

June 5, 2015

Mr. Darrell Zephier  
Tribal Historic Preservation Officer  
Crow Creek Sioux Tribe  
P.O. Box 50  
Fort Thompson, SD 57339

SUBJECT: TRANSMITTAL OF THE CLASS III CULTURAL RESOURCE INVENTORY  
REPORT FOR THE PROPOSED LUDEMAN IN SITU URANIUM RECOVERY  
SATELLITE FACILITY IN CONVERSE COUNTY, WYOMING

Dear Mr. Zephier:

On December 6, 2011, Uranium One, Inc. (Uranium One) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) to amend source materials license SUA-1341 to construct and operate an in situ uranium recovery (ISR) satellite facility at the proposed Ludeman Project site in Converse County, Wyoming. A figure showing the conceptual layout of the facility is enclosed (Enclosure 1). The facility, if licensed, will use an ISR technology to extract uranium from underground ore deposits and collect it on ion exchange resins. Uranium from ion exchange resins at the proposed Ludeman satellite facility will be transported and subsequently processed at the Willow Creek Central Processing Plant located in Johnson County, Wyoming.

The NRC staff is preparing an environmental assessment (EA) under the National Environmental Policy Act of 1969 for the proposed action to assess potential environmental impacts that may significantly affect the human environment. In accordance with 36 Code of *Federal Regulations* (CFR) 800.8 "Coordination with the National Environmental Policy Act," the NRC staff is using this process to comply with its obligations under Section 106 of the National Historic Preservation Act (NHPA). The EA will also include analyses of potential impacts to historic and cultural resources.

By letter dated August 8, 2012, the NRC staff invited you to participate as a consulting party under Section 106 of the NHPA and assist in the identification and evaluation of historic properties that may be affected by the proposed action. The NRC staff also welcomed any suggestions for alternatives or proposed measures that might minimize or mitigate any adverse effects of the proposed project on historic properties.

For your review and comment, the NRC staff is enclosing the Class III Cultural Resource Inventory Report (Enclosure 2), prepared by Ethnoscience, Inc. and submitted by Uranium One as part of their application for the Ludeman Project. Please note that the enclosed document contains confidential information, and disclosure is limited under the NHPA.

As part of our environmental review, the NRC staff is interested in learning of any areas that Tribes believe have traditional, religious, or cultural significance that may be affected by the proposed action. The NRC staff requests that you provide, within 30 days from the date of this letter, your ideas and views regarding historic and cultural resources pertaining to the Ludeman Project.

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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions or comments on the proposed Ludeman Project, please contact Ms. Kellee Jamerson of my staff. Ms. Jamerson can be reached at 301-415-7408 or via email at [Kellee.Jamerson@nrc.gov](mailto:Kellee.Jamerson@nrc.gov).

Sincerely,

**/RA S Lemont for/**

Lydia Chang, Chief  
Environmental Review Branch  
Division of Fuel Cycle Safety, Safeguards,  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 40-8502  
License No.: SUA-1341

Enclosures:

1. Ludeman Conceptual Infrastructure Figure
2. Ludeman Project Class III,  
Cultural Resource Inventory - **(Non-Public)**

cc: Mr. Brandon Sauzue, Chairman

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**/RA SLeMont for/**

Lydia Chang, Chief  
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Cultural Resource Inventory - **(Non-Public)**

cc: Mr. Brandon Sauzue, Chairman

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E. Striz

J. Caverly

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