

WM Record File

WM Project 58

Distribution

Docket No.  
JUN 6 1985

WM s/f

WMLU r/f

NMSS s/f

JO Bunting

MJ Bell

DM Gillen

MR Knapp

JT Greeves

GN Gnugnoli

RE Browning

PDR

DMG/85/05/22

Distribution:

LPDR  
- 1 -

(Return to WM, 623-SS)

Mr. John G. Themelis, Project Manager  
 Uranium Mill Tailings Project Office  
 U.S. Department of Energy  
 Post Office Box 5400  
 Albuquerque, New Mexico 87115

Dear Mr. Themelis:

Enclosed are the signed signature pages for the Shiprock Remedial Action Plan. As we have discussed in the past, this concurrence is conditional with respect to certain unresolved issues. There are four issues still requiring resolution prior to our full concurrence in the selection of the Remedial Action Plan.

The first condition involves the characterization of ground-water contamination within the floodplain alluvium of the San Juan River. As discussed in Item 2 of my April 19, 1985 letter to you summarizing open issues, the NRC needs to review the data and proposed actions resulting from the DOE's planned ground-water characterization program in this area.

The second condition involves rock sizing of the erosion protection features of the Shiprock design (Item 3 of the April 19, 1985 letter). Details of the NRC staff's concerns on the erosion protection design were transmitted by letter dated May 17, 1985. Mr. T. Wathen of Morrison-Knudsen (MK) was given an advance copy of these comments. Prior to rock cover being placed on the pile or in the ditches, the DOE will need to receive concurrence from the NRC on the size of rocks to be used.

The third condition concerns the deficiencies in the DOE's characterization of the seismotectonic hazard that were identified in Item 4 of the April 19, 1985 letter. DOE must promptly address these deficiencies, since resolution of the seismotectonic characterization issue may impact dynamic slope stability and design. Although the present slope stability analysis (Item 1 of the April 19, 1985 letter) has been found acceptable based upon the results of our review of information provided by MK, a revised analysis may become necessary if more detailed seismotectonic characterization results in increased design ground acceleration at the site.

The fourth condition pertains to details of the radon barrier design. The remedial action plan for Shiprock presents a radon barrier and soil cover designed to be 7 feet thick. During the NRC's recent tour of five sites (including Shiprock on May 9, 1985), a set of radon barrier design calculations were delivered to Banad Jagannath of NRC by T. R. Wathen. These calculations by the Remedial Action Contractor indicate a required average thickness of 8 feet. In addition, the material identified for the cover has changed from a silty sand (in the RAP) to a sandy silt (in the specifications). The technical

OFC :WMLU: rb	:WMLU	:WMGT	:WMEG	:	:	:
NAME :DM Gillen	:DE Martin	:MR Knapp	:JT Greeves	:	:	:
DATE :85/05/	:85/05/	:85/05/	:85/05/	:	:	:

8507090472 850606

PDR WASTE

WM-58

PDR

DMG/85/05/22

JUN 6 1985

- 2 -

Assistance Contractor staff has indicated in telephone conversations that these design differences have been reconciled, and the NRC has requested the calculations pertinent to the reconciled design. Prior to completion of the radon barrier, the NRC must receive and review this information and provide DOE with concurrence in this aspect of design.

As information pertaining to any of these four issues are received and reviewed by the NRC staff, we will provide you with prompt verbal and written notice of the status of the issue. If there are any questions on these matters, please contact Mr. Daniel Gillen of my staff at (FTS) 427-4160.

Leo B. Higginbotham, Chief  
Low-Level Waste and Uranium  
Recovery Projects Branch  
Division of Waste Management

OFC	:WMLU: rb	:WMLU	:WMGT	:WMEG	:WMLU	:	:
NAME	:DM Gillen	:DE Martin	:MR Knapp	:JT Greeves	:LB Higginbotham	:	:
DATE	:85/05/23	:85/05/23	:85/06/3	:85/06/5	:85/06/6	:	:

SIGNATURE PAGE

THE UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY

BY: Theetis V. Hill  
Theetis V. Hill  
Contracting Officer  
Albuquerque Operations Office

BY: James A. Morley  
James A. Morley  
Project Manager, Uranium  
Mill Tailings Project Office

NAVAJO TRIBE

BY: Edmund T. Begay  
Navajo Nation

CONCURRENCES:

NUCLEAR REGULATORY COMMISSION

BY: Leo B. Higginbotham  
Leo B. Higginbotham  
Chief, Low-Level and Uranium  
Projects Branch  
Division of Waste Management

DEPARTMENT OF INTERIOR

BY: Wilson Barber, Jr.  
Wilson Barber, Jr.  
Area Director  
Navajo Area Office  
Bureau of Indian Affairs