

November 3, 2014

Mr. Jon Winter  
Manager, Wyoming Environmental  
and Regulatory Affairs  
Uranium One Americas, Inc.  
907 N. Poplar Street, Suite 260  
Casper, WY 82601

SUBJECT: DENIAL OF REQUEST FOR RELIEF FROM ACTIONS DESCRIBED IN  
CORRESPONDENCE DATED SEPTEMBER 21, 2012, URANIUM ONE, USA,  
INC., WILLOW CREEK PROJECT, CAMPBELL AND JOHNSON COUNTIES,  
WYOMING, MATERIALS LICENSE SUA-1341 (TAC NO. J00710)

Dear Mr. Winter:

By letter dated September 4, 2013 (ML13255A345), Uranium One requested relief from actions described in its September 21, 2012 response (ML12268A270) to the U.S. Nuclear Regulatory Commission's (NRC) Confirmatory Action Letter (CAL) dated July 5, 2012 (ML12187A734). Specifically, Uranium One requested eliminating the second corrective action in its CAL response letter that increased the dryer residence (drying) time to at least 4.5 to 5 hours per drum of yellowcake. In its relief request, Uranium One requested that maintaining a minimum of 24 hours of cooling and venting of the yellowcake drums prior to shipping be considered the critical component to prevent future drum pressurization issues. This letter responds to Uranium One's CAL relief request.

By letter dated March 7, 2013 (ML13015A179), the NRC renewed Uranium One's operating license SUA-1341. License Condition (LC) 9.3 of license SUA-1341 incorporates (i.e., ties down) Uranium One's drying time commitment from its CAL response letter as a condition for conducting its uranium recovery operations. Therefore, the relief requested from Uranium One requires a license amendment to modify LC 9.3.

The NRC staff has evaluated Uranium One's relief request in light of the recently reported drum pressurization event on September 9, 2014 (ML14258A133, ML14259A320) that resulted in the ejection of yellowcake from a drum. This incident appears similar in nature to two previous incidents occurring in June 2012 and April 1998 (ML12187A734, ML12340A473) with the exception that the most recent event occurred even though Uranium One maintained a minimum of 24 hours of cooling and venting of the yellowcake drums prior to shipping. The NRC staff observes that Uranium One has not demonstrated that the drum cooling and venting time should be the only parameter measured during the yellowcake drying process at the Willow Creek facility and that the dryer residence time is unimportant. Therefore, relief requested by Uranium One is denied.

Since Uranium One has committed to investigating the conversion of uranyl peroxide at elevated temperatures to stable uranium oxides at its Willow Creek Project in its Root Cause Analysis Plan (ML14276A107) after the recent drum pressurization event, NRC staff expects this information to inform any relief request from Uranium One. The NRC staff observes that other operational parameters related to the drying of yellowcake may be requested to be used in place of dryer residence time, since the dryer residence time appears to be a difficult parameter to measure accurately, if Uranium One requests another request for relief from the dryer residence time. However, any submittal from Uranium One proposing other operational parameters should clearly demonstrate how a consistently stable yellowcake product will be achieved.

If you have any questions regarding this action, please contact me at 301-415-7777, or by e-mail at [Ron.Linton@nrc.gov](mailto:Ron.Linton@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

**/RA/**

Ron C. Linton, Project Manager  
Uranium Recovery Licensing Branch  
Division of Decommissioning, Uranium Recovery,  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 040-08502  
License No.: SUA-1341

cc: Luke McMahan, PG. (WDEQ)

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Sincerely,

**/RA/**

Ron C. Linton, Project Manager  
 Uranium Recovery Licensing Branch  
 Division of Decommissioning, Uranium Recovery,  
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 Office of Nuclear Material Safety  
 and Safeguards

Docket No.: 040-08502  
 License No.: SUA-1341

cc: Luke McMahan, PG. (WDEQ)

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