



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

14 December 2016

Mr. Richard Bush, Site Manager  
U.S. Department of Energy  
Office of Legacy Management  
2597 Legacy Way  
Grand Junction, CO 81503

**SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF COMMENTS ON THE PROPOSED REVISION OF THE SHIRLEY BASIN SOUTH WYOMING DISPOSAL SITE LONG-TERM SURVEILLANCE PLAN (DOCKET NO. 040-6659), DATED JULY 15, 2016**

Dear Mr. Bush:

I am writing in response to your letter dated July 15, 2016, informing the U.S. Nuclear Regulatory Commission (NRC) staff that the U.S. Department of Energy Office of Legacy Management (DOE LM) intends to revise the Long-Term Surveillance Plan (LTSP) for the Shirley Basin South (SBS) Wyoming Uranium Mill Tailings Radiation Control Act (UMTRCA) Title II site (Agencywide Document Access and Management System (ADAMS) Accession Number ML16201A188). In your letter you state that the DOE plans to revise the LTSP as follows:

- (1) Revise DOE-LM's long-term surveillance boundary (LTSB) to exclude the Area of Interest indicated on the map included with the letter;
- (2) Implement institutional controls between the new long-term surveillance boundary and the existing long-term surveillance boundary (i.e., the current DOE-LM ownership boundary);
- (3) Revise the Alternate Concentration Limits (ACLs) to ensure continued compliance during any future ISR operations; and,
- (4) Eliminate existing monitoring wells located within the Area of Interest.

In your letter you state that you are planning to implement these revisions because Ur-Energy is planning to conduct in-situ uranium recovery (ISR) on their property adjacent to the SBS site and that Ur-Energy has approached DOE LM about acquiring a portion of the SBS property to expand Ur-Energy's ISR operations to include part of the SBS site.

The NRC staff has reviewed your letter and has the following comments. These comments are based in part on UMTRCA § 202(b)(1)(A)<sup>1</sup> and NRC regulations in Title 10, Code of Federal Regulations (10 CFR), § 40.28(d)<sup>2</sup>:

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<sup>1</sup> Section 202(b)(1)(A) of the UMTRCA provides:

The Commission shall require by rule, regulation, or order that prior to the termination of any license which is issued after the effective date of this section, title to the land, including any interests therein (other than land owned by the United States or by a State) which is used for the disposal of any byproduct material, as defined by section 11e.(2), pursuant to such license shall be transferred to—

(A) the United States, or

(B) the State in which such land is located, at the option of such State.

(2) Unless the Commission determines prior to such termination that transfer of title to such land and such byproduct material is not necessary or desirable to protect the public health, safety, or welfare or to minimize or eliminate danger to life or property. Such determination shall be made in accordance with section 181 of this Act. Notwithstanding any other provision of law or any such determination, such property and materials shall be maintained pursuant to a license issued by the Commission pursuant to section 84(b) in such manner as will protect the public health, safety, and the environment.

(B) If the Commission determines by order that use of the surface or subsurface estates, or both, of the land transferred to the United States or to a State under subparagraph (A) would not endanger the public health, safety, welfare, or environment, the Commission, pursuant to such regulations as it may prescribe, shall permit the use of the surface or subsurface estates, or both, of such land in a manner consistent with the provisions of this section. If the Commission permits such use of such land, it shall provide the person who transferred such land with the right of first refusal with respect to such use of such land.

<sup>2</sup> NRC regulations at 10 CFR 40.28(d) provide:

(d) Upon application, the Commission may issue a specific license, as specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, permitting the use of surface and/or subsurface estates transferred to the United States or a State. Although an application may be received from any person, if permission is granted, the person who transferred the land to DOE or the State shall receive the right of first refusal with respect to this use of the land. The application must demonstrate that:

(1) The proposed action does not endanger the public health, safety, welfare, or the environment;

(2) Whether the proposed action is of a temporary or permanent nature, the site would be maintained and/or restored to meet requirements in appendix A of this part for closed sites; and

(3) Adequate financial arrangements are in place to ensure that the byproduct materials will not be disturbed, or if disturbed that the applicant is able to restore the site to a safe and environmentally sound condition.

1. When the LTSB was established, it included the Area of Interest that the DOE has indicated would be “acquired” by Ur-Energy. At the time that the LTSB was established, the Area of Interest was deemed necessary to protect the public health, safety, or welfare or to minimize or eliminate danger to life or property. As such, while Ur-Energy may be able to use the surface or subsurface estates at the site, UMTRCA does not allow Ur-Energy to purchase or otherwise acquire the property from the DOE. As we discussed in a call with Steven Miller in DOE’s Office of the General Counsel, other uses of UMTRCA Title I and II sites are discussed in UMTRCA itself, and applicable NRC regulations can be found in 10 CFR §§ 40.27(d) and 40.28(d). Additional information is also available in Federal Register Notice (55 FR 45,591) associated with these provisions.

2. In addition, Ur-Energy has not approached the NRC staff about a license for ISR operations at the SBS site. As discussed above, to conduct uranium recovery operations, Ur-Energy must request a specific license for uranium extraction activities, in addition to whatever process is associated with obtaining DOE’s approval. It is therefore premature to propose LTSP changes at the SBS site unless and until Ur-Energy submits an application for a license that includes the Area of Interest. In addition, because the contemplated revisions to the groundwater monitoring program are predicated on the potential revision to the LTSP, the DOE should continue the groundwater monitoring program as outlined in the current, approved LTSP. If the DOE intends to modify the groundwater monitoring program at the SBS site, we would be happy to support additional discussion of potential modifications, but such modifications should not be based on a revised LTSP. In addition, we note that such revisions to the groundwater monitoring program were previously discussed with the DOE in March, 2014 (ADAMS Accession Number ML14017A069), and the rationale for maintaining the current groundwater monitoring program from that discussion remains valid.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 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 ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

R. Bush

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If you have any questions concerning this letter, please contact me at 301-415-6749 or by email at [Dominick.Orlando@nrc.gov](mailto:Dominick.Orlando@nrc.gov).

Sincerely,

***/RA/***

Dominick A. Orlando, Senior Project Manager  
Materials Decommissioning Branch  
Division of Decommissioning, Uranium Recovery  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

R. Bush

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**ADAMS Accession No.:**

**ML 16308A409**

**\*Concurred via e-mail**

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