

September 5, 2012

Mr. Leroy Spang, Tribal President  
Northern Cheyenne Tribe  
P.O. Box 128  
Lame Deer, MT 59043-0128

SUBJECT: INVITATION FOR FORMAL SECTION 106 CONSULTATION PURSUANT TO THE NATIONAL HISTORIC PRESERVATION ACT REGARDING THE 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 President Spang:

On May 16, 2012, Crow Butte Resources, Inc. (CBR) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) to amend 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) 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 (CPF) and approximately 4.5 miles northeast of Marsland, Nebraska. A map showing the proposed project location is enclosed (Enclosure 1).

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. Uranium recovered at the MEA site would be loaded onto ion exchange resin at the MEA satellite facility. The loaded resin would then be trucked approximately 11 miles to the main CBR CPF for further processing.

The Atomic Energy Act of 1954, as amended (AEA), authorizes the NRC to issue licenses for the possession and use of source material and by-product material. The AEA authorizes the NRC to license facilities that meet NRC regulatory requirements designed to protect public health and safety and the environment from radiological hazards, as well as non-radiological hazards associated with the processing of certain types of by-product material. ISR facilities must meet NRC's regulatory requirements in order to obtain a license to operate.

The NRC's acceptance review of the license application to amend NRC License SUA-1534 to authorize ISR operations at the MEA site for the proposed MEA began in early August 2012. If the license application is accepted, a detailed technical review would take place, consisting of both an environmental and safety review. The environmental review will be conducted in accordance with the regulatory provisions in Title 10 of the *Code of Federal Regulations* Part 51 (10 CFR Part 51), which implement the requirements of the National Environmental Policy Act of 1969, as amended. The NRC is preparing an environmental assessment (EA) to assess the potential environmental impacts of major federal actions that may significantly affect the human environment.

In accordance with 36 CFR Part 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 of 1966, as amended (NHPA). The EA will also include analyses of potential impacts to historic and cultural resources.

Accordingly, the NRC staff is identifying parties who may wish to consult with the staff on the proposed action. Through this letter, the NRC staff invites 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 and development of proposals to address adverse effects that may be identified during the evaluation process.

Please indicate whether or not you wish to participate by completing the enclosed form (Enclosure 2). The NRC requests that the enclosed form be returned within 30 days of receipt of this letter. The NRC staff is collecting information to facilitate the identification of historic properties and historic and cultural resources, including those that are of religious and cultural significance that could be affected by the proposed action. You may also contact us if you want to discuss concerns about the confidentiality of information that may be provided to the NRC.

Please note that correspondence provided to the NRC, including that provided by email, may be made publicly available according to NRC's policy. Therefore, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed (e.g., personal email addresses). If Tribal officials do not wish for their personal email addresses to be made public, please use an alternate email address when corresponding with the NRC.

The NRC appreciates the opportunity to consult with you on issues within the scope of the NHPA. For the purposes of meeting with Tribal leaders, the Division of Waste Management and Environmental Protection's Division Director, Deputy Division Director, or Environmental Review Branch Chief will represent the NRC.

For additional information regarding the proposed action, CBR's license amendment application is publicly available from the NRC's Agency Wide Documents Access and Management System (ADAMS). You may access publicly available documents online in the NRC Library at: <http://www.nrc.gov/reading-rm/adams.html>. The accession number for the environmental portion of CBR's application is ML121650565, and is available online through ADAMS, or directly from the project's web page at <http://www.nrc.gov/materials/uranium-recovery/license-apps/Marsland.html>.

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If you have any specific questions or comments on the proposed project, or need any additional information regarding the license application and the environmental review process, please contact Ms. Jean Trefethen of my staff by telephone at 301-415-5137, or by email at [Jean.Trefethen@nrc.gov](mailto:Jean.Trefethen@nrc.gov).

Sincerely,

**/RA by Andrew Persinko Acting for/**

Larry W. Camper, Director  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 40-8943

Enclosures:

1. Map
2. Tribal Response Form

cc: John Schmuck - CBR  
Conrad Fisher, THPO

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DISTRIBUTION: K. McConnell T. Lancaster

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DATE	06/7/12	06/12/12	06/14/12	07/2/12	09/04/12	09/5/12	09/5/12

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