

September 12, 2001

T. W. Hardgrove, Manager
Environmental & Regulatory Services
Pathfinder Mines Corporation
935 Pendell Blvd.
P.O. Box 730
Mills, Wyoming 82644

SUBJECT: NRC INSPECTION REPORT 040-06622/01-01

Dear Mr. Hardgrove:

On July 10, 2001, the U.S. Nuclear Regulatory Commission (NRC) completed an on-site construction inspection at your former Shirley Basin Mill site in Carbon County, Wyoming. The inspection consisted of a routine review of site status, decommissioning and reclamation activities. The inspection determined that you have continued to make progress in remediating the site and that activities have been conducted in a safe and effective manner in accordance with the NRC-approved reclamation plan, the license, and NRC regulations.

No violations or deviations were identified; therefore, no response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available **electronically** for public inspection in the NRC Public Document Room (PDR) or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Melvyn N. Leach, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No.: 040-06622
License No.: SUA-442

Enclosure:
NRC Inspection
Report 040-06622/01-01

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U.S. NUCLEAR REGULATORY COMMISSION

Docket No. 040-06622

License No. SUA-442

Report No. 040-06622/00-01

Licensee: Pathfinder Mines Company

Facility: Former Shirley Basin Mill

Location: Carbon County, Wyoming

Dates: July 10, 2001

Inspector: John H. Lusher, Health Physicist
Division of Fuel Cycle Safety
and Safeguards
Fuel Cycle Licensing Branch
Uranium Recovery Section

Accompanied by: Terry Johnson, Surface Hydrologist
Division of Fuel Cycle Safety
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Dan Rom, Geotechnical Engineer
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Carl Jacobson, Project Manager
DOE, Grand Junction Office

Approved By: Melvyn N. Leach, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety
and Safeguards

Attachments: Supplementary Information
Photographs Taken at the Shirley Basin Site

EXECUTIVE SUMMARY

Former Shirley Basin Mill Site
NRC Inspection Report 040-06622/01-01

This inspection included a review of site status and decommissioning, and on-site construction.

Site Decommissioning Status

- Site activities and decommissioning and on-site construction programs were being conducted in accordance with the reclamation plan, the license, and applicable NRC regulations.

Report Details

1 Site Status and Decommissioning for Uranium Mill Sites (87654)

1.1 Inspection Scope

The site status and decommissioning activities were reviewed to determine if licensee activities were being conducted in accordance with the approved reclamation plan, NRC regulations and the license.

1.2 **Site Status**

Activities completed at Pathfinder Mines Corporation's Shirley Basin site included demolition and disposal of the mill, installation of an interim cover over most of the tailings material, and cleanup of the windblown material. Activities in progress during the inspection included collection of environmental and groundwater monitoring samples, evaporation of excess pond water, implementation of the groundwater corrective action program, receipt and disposal of radioactive waste from offsite in-situ leach facilities, mine reclamation, and routine equipment maintenance.

1.3 Conclusions

Site decommissioning activities were reviewed and found to have been conducted in accordance with the approved reclamation plan, applicable license conditions and regulatory requirements.

2 On-Site Construction (88001)

2.1 Scope

The NRC conducted an erosion control and geotechnical review to determine whether problems with the tailings impoundment construction or erosion controls existed such that damage or deterioration warranted repair. The geotechnical engineering evaluation included both physical observations of the reclaimed impoundment and dam and a review of testing and inspection records. The inspector also discussed several questions related to erosion protection design changes that the licensee had submitted for staff review.

2.2 Observations

a. Erosion Protection

The inspector did not identify any erosion control issues. No commitments were made regarding schedules of the design changes during these discussions.

b. Geotechnical

There was no apparent cover cracking or distress observed. The earthen cover was free of undulation, consistent with the quality of the work. The sideslopes were stable on July 10, 2001. Substantial reclamation work remains to be completed.

2.3 Conclusions

The inspector determined that the reclamation is being accomplished in accordance with the requirements of the approved reclamation plan.

3 Exit Meeting Summary

The inspector presented the inspection results to licensee representatives at the conclusion of the inspection on July 10, 2001. The licensee representative acknowledged the findings as presented. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspector.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee

T. Hardgrove, Manager, Environmental & Regulatory Services/Radiation Safety Officer

ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None

Closed

None

Discussed

None

INSPECTION PROCEDURES USED

87654 Decommissioning of Uranium Mills
88001 On-site Construction

LIST OF ACRONYMS USED

NRC Nuclear Regulatory Commission
DOE Department of Energy
PDR Public Document Room
PARs Publicly Available Records



Pathfinder Shirley Basin Tailings impoundment Looking East



Pathfinder Shirley Basin Tailings impoundment Looking East south East



Pathfinder Shirley Basin Tailings impoundment Looking South East



Pathfinder Shirley Basin Tailings impoundment Looking South