



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BLVD
ARLINGTON, TEXAS 76011-4511

December 28, 2011

Donna L. Wichers
Senior Vice President, ISR Operations
Uranium One USA, Inc.
907 North Poplar Street, Suite 260
Casper, Wyoming 82601

SUBJECT: NRC INSPECTION REPORT 040-08502/11-003

Dear Ms. Wichers:

This refers to the announced inspection conducted on December 1, 2011. The purpose of the inspection was to review dryer operations at your Irigaray Central Processing Plant, although, due to inclement weather, the inspection was conducted at your office in Casper, Wyoming. This 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 selected examination of procedures and representative records and interviews with personnel. The inspector discussed the inspection findings with your staff at the conclusion of the inspection on December 1, 2011. The enclosed report presents the results of this inspection. Based on the results of this inspection, no violations were identified.

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 report, please contact Linda Gersey at 817-200-1299 or the undersigned at 817-200-1191.

Sincerely,

/RA/ by RJEvans for

D. Blair Spitzberg, PhD, Chief
Repository and Spent Fuel Safety Branch
Division of Nuclear Materials Safety

Docket: 040-08502
License: SUA-1341

Enclosure:
NRC Inspection Report 040-08502/11-003

cc w/enclosure:
Mr. Carl Anderson, Administrator
Wyoming Department of Environmental Quality
Solid and Hazardous Waste Division
122 West 25th Street
Cheyenne, Wyoming 82002

Ms. Nancy Nuttbrock, Administrator
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**U.S. NUCLEAR REGULATORY COMMISSION
Region IV**

Docket: 040-08502
License: SUA-1341
Report: 2011-003
Licensee: Uranium One USA, Inc.
Facility: Casper Office
Location: Casper, Wyoming
Date: December 1, 2011
Inspector: Linda M. Gersey, Health Physicist
Repository and Spent Fuel Safety Branch
Approved By: D. Blair Spitzberg, PhD, Chief
Repository and Spent Fuel Safety Branch
Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

Uranium One USA, Inc.
NRC Inspection Report 040-08502/11-003

This was an announced inspection of licensed activities at Uranium One USA, Inc.'s in-situ uranium recovery facility located in Johnson County, Wyoming. The purpose of the inspection was to review dryer operations at the Irigaray Central Processing Plant. Due to inclement weather, the inspection was conducted at the licensee's office located in Casper, Wyoming. This report describes the findings of the inspection.

In-Situ Leach Facilities

- The licensee repaired the lower sand seal and generated a maintenance procedure to prevent recurrence of dryer component failure. Dryer operations will be observed during a future inspection (Section 1.2).

Radiation Protection and Inspection of Transportation Activities

- Two violations identified during the March 2011 inspection were reviewed and closed (Section 2.2).

Report Details

Site Status

The licensee's yellowcake hearth dryer experienced a sand seal failure on October 2, 2011. A special NRC inspection was conducted on October 5-12, 2011, and the findings of the inspection were issued to the licensee by letter dated October 28, 2011. The licensee used a contractor with hearth dryer experience to evaluate the sand seal failure and to assess other dryer components. The licensee completed dryer repairs and subsequently placed the dryer back into service on November 1, 2011. The dryer continued to operate as designed since it was restarted in early November 2011.

1 In-Situ Leach Facilities (89001)

1.1 Inspection Scope

Review the actions taken to repair the dryer. Ensure dryer operations are being conducted in accordance with regulations and the license.

1.2 Observations and Findings

Although the inspector was unable to observe dryer operations, documents related to the repair of the dryer were reviewed and interviews with the plant supervisor and radiation safety officer were conducted from the licensee's office. The licensee hired a contractor with expertise in hearth dryer operations to evaluate the dryer failure and assist with repairs. The contractor determined that failure of the lower sand seal was primarily caused by the automatically controlled dryer exhaust pressure control damper that had seized in the closed position. The damper was repaired and its control function was demonstrated to be workable during an exercise that was conducted with the dryer in a non-fired mode.

The licensee used a total of 12 radiation work permits (RWPs) to perform work related to dryer inspection and repairs. Work conducted under RWPs included: cleaning the loose yellowcake from the dryer enclosure; opening, inspecting, and repairing sand seals; and inspection of dryer components. Two contractors and several licensee personnel performed work under the RWPs. The inspector reviewed the RWPs and found them to contain sufficient information to mitigate radiologic hazards. Entry into the dryer enclosure required use of respiratory protection. The inspector reviewed the training, medical approval, and documentation of respirator fit testing for all personnel and found them to comply with license commitments. The training records for the contractors were also reviewed and found to be sufficient.

The licensee and contractors inspected the lower sand seal by cutting a hole in the bottom of the seal. Yellowcake had collected in the sand seal, and there was no sand remaining. The yellowcake was cleaned out of the lower sand seal, the damper was repaired, and the sand was replaced. The lower sand seal was then welded shut. Also, the upper sand seal was inspected and replaced. The licensee placed a new hatch opening on the upper sand seal to allow for future inspections. Placing a hatch opening on the lower sand seal was not an option due to the position of the sand seal.

The hearth contractor completed the inspection of all dryer components. All components were found to be in good condition and no equipment needed replacing. An electrical contractor was hired to evaluate all electrical components of dryer operations. All instruments on the dryer were checked for function and were calibrated in a non-fired mode. The inspector reviewed the electrical engineering report. The report sufficiently described the inspection and testing that was conducted by the engineer.

The licensee generated a new procedure for yellowcake dryer maintenance. The procedure outlined daily, weekly, monthly, and yearly maintenance which will be conducted by the maintenance staff or plant operators. The inspector reviewed the procedure and will evaluate the performance of the procedure during a future inspection.

1.3 Conclusions

The licensee repaired the lower sand seal and generated a maintenance procedure to prevent recurrence of dryer component failure. Dryer operations will be observed during a future inspection.

2 Radiation Protection and Inspection of Transportation Activities (83822/86740)

2.1 Inspection Scope

Ensure the licensee had performed the corrective actions in response to two violations.

2.2 Observations and Findings

The inspector reviewed the paperwork associated with two violations identified during the March 29-31, 2011, inspection. One violation (NOV 040-08502/1101-03) was identified relating to the licensee's failure to provide function-specific training for a hazmat employee, as required by 49 CFR 172.704. In letter dated August 9, 2011, the licensee committed to providing the training for the hazmat employee, and the training procedure was updated to ensure function-specific training is listed as a requirement for hazmat employees. The inspector reviewed the training documentation and found it to be adequate.

A second violation (NOV 040-08502/1101-02) was identified related to the failure of a licensee employee to perform a contamination survey prior to leaving a restricted area as required by License Condition 10.1.1. An employee had exited the restricted area into a controlled area to perform sandblasting activities without performing an exit survey. In a letter dated August 9, 2011, the licensee stated that, when sandblasting activities were in progress, a survey meter would be stationed at the restricted area exit and the employee would perform surveys prior to exiting. Also, all employees were retrained on the importance of performing an exit survey when exiting the restricted area regardless of circumstances. The inspector reviewed the paperwork associated with the licensee's training and found it to be adequate. The inspector will observe sandblasting activities in the controlled area to ensure compliance is being maintained at a future date. These violations are considered closed.

2.3 Conclusions

Two violations identified during the March 2011 inspection were reviewed and closed.

3 Exit Meeting Summary

An exit briefing was conducted at the conclusion of the inspection on December 1, 2011, with licensee management and staff. Licensee representatives acknowledged the inspector's findings. No proprietary information was identified.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Donna Wichers, Senior Vice President, Americas
Bill Kearney, Director, Safety, Health and Environment
Hilton Ballinger, Plant Supervisor
Larry Arbogast, Radiation Safety Officer

INSPECTION PROCEDURES USED

86740	Inspection of Transportation Activities
89001	In-Situ Leach Facilities
83822	Radiation Protection

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

040-08502/1101-02	NOV	Failure to perform a contamination survey prior to exiting a restricted area
040-08502/1101-03	NOV	Failure to have complete hazmat training for a hazmat worker

Discussed

None

LIST OF ACRONYMS USED

CFR	<i>Code of Federal Regulations</i>
NOV	Notice of Violation
RWP	Radiation Work Permit