

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
URANIUM RECOVERY FIELD OFFICE
REGION IV

Inspection Report: 40-8914/92-02

Operating License: SUA-1482

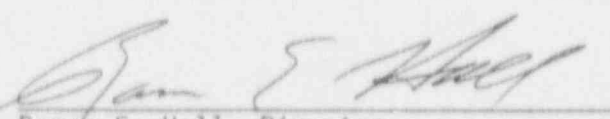
Licensee: Hecla Mining Company
6500 Mineral Drive
Box C-8000
Coeur d'Alene 83814-1931

Facility Name: Johnny M Mine

Inspection At: McKinley County, New Mexico

Inspection Conducted: November 19, 1992

Inspectors: Dawn L. Jacoby, Project Manager
Raymond O. Gonzales, Project Manager

Approved: 

Ramon E. Hall, Director
Uranium Recovery Field Office
Region IV

12/1/92
Date

Inspection Summary

Areas Inspected: Special, announced inspection of reclamation cleanup activities at the Johnny M Mine.

Results:

- Additional cleanup activities have been performed by the licensee. A composite soil sample was taken for radiological analyses to verify cleanup in the area identified as requiring additional cleanup during the previous inspection (paragraph 2).

Summary of Inspection Findings:

- Within the scope of the inspection no apparent violations or deviations were identified.

Attachment:

- Attachment 1 - Person Contacted and Exit Meeting

DETAILS

I SITE STATUS

The Johnny M Mine located near San Mateo, New Mexico, was operated by Ranchers Exploration and Development (predecessor to Hecla) from early 1972 to late 1982. The mining sequence at the mine included backfilling of the mined-out areas with mill tailings returned to the site from the mill which processed the ore. To accomplish this, two surface injection locations were used for storage of the uranium tailings prior to disposal in the mine stopes. According to New Mexico records, these two storage areas covered approximately one acre each at the north and the south injection sites. The tailings were slurried and then pumped into the mine to prevent caving and "reduce the vulnerability of possible breaks in the integrity of the Dakota aquifer located above the mine." An estimated 286,000 tons of tailings were injected into the mine.

Reclamation of the mine property began in early 1982. The mine shaft and portal were sealed. The surface was then covered with earthen materials during site recontouring.

When the New Mexico site came under NRC jurisdiction in 1986, the reclamation of the Johnny M Mine was readdressed. By letter dated September 28, 1986, Hecla requested an amendment to their license to incorporate a proposed reclamation plan. The proposed reclamation plan for the site consisted of cleaning up the remaining surface contamination to appropriate standards, and leaving the underground tailings undisturbed. After several revisions, NRC was in agreement with the proposed cleanup plan submitted May 4, 1990, and an amendment was issued on October 12, 1990. Reclamation cleanup activities involved the excavation and removal of tailings surrounding the north and south injection sites. All contaminated material was to be transported to and disposed of at the Quivira Mining Company's Pond 2 disposal area.

Previous inspections and associated soil sampling determined that the north area had been cleaned to EPA standards. The south injection area also met the cleanup standards except for one area west of the restricted area boundary. This area was identified as requiring additional cleanup in a letter to the licensee dated May 20, 1992.

During this inspection period, the licensee performed additional cleanup of tailings west of the restricted area boundary. This area was identified as requiring additional cleanup during the previous inspection, and subsequent soil sampling test results confirmed the expected levels of contamination. Approximately 75 cubic yards of material were reportedly removed from the area in April 1992. In addition, the mine site was recontoured and seeded.

2 RADIOACTIVE WASTE MANAGEMENT (BB035)

The inspection involved a general survey of the site. The inspectors observed that the areas had been recontoured and seeded. The resulting vegetation was sparse. The recontouring had left no abrupt changes in the landscape, although a small depression that could impound water had been left in the south area. It was observed that additional material had been removed from the area identified in the previous inspection as requiring additional cleanup. One composite surface soil sample was taken from this area (JMM-17) to verify that the cleanup activities are complete. The confirmatory sample was split with the licensee.

The sample was sent to Oak Ridge National Laboratories on November 25, 1992, for radium-226 and uranium analysis. The results of this testing program will be available in approximately 8 weeks and will be docketed at that time.

The licensee indicated that he would be removing the radiation warning signs from the fences. As the mine site is considered clean, this action was considered appropriate.

ATTACHMENT 1

1 PERSON CONTACTED

1.1 Licensee Personnel

G. Gamble, Environmental Engineer

1.2 NRC Personnel

D. Jacoby, Project Manager

R. Gonzales, Project Manager

The personnel listed above attended the exit meeting.

2 EXIT MEETING

An exit meeting was conducted on November 19, 1992. 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.

