

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF WASTE MANAGEMENT

Report No.: 40-8903/97201
License No.: SUA-1471
Docket No.: 40-8903
Licensee: Homestake Mining Company (HMC)
Facility: Grants Mill
Location: Cibola County, New Mexico
Date: March 31, 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

Report Details

On-Site Construction (88001)

Inspection Scope

Inspectors conducted a routine, announced inspection of the licensee's placement and repair of erosion protection rock. The staff examined areas of the main tailings pile outslope rock placement for areas of segregation or inadequate thickness, such as those identified during inspection 40-8903/95201, November 30, 1995, as possibly not meeting construction specifications. Some outslope areas were repaired by HMC and subsequently examined during inspection 40-8903/96-01, February 5-7, 1996, and some were determined to be acceptable. At this time, riprap placement had not been completed, and there were several areas that needed further rock placement. The adequacy of the repairs and the in-place density of the rock were documented in HMC's letter of November 1, 1996 "Quantitative Review of Outslope Rock."

Observations and Findings

The additional areas of riprap that were placed or repaired after February 1996 needed to be examined to determine that rock placement was acceptable and met all applicable license requirements. This inspection also provided inspectors with sufficient information to evaluate the validity of the licensee's procedures for measuring in-place rock density.

The inspectors walked several areas of the outslope and inspected those locations where test pits had been excavated to measure the in-place density of the rock. The inspection indicated that some areas of the outslope still appeared questionable and that layer thicknesses, in those areas chosen to perform the in-place density tests, may not meet specifications. Various reasons for these problems include: (1) deposition of wind-blown soils into the riprap layer; (2) inadequate layer thickness; or (3) inadequate rock size.

The inspectors discussed with HMC possible methods for demonstrating the adequacy of the questionable areas. First, HMC could perform hydraulic calculations to determine if the installed riprap (despite the questionable layer thickness and rock size) is adequate, based on evaluation of original design flow rates and the average in-place rock size. Alternatively, HMC could perform additional testing to demonstrate that adequate rock has been placed.

Conclusions

Visual inspection of the outslope erosion protection rock on the main tailings pile identified areas which may not meet specifications. HMC committed to provide additional calculations to the NRC to justify the existing rock placement, or perform additional tests to demonstrate compliance with specification requirements.

EXIT MEETING SUMMARY

An exit meeting was conducted at the conclusion of the inspection on March 31, 1997. During this meeting, the inspectors reviewed the scope and findings of the inspection. The licensee did not identify, as proprietary, any information provided to, or reviewed by, the inspectors.

Attachment 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Cellan, HMC

ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None were opened in this report.

Closed

None

Discussed

None

LIST OF ACRONYMS USED

HMC	Homestake Mining Company
DWM	Division of Waste Management
URB	Uranium Recovery Branch