

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 40-8943; NRC-2012-0281]**

**Crow Butte Resources, Inc.; Marsland Expansion Area**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Draft environmental assessment and draft finding of no significant impact; notice of availability and request for comments.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment a draft environmental assessment (EA) and draft finding of no significant impact (FONSI) for a proposed amendment of NRC source materials license SUA-1534 that would authorize Crow Butte Resources, Inc., to construct and operate an in situ uranium recovery (ISR) expansion area at the Marsland Expansion Area (MEA) site in Dawes County, Nebraska. The draft EA, "*Environmental Assessment for the Marsland Expansion Area License Amendment Application*," documents the NRC staff's environmental review of the license amendment application.

**DATES:** Submit comments by January 29, 2018. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2012-0281. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the Office of Nuclear Material Safety and Safeguards individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** May Ma, Office of Administration, Mail Stop: OWFN-2-A13, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Jean Trefethen, Office of Nuclear Material Safety and Safeguards, telephone: 301-415-0867, e-mail: [Jean.Trefethen@nrc.gov](mailto:Jean.Trefethen@nrc.gov), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

#### **SUPPLEMENTARY INFORMATION:**

##### **1. Obtaining Information and Submitting Comments**

###### **A. Obtaining Information**

Please refer to Docket ID NRC-2012-0281 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2012-0281.

- **NRC's Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdresource@nrc.gov](mailto:pdresource@nrc.gov). The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced. The ADAMS Accession Number for the MEA draft EA is ML17334A870.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

## B. Submitting Comments

Please include Docket ID NRC-2012-0281 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into the ADAMS Public Documents collection. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment

submissions to remove such information before making the comment submissions available to the public or entering the comment into the ADAMS Public Documents collection.

## **I. Introduction.**

The NRC is considering a request for an amendment to NRC source materials license SUA-1534, issued to Crow Butte Resources, Inc. (CBR or the licensee), to authorize construction and operation of the MEA, an ISR expansion facility that would be located in Dawes County, Nebraska. In accordance with NRC's regulations in part 51 of title 10 of the *Code of Federal Regulations* (10 CFR), "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," that implement the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321 et seq.), the NRC staff has prepared a draft EA documenting its environmental review of the license amendment application that included an environmental report (ADAMS Accession No. ML17325B322) and technical report, as amended (ADAMS Accession Nos. ML15328A422, ML16155A267, ML16155A268, and ML17193A314). Based on the environmental review, the NRC has made a preliminary determination that the proposed action will not significantly affect the quality of the human environment and that a FONSI is therefore appropriate.

By this notice, the NRC is requesting public comment on the draft FONSI and supporting draft EA.

## **II. Summary of Draft Environmental Assessment.**

The draft EA is publicly available in ADAMS using ADAMS Accession No. ML17334A870. A summary description of the proposed action and expected environmental impacts is provided below. The draft EA and the draft FONSI for the proposed MEA will also be available at the following public libraries: Crawford Public Library, 601 2<sup>nd</sup> Street, Crawford, NE 69339, and Chadron Public Library, 507 Bordeaux Street, Chadron, NE 69337.

### *Description of the Proposed Action*

The proposed Federal action is approval of CBR's license amendment application, which would authorize the expansion of CBR's commercial-scale uranium recovery operations to the MEA. Under the proposed action, the licensee would perform construction, uranium recovery operations, aquifer restoration, and decommissioning activities at the proposed MEA, which would encompass approximately 4,622 acres (1,870 hectares). CBR has proposed eleven production units in the MEA, which is located 11.1 miles (17.9 kilometers) south-southeast of the central processing facility (CPF) at the existing Crow Butte license area. Uranium recovery operations at the MEA would include injection of lixiviant into and pumping of water from the uranium-bearing aquifer, removal of uranium from the pumped water using ion exchange, and transport of loaded ion exchange resin to the existing Crow Butte CPF for further processing into

yellowcake. Approval of the proposed action would authorize CBR to conduct uranium recovery operations at the MEA in accordance with its license amendment application, NRC source materials license SUA-1534, and the requirements in 10 CFR part 40, “Domestic Licensing of Source Material.”

### *Environmental Impacts of the Proposed Action*

In the draft EA, the NRC staff assessed the potential environmental impacts from the construction, operation, aquifer restoration, and decommissioning of the proposed MEA on the following resource areas: land use; geology and soils; water resources; ecological resources; climatology, meteorology, and air quality; historic and cultural resources; demographics and socioeconomics; environmental justice; transportation; noise; scenic and visual resources; public and occupational health; and hazardous materials and waste management. The NRC staff also considered the cumulative impacts from past, present, and reasonably foreseeable future actions when combined with the proposed action.

All long-term impacts were determined to be SMALL. The NRC staff concluded that approval of the proposed action would not result in a significant increase in short-term or long-term radiological risk to public health or the environment. The NRC staff identified a potential for MODERATE short-term impacts to a few resource areas, including noise (temporary impacts to the nearest resident to the MEA during construction), ecological resources (localized and temporary impacts resulting from the loss and slow recovery of forest habitat), and groundwater resources (short-term

lowering of the potentiometric surface of the Basal Chadron Sandstone aquifer). While potential MODERATE impacts would be expected for specific aspects of these resource areas, the impacts are short-term and temporary. Therefore, the NRC staff concluded that the overall impacts related to these resource areas would be SMALL. Furthermore, the NRC staff found that there would be no significant negative cumulative impact to any resource area from the MEA when added to other past, present, and reasonably foreseeable future actions, and that a potential positive cumulative socioeconomic impact could result from additional tax revenue, employment, and local purchases.

#### *Environmental Impacts of the Alternatives to the Proposed Action*

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the “no-action” alternative). Under the no-action alternative, the NRC would not authorize CBR to construct and operate the MEA. In situ uranium recovery activities would not occur within the MEA and the associated environmental impacts also would not occur.

### **III. Finding of No Significant Impact (Draft).**

In accordance with the NEPA and 10 CFR part 51, the NRC staff has conducted an environmental review of a request for a license amendment to NRC source materials license SUA-1534 that would authorize construction and operation of the MEA. Based on its environmental review of the proposed action, as documented in the draft EA, the NRC staff has preliminarily determined that granting the requested license amendment

would not significantly affect the quality of the human environment. Therefore, the NRC staff has preliminarily determined, pursuant to 10 CFR 51.31, that preparation of an environmental impact statement is not required for the proposed action and a FONSI is appropriate.

Dated at Rockville, Maryland, this 8<sup>th</sup> day of December 2017.

For the U.S. Nuclear Regulatory Commission.

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Brain W. Smith, Acting Director,  
Division of Fuel Cycle Safety, Safeguards,  
and Environmental Review,  
Office of Nuclear Material Safety  
and Safeguards