

December 4, 2012

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-2012-005A**

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV, Arlington, Texas, staff on this date.

**Facility**

Uranium One USA, Inc.  
907 Poplar Street, Suite 260  
Casper, WY 82601  
Docket No.: 040-08502  
License No.: SUA-1341

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

**SUBJECT:** UPDATE TO SHIPMENT OF PRESSURIZED DRUM TO BLIND RIVER REFINERY IN ONTARIO, CANADA, RESULTING IN UPTAKES OF URANIUM BY THREE WORKERS

**DESCRIPTION:**

This Preliminary Notice supplements the information provided in PNO-IV-2012-005 dated July 5, 2012.

On June 25, 2012, Uranium One notified the Region IV office of an event that occurred on June 23, 2012, involving packaged uranium concentrate (yellowcake) that had been shipped from Uranium One's Willow Creek facility in Wyoming to a fuel services refinery located in Blind River, Ontario, Canada. The NRC was subsequently informed by the Canadian Nuclear Safety Commission (CNSC) that three workers at the Canadian facility were exposed to airborne uranium.

Three operators at the Blind River refinery ingested uranium when they attempted to open the pressurized drum. The Canadian licensee conducted a dose assessment in response to the event. None of the operators exceeded Canada's annual occupational dose limit, but one individual exceeded the kidney toxicity limit. This operator underwent kidney function tests and the results were negative.

In response to the event, the NRC issued Confirmatory Action Letter (CAL) 4-12-003 to Uranium One on July 5, 2012. The CAL committed the licensee to take actions to identify and propose steps for handling any unopened yellowcake drums, to investigate the causes of the event and recommend corrective actions to prevent recurrence, to provide the results of these actions to the NRC for review, and to not resume shipment of yellowcake product until NRC has completed its review. The licensee subsequently responded to the CAL by letters dated July 9 and September 21, 2012.

Region IV conducted a follow-up inspection at the Uranium One facility during September - October 2012. NRC inspectors were joined by a U.S. DOT inspector who reviewed the packaging and transportation aspects of the event. The inspection reviewed the licensee's root cause analysis and corrective actions taken in response to the event. Corrective actions were appropriately identified and the inspection confirmed they were effectively implemented. In

addition, NRC has communicated frequently with Canadian Nuclear Safety Commission counterparts regarding actions related to this event. There is alignment between the two agencies regarding the adequacy of the actions completed.

Based on an independent evaluation of the adequacy of corrective actions taken, the NRC has determined that the actions prescribed in CAL 4-12-003 have been met. Consequently, the NRC is closing the CAL, which will allow Uranium One to resume shipments of yellowcake product in accordance with the new packaging and transportation procedures.

This information has been discussed with the CNSC and the State of Wyoming. This information is current as of 2 p.m. (CDT), December 3, 2012.

**ADAMS ACCESSION NUMBER: ML12339A433**

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