



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 30, 2019

Marty Link, Water Quality
Division Administrator
Nebraska Department
of Environmental Quality
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, NE 68509-8922

SUBJECT: RESOLUTION OF CROW BUTTE FINANCIAL SURETY REQUIREMENTS

Dear Ms. Link:

The Crow Butte Resources (CBR) uranium in situ recovery (ISR) facility, located in Dawes County, Nebraska, operates under U.S. Nuclear Regulatory Commission (NRC) source materials license SUA-1534. The current surety arrangement for this facility is an irrevocable letter of credit (ILOC) in favor of the State of Nebraska. The NRC staff has been corresponding with staff at the Nebraska Department of Environmental Quality (NDEQ) regarding two issues related to CBR's surety arrangement for that site. Both issues arise from requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 40, Appendix A, Criterion 9. First, the NRC-related portion of the surety amount is not identified and committed for use in the ILOC, and second, there is no standby trust established to receive the NRC-related portion of the surety should that become necessary. The purpose of this letter is to explain the legal and regulatory bases for the NRC staff's concerns, and to seek NDEQ's agreement on an approach to address the issues in a manner that will satisfy the regulatory requirements of both the NRC and the State of Nebraska.

A. Identification of NRC-related portion of the surety

Section 161x. of the Atomic Energy Act (AEA), as amended (42 U.S.C. § 2014x), authorizes the NRC to establish requirements for financial assurance arrangements to ensure that all regulatory requirements associated with decontamination, decommissioning, and reclamation of uranium milling sites, including ISR facilities, are satisfied.¹ The regulations in 10 CFR Part 40, Appendix A, Criterion 9, contain the NRC's requirements for financial surety arrangements for such facilities. The purpose of the surety, as stated in Criterion 9(a), is "to assure that sufficient

¹ NRC regulations define "uranium milling" as "any activity that results in the production of byproduct material as defined in [10 CFR Part 40]." "Byproduct material" includes "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction operations." Accordingly, in situ uranium recovery falls within the definition of "uranium milling" and is subject to the applicable regulations in 10 CFR Part 40, Appendix A.

funds will be available to carry out the decontamination and decommissioning of the mill and site and for the reclamation of any tailings or waste disposal areas.”

Section 161x. of the AEA further states that the NRC is to take into account financial arrangements required by other Federal or State agencies in order to avoid unnecessary duplication and expense. This is reflected in Criterion 9(d) of 10 CFR Part 40, Appendix A, which states that, to avoid unnecessary duplication and expense, the NRC may accept a financial surety that has been consolidated with other surety arrangements, such as those established to meet decommissioning and reclamation requirements of another Federal or State agency. Such consolidation is permitted if two conditions are met: first, such arrangements must be considered adequate to satisfy NRC decommissioning requirements; and second, the portion of the surety that covers the NRC-related decommissioning activities must be “clearly identified and committed for use in accomplishing these activities.”²

License Condition 9.5 (LC 9.5) in NRC source materials license SUA-1534 reflects the requirement in Criterion 9(d) (emphasis added):

...Crow Butte Resources, Inc., shall continuously maintain an approved surety instrument for the Crow Butte project, in favor of the State of Nebraska...

...The licensee also must ensure that the surety, where authorized to be held by the State, **identifies the NRC-related portion of the surety and covers the above-ground decommissioning and decontamination, the cost of offsite disposal, soil and water sample analyses, and groundwater restoration associated with the site...**

Based on NRC regulatory requirements and the license condition discussed above, CBR's surety arrangement, which is held in favor of the State of Nebraska, must identify the portion (i.e., the dollar amount) that covers the cost of NRC-related decommissioning and reclamation activities and commit that amount to those activities. However, the existing ILOC language does not contain such a provision.

From a regulatory efficiency standpoint, there is significant overlap in the NRC and NDEQ decommissioning and reclamation requirements for ISR facilities, particularly in the area of groundwater restoration. Thus, in the NRC's view, use of a consolidated surety instrument would avoid unnecessary duplication and expense that would occur if CBR is required to provide a separate, independent financial assurance instrument to cover the cost of NRC-related decommissioning activities. The NRC recognizes that there are some required decommissioning and reclamation activities that are unique to the NRC or NDEQ for which each regulator would want to ensure the availability of sufficient funds. However, as long as CBR's existing surety arrangement is sufficient to cover the cost of all necessary decommissioning and reclamation activities (both overlapping and not) for both regulatory agencies, the NRC believes that changing the ILOC to address the NRC requirements stated above would not adversely

² 10 CFR Part 40, Appendix A, Criterion 9(d). According to Criterion 9(d), required decommissioning activities include “decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge.” Although this language was written for conventional uranium mills, it applies to analogous activities at ISR facilities, including above-ground decommissioning and decontamination of the site, offsite disposal, soil and water sampling and analyses, and groundwater restoration. The long-term site surveillance and control requirements (and associated costs) referred to in Criterion 9(d) are not applicable to ISR facilities.

affect NDEQ's interest in assuring that full decommissioning and reclamation of the CBR ISR facility, according to NDEQ requirements, can take place. Based on these considerations, the NRC staff proposes that the ILOC be modified to include language reflecting the NRC requirements stated above.

B. Standby trust

Criterion 9(i) of 10 CFR Part 40, Appendix A lists the types of financial surety arrangements that are generally acceptable to the NRC, and then states that if a trust is not used, a standby trust must be set up to receive funds if the NRC or State regulatory agency exercises its right to collect the surety. Because CBR is using an ILOC, not a trust, as the surety arrangement for its ISR facility, Criterion 9(i) requires the establishment of a standby trust. The reason for this requirement is that, as a Federal agency, the NRC cannot receive funds directly from a licensee's funding mechanism. If the funds were paid directly to the NRC, they would have to be deposited in the U.S. Treasury as general revenue. Consequently, the funds would not be available to pay for decommissioning costs.

The NRC does not believe that the establishment of a standby trust to receive surety funds would adversely affect NDEQ's interest in achieving full decommissioning and reclamation of the CBR ISR facility. Furthermore, the NRC has found it acceptable to use other mechanisms that are functionally equivalent to a standby trust. For example, before Wyoming became an NRC agreement state, the NRC approved the use of a legislatively established fiduciary fund in lieu of a standby trust.³ If the State of Nebraska has a similar mechanism, the NRC could consider it as an alternative to establishment of a standby trust.

I am requesting your response to indicate (1) whether NDEQ is willing to modify the language in CBR's ILOC to identify the amount of the NRC portion of the surety and commit that amount for use in NRC-related decommissioning activities, and (2) whether NDEQ would be amenable to the establishment of a standby trust to receive NRC-related surety funds, or whether NDEQ has a mechanism, such as a legislatively established fund, that might serve as an alternative to establishing a standby trust. If you would like to discuss these issues further, please contact Reginald Augustus at 301-415-0165 or Reginald.Augustus@nrc.gov.⁴

³ Enclosed for your reference are two documents related to the Wyoming fiduciary fund. The first is the NRC staff's determination that Wyoming's fiduciary fund is equivalent to a standby trust fund (dated October 25, 2017). The second is a letter from the Wyoming Department of Environmental Quality explaining Wyoming's fiduciary fund mechanism (dated May 26, 2017).

⁴ If NDEQ legal staff have questions related to the statutory or regulatory requirements discussed in this letter, or other legal questions, please have them contact Marcia Simon in the NRC's Office of General Counsel at 301-287-9176 or marcia.simon@nrc.gov.

In accordance with 10 CFR 2.390, 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 the NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

A handwritten signature in black ink, appearing to be 'P. Holahan', with a horizontal line extending to the right. Below the signature, the word 'for' is written in a small, cursive script.

Patricia K. Holahan, Director
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. NRC staff's evaluation of Wyoming's
fiduciary fund (ADAMS accession No. ML17234A454)
2. Letter explaining Wyoming's fiduciary
fund mechanism (ADAMS accession No. ML17177A267)

cc: Patrick Moulding, OGC
Marcia Simon, OGC
Crow Butte listserv

SUBJECT: RESOLUTION OF CROW BUTTE FINANCIAL SURETY REQUIREMENTS
DATE: September 30, 2019

ADAMS Package Accession No. ML19273A876

***via email**

OFFICE	DUWP	DUWP	DUWP	DUWP	OGC	DUWP
NAME	R. Augustus *	R. Burrows	S. Achten*	B. VonTill*	M. Simon NLO*	B. Pham for P. Holahan*
DATE	7/1/2019	7/1/2019	7/8/2019	7/9/2019	7/10/2019	9/30/19