

February 8, 2013

Mr. L. Robert Puschendorf
State Historic Preservation Officer
Nebraska State Historic Society
P. O. Box 82554
Lincoln, NE 68501

SUBJECT: NOTIFICATION AND REQUEST FOR CONSULTATION AND PARTICIPATION
REGARDING RESOURCES POTENTIALLY AFFECTED BY THE PROPOSED
CROW BUTTE RESOURCES, INC. LICENSE AMENDMENT APPLICATION
FOR THE PROPOSED MARSLAND EXPANSION AREA IN-SITU URANIUM
RECOVERY SATELLITE FACILITY, IN DAWES COUNTY AND SIOUX
COUNTY, NEBRASKA

Dear Mr. Puschendorf:

By letter dated May 16, 2012 the U.S. Nuclear Regulatory Commission (NRC) received an application from Crow Butte Resources (CBR) for an amendment to source materials license SUA-1534 to authorize CBR to construct and operate an in-situ uranium recovery (ISR) satellite facility at the proposed Marsland Expansion Area (MEA) project site in Dawes County and Sioux County, Nebraska. The facility, if licensed, would use an ISR technology to extract uranium at the 4,622.3 acre project site located approximately 11 miles south southeast of the main CBR Central Processing Facility and approximately 4.5 miles northeast of Marsland, Nebraska. A map showing the proposed project location is enclosed (See Enclosure).

The ISR process, also known as in-situ leach milling, is used to recover uranium from low-grade ores or deeper deposits that are not economically recoverable by conventional mining and milling techniques. In this process, a leaching agent, such as oxygen with sodium carbonate, is injected through wells into the underground ore body to dissolve the uranium. The mineral-laden solution is pumped to the surface through ion exchange columns. The uranium in the solution adheres to resin beads in the columns. The resin beads are then transported to a processing plant where the uranium is washed off the beads and dried. The resultant product, a mixture of uranium oxides also known as "yellowcake," is placed in drums prior to shipment offsite for further processing. Eventually, this processed material can be used to make fuel for nuclear power plants and other products.

As established in Title 10 *Code of Federal Regulations* Part 51 (10 CFR 51), the NRC regulation that implements the National Environmental Policy Act of 1969, as amended (NEPA), the agency is preparing an Environmental Assessment (EA) for the proposed action. The EA will include an analysis on the potential impacts on cultural and historic resources.

The NRC staff also provides notice that in accordance with 36 CFR 800.8(c), the NRC is using the NEPA process to comply with the Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) requirements in lieu of the procedures set forth in 36 CFR 800.3 through 800.6. Accordingly, the NRC staff is identifying parties and inviting them to consult with the NRC staff on this matter. Consultation will include participation in the identification of cultural, historic and archaeological properties within the area of potential effect for the project; assessment of the effects of the proposed action on any such properties identified; and development of alternatives and proposed measures that might avoid, minimize, or mitigate any adverse effects of the proposed action on such properties. The EA will include analyses of potential impacts to cultural, historic and archaeological properties and will document the NRC staff's determinations.

Through this letter, the NRC staff initiates consultation under Section 106 of the NHPA with the Nebraska State Historic Preservation Officer regarding the MEA application. To support the environmental review and implementation of the Section 106 process through NEPA, the NRC requests that your office provide information, comments or concerns you consider appropriate with regard to cultural, historic or archaeological resources of interest that may be affected by an amendment to the CBR license. Any information you provide will be used to enhance the scope and quality of our review in accordance with 10 CFR 51. After reviewing all the information collected, the NRC will prepare a draft EA and will provide your office an opportunity to comment.

For additional information regarding the proposed project, CBR's license application is publicly available from the NRC's Agency Wide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is accessible at: <http://www.nrc.gov/reading-rm/adams.html>. The NRC found the application acceptable for commencement of review on October 5, 2012. The accession number for the Marsland source material amendment application is ML121650565, and is available online through ADAMS.

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Please submit any comments/information that you may have regarding this environmental review within 30 days of the receipt of this letter to the NRC, Attn: Mr. Kevin Hsueh, Mail Stop T-8F05, Washington, DC 20555. If you have any questions, please contact Ms. Jean Trefethen of my staff by telephone at 240-751-5358 or by email at Jean.Trefethen@nrc.gov. Thank you for your assistance.

Sincerely,

/RA/

Kevin Hsueh, Chief
Environmental Review Branch
Environmental Protection and Performance
Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 40-8943

Enclosure:
Marsland Proposed Area Map

cc: Jill Dolbert
Nebraska State Historic Society
P. O. Box 82554
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Kevin Hsueh, Chief
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Marsland Proposed Area Map

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DATE	11/30/12	11/30/12	1/30/13	1/30/13	2/8/13

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