these areas.

B. Resulting changes to the RAP:

Page C-2 of UMTRA-DOE/AL 050503.0000, June 1986, Remedial Action Plan and Site Design for Stabilization of the Inactive Uranium Mill Tailings Site at Durango, Colorado. Add the following paragraph before the last paragraph of Section C.1, "Introduction":

"If Ra-226 and its decay products are present in areas on the slopes of Smelter Mountain which slope so steeply that: (1) Attempts to excavate the Ra-226 would pose a clear and present risk to excavation workers, or (2) Attempts to excavate the Ra-226 would directly produce environmental harm that is clearly excessive compared to the health benefits to persons living on or near the site, now or in the future, or (3) Both conditions apply, then the Ra-226 shall be left in place."

C. Overall Impact to Design and Complete Remedial Action

This change eliminates unnecessary danger to remediation workers and eliminates the environmental damage which would otherwise result from disturbing these steeply-sloping areas with established vegetation. The change results in low-level contamination remaining on the steep slopes of Smelter Mountain. The material is in locations where construction of structures is not likely, and the areas in which the material will be left in place adjoin Vicinity Property areas which will not be remediated for the same reasons.

D. Compliance of Revised Design with EPA Standards

The revised design, after the application of Supplemental Standards, will meet the test given by 40 CFR 192.22(a), in that it "[comes] as close to meeting the otherwise applicable standards as is reasonable under the circumstances." Therefore, the application of Supplemental Standards is appropriate.

First, excavation of this material would, in the words of 40 CFR 192.21(a), "pose a clear and present risk to [remedial action] workers" attempting to remove it. These slopes are extremely steep and extremely high, so much so that it has been estimated that remediation would cost over four million dollars merely for this comparatively small area; the high price reflects the difficulty of the work, which would require extraordinary methods of construction to allow the work to be done with a reasonable degree of safety. In addition, in the words of 40 CFR 192.21(b), removal of this material would "directly produce environmental harm that is clearly excessive compared to the health benefits to persons living on or near the site, now or in the future." It is suggested that removal of the material would produce no benefits to the health of any present or prospective resident; the site is uninhabitable, and the area is not contaminated to a degree which could affect the health of anyone nearby. Therefore, any environmental harm done by the remediation activities would outweigh the nonexistent health benefits to be gained. The environmental harm which remediation would cause can be seen by observing the pictures of the site; the established vegetation, which has taken many years to become thus established, reduces erosion of the slope (including erosion of the contaminated material, which is thus hindered from being deposited below, where people might come into contact with it). By these two criteria, therefore, it is appropriate to establish Supplemental Standards for compliance with EPA requirements.

E. Reason for Change

This change reduces the residual radioactivity to levels as low as reasonably achievable while avoiding the risk of injury to workers, as well as avoiding environmental harm which would be clearly excessive compared to any health benefits to be gained. In addition, this change avoids costs of remediation which are excessive compared to the benefit to be gained.