

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF WASTE MANAGEMENT

Report No.: 40-8907/97201
License No.: SUA-1475
Docket No.: 40-8907
Licensee: United Nuclear Corporation (UNC)
Facility: Church Rock Mill
Location: McKinley County, New Mexico
Date: April 1, 1997
Inspectors: Kenneth R. Hooks, Project Manager and Team
Leader, Division of Waste Management, Uranium
Recovery Branch (DWM/URB)
Daniel S. Rom, Geotechnical Engineer, DWM/URB
T. L. (Ted) Johnson, Surface Water Hydrologist, DWM/URB

Approved By: Charles L. Cain, Acting Chief
Uranium Recovery Branch
Division of Waste Management

Attachments:

Attachment 1: Partial List of Persons Contacted
List of Items Opened, Closed, and Discussed
List of Acronyms

On-site Construction (88001)

Inspection Scope

The inspectors conducted a routine, announced inspection of the licensed activities as they relate to geotechnical engineering, surface water hydrology and erosion protection. The inspection consisted of review of selected records, observation of completed site reclamation activities, and interviews with UNC personnel. The inspectors performed a general site tour and more detailed observations of in-place erosion protection rock (riprap),

Observations and Findings

The inspectors reviewed construction records, including the November 1994 "As-Built Report, North Cell Final Reclamation," the June 1995 "As-Built Report, Central Cell Final Reclamation," the April 1996 "As-Built Report, South Cell Final Reclamation," and the March 1997 "As-Built Report, 1996 Final Reclamation Construction." The reports indicated that satisfactory field density was recorded for materials placed. The laboratory Proctor (moisture-density) curves did not record specific gravity, nor did they show a zero air-voids curve. This information should be included in any future laboratory test results. Review of rock production and durability test records showed failed tests as well as passed tests, as appropriate.

During the observations of surface reclamation features, the inspectors observed the rock wall barrier placed in Pipeline Arroyo to prevent drainage channel migration into the tailings pile and rock placement in the drainage channels. The inspection indicated that some areas of the North Drainage Channel riprap appeared questionable. The rock layer appeared to have inadequate thickness and inadequate rock sizes to meet specifications.

The inspectors discussed with UNC possible methods for demonstrating the adequacy of the questionable areas. UNC could provide additional riprap to meet specifications, or perform additional testing to demonstrate that adequate rock has been placed. Alternatively, UNC could perform hydraulic calculations to determine if the installed riprap is adequate, based on evaluation of original design flow rates and in-place rock size.

Conclusions

Based on review of records, it was apparent that satisfactory density was attained for material placed during the report periods. Visual inspection of the drainage channel riprap identified areas which may not meet specifications. UNC personnel indicated that they would probably perform additional tests to demonstrate compliance with specification requirements or provide additional calculations to the NRC to justify the existing rock placement.

EXIT MEETING SUMMARY

An exit meeting was conducted at the conclusion of the inspection on April 1, 1997. During this meeting, the inspectors reviewed the scope and findings of the inspection. The licensee did not identify, as proprietary, and information provided to, or reviewed by, the inspectors.

Attachment 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Velasquez, UNC
E. Morales, UNC

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None were opened in this report.

Closed

None

Discussed

None

LIST OF ACRONYMS USED

UNC	United Nuclear Corporation
URB	Uranium Recovery Branch
DWM	Division of Waste Management