



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4125

December 17, 2010

Donna L. Wichers
Senior Vice President, ISR Operations
Uranium One USA, Inc.
907 No. Poplar Street, Suite 260
Casper, Wyoming 82601

SUBJECT: NRC INSPECTION 040-08502/10-001 AND AUTHORIZATION FOR RESTART

Dear Ms. Wichers:

This correspondence documents the interim results of the team inspection conducted in two phases, between October 25-28 and December 7-9, 2010, at the Uranium One USA, Inc. (Uranium One) Irigaray and Christensen Ranch facilities located in Johnson and Campbell Counties, Wyoming. This inspection was conducted in fulfillment with a requirement for restarting operations. A preliminary exit briefing was presented to Uranium One at the conclusion of the onsite inspection, and the inspection results were discussed with Uranium One via telephone on December 14, 2010.

The purpose of the team inspection was to determine whether or not Uranium One's two facilities were prepared to commence in-situ uranium recovery operations. Amendment 13 to license SUA-1341, dated September 30, 2008, authorized a change in plant status from restoration and decommissioning to operational. In the cover letter to this license amendment, NRC included two conditions to be fulfilled before Uranium One was allowed to commence with operations. First, Uranium One was required to update the surety to reflect decommissioning costs based on the operational status of the facilities. Uranium One submitted an updated surety request to the NRC by letter dated August 18, 2010 as updated by letter dated November 8, 2010. The surety was approved by the NRC on December 16, 2010, and the NRC received a copy of the updated standby letter of credit with the State of Wyoming as beneficiary on December 17, 2010. Second, Uranium One was notified that a preoperational inspection would be required before startup of facility operations. The NRC completed the onsite portion of the preoperational inspection on December 9, 2010. The final results of this inspection will be sent to Uranium One under separate correspondence.

Based on the results of the preoperational inspection, the NRC staff has determined that Uranium One's facilities are ready for in-situ recovery operations and are protective of the employees, the public, and the environment because Uranium One has established the following:

- necessary management organization and controls including implementation of the performance-based license condition and formation of the Safety and Environmental Review Panel

- hardware, personnel, and procedures for in-situ uranium recovery operations, although NRC staff recognizes that operational staff training will continue during the startup period
- procedures, personnel, and equipment for an effective radiation protection program, although NRC staff understands that Uranium One will continue to train and to qualify additional individuals to supplement the current health physics staff
- procedures to ensure adequate protection of groundwater
- procedures and equipment for an environmental monitoring program that are consistent with the approved license application
- procedures and equipment necessary for transportation of radioactive materials including uranium bearing resins and drummed yellowcake material
- procedures and equipment necessary for handling radioactive wastes, including an up-to-date contract for permanent disposal of these wastes
- procedures, equipment, and training for handling emergency situations including personnel and radioactive material emergencies

During the inspection, NRC staff did not conduct a detailed review of Uranium One's yellowcake dryer and support systems because this equipment was not ready for operations during the inspection. Uranium One has indicated that yellowcake drying will not occur until approximately six months after restart of operations; therefore, operability of the dryer is not required at this time. Uranium One is not authorized to use the dryer until the NRC has conducted an inspection for dryer operations. Second, the staff did not review Uranium One's program for reclamation and decommissioning of the new wellfields. The NRC will review these program areas during future inspections.

Also, the NRC did not agree with Uranium One's Safety and Environmental Review Panel conclusions regarding use of sulfuric acid in place of hydrochloric acid during the precipitation process in the final processing of the yellowcake, as this appears to be a departure from the method of evaluation described in the license application used in establishing the final safety evaluation report, the environmental assessment, or technical evaluation reports as required by License Condition 9.4(b). Thus, Uranium One may continue to use hydrochloric acid in the precipitation process, but may not use sulfuric acid in place of hydrochloric acid until the NRC receives and approves a license amendment for this change.

In summary, Uranium One is authorized to commence with in-situ uranium recovery operations at the Christensen Ranch and Irigaray Facilities (except dryer operations). The NRC plans to conduct at least one post-startup inspection during early 2011, in part, to ensure that Uranium One has implemented effective radiation protection controls. In addition, the NRC will conduct a second inspection during mid-2011, prior to authorizing the start up and operation of the yellowcake dryer at the Irigaray Facility. Future inspections will be established in accordance with guidance provided in NRC Manual Chapter 2641, "In-Situ Leach Facilities Inspection Program." Future NRC inspections may be unannounced to ensure that Uranium One continues to operate its facilities in accordance with regulatory and license requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter 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 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 letter, please contact Ms. Linda Gersey, Health Physicist, at (817) 860-8299, or Jack E. Whitten, Chief, at (817) 860-8197.

Sincerely,

/RA Roy J. Caniano for/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B
Division of Nuclear Materials Safety
Region IV

/RA Paul Michalak for/

Bill VonTill, Chief
Uranium Recovery Licensing Branch
Division of Waste Management and
Environmental Protection
Office of Federal and State Materials and
Environmental Management Programs

Docket Number: 040-08502
License Number: SUA-1341

cc:

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