



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

June 4, 2010

Lawrence J. Corte, President
Western Nuclear, Inc.
2801 Youngfield, Suite 340
Golden, CO 80401

SUBJECT: NRC INSPECTION REPORT 040-01162/10-001

Dear Mr. Corte:

This refers to the announced routine inspection conducted on May 5, 2010, at the Western Nuclear, Inc., Split Rock site in Jeffrey City, Fremont County, Wyoming. The inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of examination of selected procedures and representative records, observations of activities, and interviews with personnel. Details of the inspection were presented to you at the conclusion of the inspection. No violations were identified, and no response to this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC's Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Should you have any questions concerning this inspection, please contact Ms. Linda M. Gersey at (817) 860-8299 or the undersigned at (817) 860-8197.

Sincerely,

/RA/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Docket: 040-01162
License: SUA-56

Enclosure:
NRC Inspection Report 040-01162/10-001

cc w/Enclosure:

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket: 040-01162
License: SUA-56
Report: 040-01162/10-001
Licensee: Western Nuclear, Inc.
Facility: Split Rock Site
Location: Jeffrey City, Fremont County, Wyoming
Date: May 5, 2010
Inspector: Linda M. Gersey, Health Physicist
Nuclear Materials Safety Branch B
Approved by: Jack E. Whitten, Chief
Nuclear Materials Safety Branch B
Attachment: Supplemental Inspection Information

ENCLOSURE

EXECUTIVE SUMMARY

Western Nuclear, Inc., Split Rock Site
NRC Inspection Report 040-01162/10-001

This inspection consisted of a site tour of the completed construction activities and verification of the groundwater and surface water monitoring programs.

Uranium Mill, In-Situ Leach Uranium Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection

- The licensee was maintaining oversight of the decommissioned facility in accordance with license requirements (Section 1).

Effluent Control and Environmental Protection

- The surface water and groundwater monitoring programs were being implemented in accordance with regulations and the license (Section 2).
- All ambient gamma exposure rates were the same as background levels (Section 2).

Report Details

Site Status

All reclamation work has been completed and approved by the NRC, including reclamation of the tailings impoundment, reclamation of the corrective action pond, approval of the alternate concentration limits for groundwater, and subsequent deactivation of the groundwater remediation system. The license no longer requires a radiation safety program because all tailings have been covered. The only activities remaining are groundwater and surface water monitoring and preparation for transfer of the site to the U.S. Department of Energy (DOE).

1 Uranium Mill, In-Situ Leach Uranium Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection (87654)

1.1 Inspection Scope

Ensure that the licensee was maintaining oversight of the decommissioned facility as required by the license.

1.2 Observations and Findings

A site tour was conducted to observe area conditions. The tour included the reclaimed corrective action pond, the former mill site, and diversion ditches. No structures remained at the site. Fences, gates, and radiological postings were in place and in good condition. The inspector noted that the cattle guards were being maintained by the licensee to control grazing to the north and northeast of the tailings impoundment, as required by License Condition 64

Licensee representatives stated that they are working with the DOE to turn over the facility to them for long-term surveillance. At the time of the inspection, the Army Corps of Engineers was reviewing the real estate package. The licensee anticipates complete turnover of the area to the DOE by the second quarter of 2011.

1.3 Conclusions

The licensee was maintaining oversight of the decommissioned facility in accordance with license requirements.

2 Effluent Control and Environmental Protection (88045)

2.1 Inspection Scope

Determine if the surface water and groundwater monitoring programs were being performed by the licensee as required by the regulations and the license.

2.2 Observations and Findings

License Conditions 24 and 74 state, in part, the requirements for the surface water and groundwater monitoring programs. Five surface water samples are collected at locations along the Sweetwater River. Sixteen groundwater sampling points are within

the proposed long-term care boundary. All surface water and groundwater wells are sampled semiannually for uranium and sulfate and annually for 21 other constituents. The inspector reviewed the semiannual surface water and groundwater monitoring reports submitted by the licensee since the second half of 2008. Data indicates that the surface water and groundwater quality are within expected ranges.

On December 1, 2008, the licensee requested an alternate concentration limit for selenium at the point of compliance wells and that the natural uranium trigger values at the point of exposure be set to aquifer-wide background concentrations. The NRC approved this request in a license amendment dated February 24, 2010. The selenium limit at the point of compliance Wells 5 and 21 was changed from 0.013 milligrams per liter (mg/L) to 0.05 mg/L. At the point of exposure, the NRC approved natural uranium trigger levels of 0.087 mg/L for the Split Rock aquifer and 0.044 mg/L for the flood-plain aquifer. The NRC found the new limits to be protective of human health and environment.

The licensee's Procedure C.3.0, "Groundwater Sampling Procedure," was reviewed by the inspector, along with groundwater sampling records and field sheets. Based on the review of the procedures and field sheet records, the licensee is performing the Compliance Sampling Program in accordance with License Conditions 24 and 74 and Internal Procedure C.3.0.

During the site tour, the inspector conducted radiation surveys using a Ludlum Model 19 microR survey meter calibrated with radium-226 (NRC Number 015544, calibration due date of April 6, 2011). The covered areas were found to be approximately 35-40 microRoentgens per hour, which was the same as the background ambient gamma exposure rate.

2.3 Conclusions

The surface water and groundwater monitoring programs were being implemented in accordance with regulations and the license. All ambient gamma exposure rates were the same as background levels.

3 **Exit Meeting Summary**

The inspector presented the inspection results to the licensee's representatives at the conclusion of the onsite inspection on May 5, 2010. During the inspection, the licensee did not identify any information reviewed by the inspector as proprietary.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

B. DeWard	Site Manager
L. Miller	Geotechnical Consultant

INSPECTION PROCEDURES USED

IP 87654	Uranium Mill, In-Situ Leach Uranium Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection
IP 88045	Effluent Control and Environmental Protection

ITEMS OPENED, CLOSED, AND DISCUSSED

Open

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

CFR	<i>Code of Federal Regulations</i>
DOE	U.S. Department of Energy
IP	inspection procedures
mg/L	milligrams per liter
NRC	U.S. Nuclear Regulatory Commission