

STATEMENT OF BASIS

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Background:

History of the Dawn Mining Company Site

Midnite Mine is an inactive open-pit uranium mine located on the Spokane Indian Reservation in Stevens County, Washington, about 8 miles northwest of Wellpinit. The mine was operated between 1954 and 1981 by the Dawn Mining Company (DMC) on land leased from the Spokane Tribe and individual tribal members. Initially, Jim and John LeBret were prospecting on the Spokane Reservation with a Geiger counter in 1954 and discovered rocks which had a fluorescent green glow. The LeBet brothers (Brothers), members of the Spokane Tribe, staked the first uranium claim on the reservation. The Brothers and their partners soon contracted with DMC to operate the mine. The mine, a 350 acre site about 45 miles northwest of Spokane, produced uranium needed to support production of the nation's nuclear arsenal from 1955 to 1981. Ore was extracted from pits and was transported by truck to DMC's mill located in Ford, Washington, about 20 miles east of the mine. During the life of the mine, about 2.9 million tons of ore was milled, producing approximately 11 million pounds of uranium oxide "yellowcake" (ATSDR, 2010).

The Washington Department of Health (WDOH) issued a radioactive materials license (RML) in 1992 for the uranium material generated from the Midnite Mine Water Treatment Plant (WTP), which was constructed in 1988 and began treating water in 1992. The WDOH RML was terminated after December 31, 2008, and the regulatory authority for operation of the WTP was transferred under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to the U.S. Environmental Protection Agency (EPA). The Dawn Mill processing facility has been decommissioned and uranium material is no longer processed at this location. After December 2008, the Dawn Mill tailings facility accepted Uranium Material for direct disposal as source material in accordance with U.S. Nuclear Regulatory Commission (NRC) guidance on Disposal of Atomic Energy Act Non-Section 11e.(2) Byproduct Material of Tailings Impoundments (DUSA, 2011). Direct disposal in the tailings impoundment has not been an option since the 2010 operating season because of the scheduled reclamation of the Midnite Mine tailings facility. The uranium material resulting from treatment of pumped groundwater and surface water is treated at the WTP using either centrifuge or filter press technology. Pilot testing performed by DMC indicates that the final resulting uranium material remaining after treatment in the WTP is expected to have an average moisture content of 55% to 75% (DUSA,

2011).

Before the State of Utah's Agreement State status was formalized, the Nuclear Regulatory Commission (NRC) approved similar amendment requests in the past for separate alternate feed materials under this license. In the Final Application for Uranium Mills and Mill Tailings made by the State of Utah to the NRC Office of State and Tribal Affairs, the following commitment was made by the State of Utah:

“The State of Utah recognizes the importance of and supports the uranium mining and milling industry. The State recognizes that to remain viable at this time, uranium mills must be able to engage in activities other than milling conventional mined uranium such as processing alternate feed materials for the recovery of uranium alone or together with other minerals.”

The State of Utah also agreed to use the current NRC guidance (NRC Regulatory Issues Summary 2000-23) for review and decision of receipt of alternate feed materials and that each amendment would be considered a major amendment for the purposes of licensing.

Purpose

Energy Fuels Resources (USA) Inc., (EFRI) is requesting that the uranium material be authorized for receipt and processing at the White Mesa Mill based on its source material content. Byproduct (residuals) from the extraction of source material would be disposed within one or both of the Mill's active lined uranium tailings management/disposal cells.

This Statement of Basis describes proposed changes to Radioactive Material License (RML) No. UT 1900479 (hereafter License). The accompanying Safety Evaluation Report (SER), as reference below, has been prepared to evaluate the environmental impacts resulting from the proposed receipt and processing of alternate feed material (“uranium material”) from DMC, at the White Mesa Uranium Mill (Mill).

The White Mesa Mill site is located in San Juan County, Utah, approximately 5 miles south of Blanding. The White Mesa Mill was originally issued a byproduct materials license by the NRC and, following obtaining Agreement State status with the NRC in 2004, a license was issued by the Utah Division of Radiation Control (UDRC). The License authorizes EFRI to receive and process natural uranium-bearing ores and approved alternate feed materials. The License also authorizes EFRI to dispose of byproduct material in the form of uranium mill tailings and dispose of other uranium byproduct waste generated by the licensee's milling operations. EFRI, formerly Denison Mines (USA) Corp (DUSA), submitted a request to the UDRC to amend RML No. UT1900479 in a letter dated April 27, 2011 (amendment request). The amendment request, if approved by UDRC, would allow EFRI to receive and process up to a total of 4,500 tons (dry weight) of uranium material from the DMC Site as alternate feed material.

Discussion

Generally, concentrations of constituents identified in tailings liquids or solids, feed materials, or

process streams at the Mill are at concentrations that are comparable to the concentrations in the uranium material (DUSA, 2011). Due to the small annual and total quantities of the proposed receipt of uranium material, increases in the concentration of these constituents in the Mill's tailings are determined not to be significant (SER, 2013). A few other constituents, such as barium, beryllium, silver, manganese, and calcium are present in the uranium material and are either present in lower concentrations in the ores and other alternate feeds at the Mill. In addition, the total mass of uranium material received will have a contribution of less than 1% of the total mass in the tailings cell (EFRI 2013a, p. 233).

Conclusion

Based on the SER for the proposed amendment request as described in the Amendment Request dated April 27, 2011, the Supplementary Information letter dated December 5, 2012, and in EFRI's letters dated June 14, 2013 and August 7, 2013, (EFRI 2013a; 2013b), the UDRC has determined that no significant adverse effects on public health or the environment are expected to result from the approval and implementation of the proposed action. Furthermore, as documented in the accompanying SER, processing of the uranium material does not produce any additional pathway for, or cause a significant increase in, concentrations of any constituents present in the uranium material in groundwater. Specifically, each constituent in the uranium material is either monitored under the Mill's approved GWDP, or, due to similar physical and chemical properties, represented by a constituent presently monitored in the GWDP. EFRI's monitoring program, as required by the GWDP, meets the requirements of NRC Reg. Guide 4.14 (NRC 1980) and R317-6 Utah groundwater regulations. Hence, processing of the uranium material is not expected to change the nature of groundwater conditions in a way that would require additional groundwater restoration before or during the required site reclamation following closure of the mill.

Proposed License Changes

Specific modifications made to the License are listed by item or license condition in the following table:

License Condition Modified	Minor/Major Change	Description of Modification
Item 10.20	Major	Added a new condition that would authorize the Licensee to receive and process up to 4,500 tons for uranium recovery, Uranium Material from the Dawn Mining Company's Midnite Mine site in Wellpinit, Washington State.
Item 10.12	Minor	Corrected minor spelling error; Changed the "o" in Tonowanda to an "a" in Tonawanda.
Item 13.1	Minor	Added specific documents related to this license amendment. Updated this condition to add documents pertinent to Dawn

1. License Condition 10.20:

The following license condition change (new license condition) would result from this license amendment:

“10.20 The licensee is authorized to receive and process up to 4,500 tons (dry weight) source material from the Dawn Mining Company’s Midnite Mine site in Wellpinit, Washington, in accordance with statements, representations, and commitments contained in the Amendment Request submitted to the Executive Secretary dated April 27, 2011 and supplemented by a Letter Report (with attachment) submitted to the Director of the Utah Division of Radiation Control (Director) on December 5, 2012, a Letter Report (with attachments) submitted to the Director on June 14, 2013, and a Letter submitted to the Director on August 7, 2013.” The Licensee is authorized to receive no more than 1,000 tons per year and a total limit of 4,500 tons (dry weight) under this condition without prior approval from the Director.

“A (1) Dawn Mining Uranium Material stored (stockpiled) at the Mill Site longer than 14 days shall be covered with a durable geomembrane cover resistant to damage by ultraviolet (UV) radiation and sufficient ballast shall be placed over the cover to prevent wind uplift of the cover during peak wind conditions at the site; and (2) If at any time, visible dust is observed to be originating from Uranium Material stored on site, the EFRI RSO or his or her authorized representative shall take actions within 30 minutes to stop the generation of visible dust.”

2. License Condition 10.12:

As identified above, the Agency made a minor spelling correction to the word “Tonawanda”. Changed the “o” in Tonowanda to an “a” in Tonawanda.

3. License Condition 13.1:

License Condition 13.1 identifies documents that support specific license amendments. This information was previously found in License Condition 9.3, and was moved to LC13.1 in License Amendment 5. Documents to support the addition of License Condition 10.20 were added to License Condition 13.1.

References

Agency for Toxic Substances and Disease Registry (2010), Public Health Assessment Midnite Mine Site, Wellpinit, Stevens County, Washington, EPA FACILITY ID: WAD980978753; Site and Radiological Assessment Branch, Division of Health Assessment and Consultation, May 19,

2010.

Denison Mines (USA) Corp (DUSA) 2011. "Amendment Request to Process an Alternate Feed Material (the "Uranium Material") at White Mesa Mill (the "Mill") from Dawn Mining Corporation ("DMC") Midnite Mine, State of Utah Radioactive Material License No. 1900479, April 27, 2011.

Energy Fuels Resources (USA) Inc. (EFRI) 2012. State of Utah Radioactive Material License No. UT 1900479, April 27, 2011 Amendment Request to Process an Alternate Feed Material from Dawn Mining Company- Transmittal of Supplementary Information. Letter Report to Mr. Rusty Lundberg, Utah Division of Radiation Control, December 5, 2012.

Energy Fuels Resources (USA) Inc. (EFRI) 2013a. White Mesa Uranium Mill - RML UT1900479: April 27, 2011 Request to Amend Radioactive Materials License to Allow Processing of Alternate Feed Materials from Dawn Mining Company's Midnite Mine Water Treatment Plant ("WTP") - Response to January 22, 2013 and January 23, 2013 Utah Division of Radiation Control Requests for Information. Letter Report to Mr. Rusty Lundberg, Utah Division of Radiation Control, June 14, 2013.

Energy Fuels Resources (USA) Inc. (EFRI) 2013b. White Mesa Uranium Mill – RML UT1900479: April 27, 2011 Request to Amend Radioactive Materials License to Allow Processing of Alternate Feed Materials from Dawn Mining Company's Midnite Mine Water Treatment Plant ("WTP") – Response to July 31, 2013 URS Email Comments. Letter to Mr. Rusty Lundberg, Utah Division of Radiation Control, August 7, 2013.

URS Safety Evaluation Report (SER), 2013. Amendment Request to Process an Alternate Feed Material (the "Uranium Material") at White Mesa Mill (the "Mill") from Dawn Mining Corporation ("DMC") Midnite Mine, Washington State, August 9, 2013.

U. S. Nuclear Regulatory Commission, Office of Nuclear Material and Safety and Safeguards, NRC Regulatory Issue Summary 2000-23, Recent Changes to Uranium Recovery Policy, Washington, D.C., November 30, 2000.

Attachment A

Redline/Strikeout text of Energy Fuels Resources (USA) Inc. 11e.(2) License #UT1900479