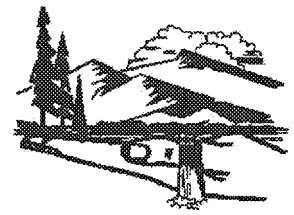




# Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Matthew H. Mead, Governor

Todd Parfitt, Director

May 30, 2017

The Honorable Scott Pruitt  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, NW  
Washington, D.C. 20460

RE: Comments on Proposed Rule: Financial Requirement Under CERCLA Section 108(b) of Facilities in the Hardrock Mining Industry

Dear Mr. Pruitt,

On behalf of the State of Wyoming Department of Environmental Quality (WDEQ), I am writing to express the concerns and questions regarding the Environmental Protection Agency's (EPA) proposed rule, *Financial Requirements Under CERCLA Section 108(b) of Facilities in the Hardrock Mining Industry*, signed by the EPA administrator on December 1<sup>st</sup>, 2016, and published in the federal register January 11, 2017. The intent of the rule is to require owners and operators of hardrock mining facilities to have sufficient financial responsibility to be able to cover future possible Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) environmental response liabilities. The proposed rule is unnecessary and duplicative. In Wyoming, specifically for the uranium recovery industry (In-Situ Recovery (ISR)). The WDEQ is grateful for the opportunity to provide comment on the concerns and impacts to the state mining operations of the proposed rulemaking.

**A. Financial responsibility requirements currently required by State and Federal Agencies; Therefore, CERCLA 108(b) rulemaking is either duplicative of or will pre-empt state authorized programs.**

Hardrock mining is defined in EPA's notices<sup>1</sup> as the extraction, beneficiation, or processing of metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic non-fuel minerals (e.g. asbestos, phosphate rock, and sulfur). The WDEQ has regulated hardrock mining operations for over 34 years. These operations are subject to financial responsibility and assurance regulations under state and federal laws in some instances. The financial responsibility provisions of the WDEQ provide financial assurances for operation, cleanup, closure, and post-closure care of hardrock mining operations, including those subject to bankruptcy or operator abandonment.

The proposed rulemaking will either pre-empt or be duplicative of state and other federal agencies' financial responsibility requirements. Thus, creating double bonding for "hardrock" and uranium recovery operations in Wyoming. Currently the WDEQ and federal Nuclear Regulatory Commission (NRC) financial assurance provide liability assurances for groundwater restoration, surface reclamation, equipment removal and disposal, building demolition and disposal, wellfield buildings removal, well maintenance and abandonment, wellfield and satellite surface reclamation, as well as various other costs. A 2012 United States Government Accountability Office (GAO) document<sup>2</sup> on the oversight of financial assurances for uranium mining stated that as of January 2012, 247.6 million dollars were held by the by federal entities (BLM, USFS, and DOE) to cover estimated reclamation costs for uranium operations on federal lands alone, and that these assurances were generally adequate. Therefore, WDEQ is requesting clarification on the following rule provisions:

<sup>1</sup> 74 Fed. Reg. at 37214

<sup>2</sup> GAO Report to the Ranking Member, Committee on Natural Resources, House of Representatives, *Uranium Mining: Opportunities Exist to Improve Oversight of Financial Assurances* (May 2012)

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- 1) How will the additional surety, set aside by Section 108(b), be used beyond the costs already bonded for and described above?
- 2) Is there an example of an in-situ recovery site which necessitated a CERCLA response?
- 3) Will EPA propose specific financial assurance release criteria?

#### **B. State Involvement with the EPA**

The EPA has a requirement and duty to consult with States before promulgating regulations that will impact State regulatory programs, economics, and sovereign authorities. Executive Order 13132<sup>3</sup> directs the EPA to adhere to specified "fundamental federalism and principles" and meaningfully consult with State governments whenever the agency considers creating "policies that have federalism implications." *Id.* at § 2.

Given the Executive Order's clear language about early and meaningful consultation, the EPA cannot in good faith act "in the spirit of Executive Order 13132" by holding a single webinar, and two teleconferences with the States, prior to the proposed regulations being published in the Federal Register, as meaningful engagement with States. As principle stakeholders, specific meetings with affected states would have been productive and helped to eliminate many of the items of issue that are now facing both EPA and the States. At a minimum a joint meeting with the States in coordination with the Interstate Mining Compact Commission (IMCC) would have been beneficial to all stakeholders. It is of concern that the EPA met with environmental groups in person<sup>4</sup> to discuss the proposed rulemaking, a courtesy that was not extended to Wyoming or member states of IMCC.

By not engaging the State of Wyoming in the rulemaking EPA did not consider expertise regarding the regulation of uranium mining and milling. After analyzing the supporting documents for the proposed rule it appears that the EPA took into account third party information from sources with limited experience in ISR operations and excluded regulators in the States where uranium mining and milling occurs. The documents overwhelmingly cite organizations such as WISE Uranium, Earthworks Action, and other NGOS. Why did EPA elect not to approach the regulators in states with the highest level of expertise? If EPA implemented Executive Order 13132 as intended, the information that led to the rulemaking would have considered most current and available information. The EPA rulemaking failed to develop a regulation based on the best available technology (BAT) and the best available information (BAI).

#### **C. Program Deferral**

In the proposed rulemaking, a "program deferral approach"<sup>5</sup> is discussed. The in-situ uranium recovery facilities in Wyoming are subject to conservative levels of financial responsibility. The \$1,000,000 median financial responsibility estimated for in-situ recovery sites in the Federal Register Notice<sup>6</sup> of the proposed rule is a small fraction of the financial responsibility for which the facilities are bonded by the State of Wyoming. Other hardrock mining facilities are also required to meet State financial assurance requirements sufficient to address all concerns from their operations<sup>7</sup>. The State of Wyoming requires facilities to calculate their financial responsibilities and then the State reviews these calculations on an annual basis. WDEQ reserves the right to revise the financial responsibilities, as necessary, on the Land Quality Division administrator's request. This is a more site-specific approach to financial responsibilities than the financial responsibility formula proposed by the EPA in the proposed rulemaking. Wyoming's financial responsibility requirements are conservative and would meet the EPA's criteria for program deferral listed

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<sup>3</sup> 64 Fed. Reg. at 43255 (August 4, 1999),

<sup>4</sup> EPA-HQ-SFUND-2015-0781-0373

<sup>5</sup> 82 Fed. Reg. at 3468 (January 11, 2017),

<sup>6</sup> 82 Fed. Reg. at 3391 (January 11, 2017),

<sup>7</sup> WS § 35-11-417 and WS § 35-11-418

in the proposed rulemaking<sup>8</sup>. The State of Wyoming strongly encourages the full programmatic deferral approach. WDEQ has the following questions related to the deferral option:

- 1) How would the programmatic review be initiated? Would a program need to apply for the deferral, would the regulated facilities request this option, or will the EPA complete these reviews autonomously?
- 2) How would the EPA judge a program's currently held financial responsibility as comparable with that computed by the financial responsibility formula in the proposed rulemaking?
- 3) As discussed previously, facilities may have financial responsibility with both the State of Wyoming and with the NRC. How will this situation be handled?

**D. Comprehensive Report: An Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substances Final Report.**

It appears that the *Comprehensive Report: An Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substance Report* is the primary document used to support the decision to include uranium in-situ recovery and conventional milling operations into the category of hardrock mining and this proposed rulemaking. The document states that the "primary threats are releases to adjacent groundwater and to surface soils and waters from spills." Furthermore, the document evaluates two in-situ facilities and reports on the releases at these facilities. It outlines spills that occur and additionally an employee being exposed to yellowcake. The document is unclear on how additional financial responsibility requirements held by the EPA would mitigate or respond to exposures to workers and therefore WDEQ is confused as to the purpose of identifying exposures to workers in this document. This is outside of a CERCLA type response and additional financial assurances held by EPA would not mitigate the hazard. Additionally, WDEQ believes that spills from In-Situ and Conventional Mill facilities have already been contemplated by the EPA and the NRC and inclusion in this proposed rulemaking would be contradictory to existing regulations and EPA decisions. The following examples illustrate these contradictions:

1. EPA clarifies the definition of release in the existing CERCLA rules<sup>9</sup> and provides for an important exclusion; "definition of release excludes ....(C) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act (AEA) of 1954, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under §170 of such act." It appears the EPA has historically considered "releases" at uranium recovery operations previously and determined that it fell under UMTRCA and NRC jurisdiction as long as financial assurances were in place. Wyoming contends that NRC already has financial assurance requirements to address the effects of releases. Therefore, the EPA proposed inclusion of in-situ and Conventional Mills contradicts with the CERCLA regulations and establishes a situation of double bonding. This situation would also apply to the rare earth mines in regards to their source material streams.
2. UMTRCA granted the EPA the authority to promulgate standards for Uranium Recovery Operations, and the NRC and by extension the Agreement States the authority to implement and enforce EPA's standards<sup>10</sup>. Additionally in *Comprehensive Report: An Overview of Practices at Hardrock Mining and*

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<sup>8</sup> 82 Fed. Reg. at 3469 (January 11, 2017),

<sup>9</sup> CERCLA § 101(22)(C)

<sup>10</sup> Atomic Energy Act of 1954, 42 U.S.C. § 2011 et seq., as amended Section 275(a)

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*Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substance Report* it states "While UMTRCA has historically regulated only traditional uranium mill process, EPA promulgated a proposed rule establishing groundwater restoration and monitoring requirements at ISL facilities under UMTRCA. These requirements which would be implemented by NRC." Additionally in a proposed revision to 40 CFR Part 192<sup>11</sup>, EPA further states "EPA has always held the position that UMTRCA is the controlling legal authority for protection of groundwater and NRC is obligated to implement the 40 CFR Part 192 standards to carry out that function at ISR site. By promulgating the new financial responsibility requirements EPA extends its authority beyond those granted to them under UMTRCA and is in contradiction to statements made in *Comprehensive Report: An Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substance Report* and the statements and long held positions made in proposed 40 CFR Part 192 revisions.

The State of Wyoming position is that the EPA's inclusion of In-situ and Conventional uranium recovery operations should be reconsidered and removed from the proposed rule. If the EPA feels that additional financial assurance requirements are needed for CERCLA type responses, they should promulgate standards for the NRC or the Agreement States to enforce.

Additionally, Wyoming is providing clarifications to information provided in the document *Comprehensive Report: An Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substance Report*:

1. The document states that "for uranium mining, the EPA and the NRC have also promulgated a variety of technical standards for uranium facilities that address health, safety, and environmental issues under AEA." This statement is inaccurate because mining is not included under NRC authority. NRC regulates In-situ uranium mining on the premise that it is milling underground, a decision that is outlined in SRM/SECY 99-013.
2. The document states that "the NRC requires the restoration of aquifer quality to the use class prior to mining operations." This is inaccurate, NRC requirements for restoration<sup>12</sup> are (1) The Commission approved background (2) Maximum Concentration Level<sup>13</sup> (3) An alternate concentration limit set by the Commission.

**E. 2002 EPA/NRC Memorandum of Understanding (MOU) Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites.**

In 2002 the EPA and the Nuclear Regulatory Commission (NRC) entered into a Memorandum of Understanding (MOU)<sup>14</sup> that delineated the roles of each agency as it pertained to uranium milling decommissioning and decontamination. The MOU states conditions where EPA involvement would be required. It specifically states in the MOU:

Section V.C.2

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<sup>11</sup> 80 FR at 4167, (January 26, 2015)

<sup>12</sup> 10 C.F.R § 40 Appendix A Criterion 5B(5)

<sup>13</sup> 10 C.F.R § 40 Appendix A Criterion 5C

<sup>14</sup> MOU between NRC and EPA "*Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites.*"

"For NRC-licensed sites at which NRC determines during the license termination process that there is radioactive groundwater contamination in excess of EPA's MCLs, or for which NRC contemplates either restricted release (10 CFR 20.1403) or the use of alternative criteria for license termination (10 CR 20.1404), NRC will seek EPA's expertise to assist in NRC's review of decommissioning or license termination plan. In addition, NRC will consult with EPA if either the planned level of residual radioactive soil concentrations in the proposed action or the actual residual level of radioactive soil concentrations found in the final site survey exceed the radioactive soil concentration in Table 1. With respect to all such sites, the NRC will consult with EPA on the application of the NRC decommissioning requirements and will take such action as the NRC determines to be appropriate based on its consultation with EPA. For example, if NRC determines during the license termination process that there will be radioactive ground-water contamination in excess of EPA's MCLs at the time of license termination, then NRC will discuss with EPA the use of flexibility under EPA's phased approach for addressing ground-water contamination. If NRC does not adopt recommendations provided by the EPA, NRC will inform EPA of the basis for its decision not to do so."

Section V.C.3:

"NRC will defer to EPA regarding matters involving hazardous materials not under NRC's jurisdiction."

Therefore, unless the conditions of either V.C.2 or V.C.3 of the MOU are met, the EPA plays no part in the remediation of uranium milling sites, and therefore Section 108(b) financial responsibilities for such sites may be limited in scope to solely those items which would be under the purview of the EPA. Even when the conditions of V.C.2 or V.C.3 are met, the NRC will still be the ultimate decision maker for the termination of the license. While this MOU does not apply to Agreement States, in practice the Agreement State with concurrence from NRC decides when the license may be terminated. Wyoming is currently seeking Agreement State status for uranium recovery operations in the State and is very interested in how this process will work and has the following questions:

- 1) How did EPA take into account the separation of these roles, as it pertains to CERCLA, in their calculation of financial responsibilities for uranium milling (including in-situ recovery of uranium) activities or other activities necessitating source material licenses, such as some rare earth mines?
- 2) If the NRC grants a license termination for a site, what response is elicited from the EPA in regards to the release of financial responsibility?
- 3) What is the process or vehicle for the release of financial responsibility for a site for which the license has been terminated under the regulation of the NRC?
- 4) If an Agreement State grants a license termination for a site, what response is elicited from the EPA in regards to the release of financial responsibility?
- 5) What is the process or vehicle for the release of financial responsibility for a site for which the license has been terminated under the conditions of the Agreement State?

**F. NRC/State Financial Assurances**

The NRC, or an Agreement State, which regulates source and 11e.(2) byproduct material, bond future Title II sites under Criterion 9 and Criterion 10 of 10 CFR Part 40 Appendix A. Wyoming seeks clarity on how EPA will view existing federal assurance requirements.

Criterion 9(a)(4)(d) states:

"To avoid unnecessary duplication and expense, The Commission may accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements of other Federal or state agencies and/or local governing bodies for decommissioning, decontamination, reclamation, and long term site surveillance and control, provided such arrangements are considered adequate to satisfy these requirements and that the portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge is clearly identified and committed for use in accomplishing these activities."

- 1) How will EPA consider funds already set aside for Criterion 9? Is it possible to reduce the number of financial responsibility formula components for sites that have those components of the formula already included in their bond?
- 2) Have the costs to the licensee of this re-negotiation been taken into account by the EPA under a cost/benefit analysis of the proposed rule?
- 3) Has the EPA consulted with the NRC or Agreement State programs with uranium milling licensees (i.e. Washington, Texas, Utah, and Colorado) on the proposed rule? If so, to what extent?

#### **G. Use of Best Technology**

In Appendix B, "Defining the Universes of 108(b) Historical CERCLA and 2009 Current Sites" to the supporting documentation "*Evidence of CERCLA Hazardous Substances and Potential Exposures at CERCLA §108(b) Mining and Mineral Processing Sites*", the Appendix notes that the sample subset, one in which site operations ended after 1980, was chosen because it was "more likely to be similar to modern mining and milling practices and mineral processing methods used at currently active sites". Homestake Mining Co.'s uranium mill is used as an example. However, the Homestake Mining Co. uranium mill, near Milan, NM, began operations in the 1950's. Dawn Mining Company's Midnite Mine, a former uranium mine, near Welpinit, WA, is also used as an example of a hardrock mining facility which utilized "modern mining practices". This mine also began operations in the 1950's.

Based on these two examples alone, justifying 1950's uranium mining and milling practices as examples of "modern" methods is questionable and biased. UMTRCA was promulgated in 1978, a full 20 years after the beginning of operations at Homestake Mining's uranium mill. Modern surface mining laws vary by state, but the State of Washington first passed their *Metals Mining and Milling Operations Act* in 1994, a full 40 years after the beginning of operations at Midnite Mine. To categorize the environmental degradation that could reasonably occur due to a modern hardrock mining facility (operations beginning after the promulgation of such standards) with one that existed pre law prior to those standards is inappropriate and irresponsible. This type of analysis represents a clear bias in development of the rule and ignores lessons learned and modern standards and practices. This type of review is unbalanced and does not accurately represents the rule development of the stakeholders.

- 1) How did the EPA take into account modern environmental standards and practices in mining and mineral processing when the formulas for financial responsibility were developed? Can an example be provided that would apply to Wyoming?
- 2) Based on the two examples above, would the analysis completed in the supporting documentation have been better served by utilizing the latest "start-up" date instead of using the ending date?

#### **Financial Responsibility Calculator**

On January 30, 2016 the EPA held a webinar to discuss the CERCLA 108(b) financial responsibility calculation. Along with the webinar the EPA released an Excel calculator for calculating the FR for any given facility. Some of

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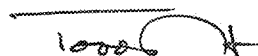
the definitions and intricacies of the calculation are not clearly explained, particularly for in-situ uranium recovery facilities. When using the calculator, the State was unable to verify the financial responsibility amount for an in-situ recovery site, which according to the proposed rule, projected \$1,000,000.<sup>15</sup> The State attended the webinar to seek clarity, but the EPA stated that Wyoming's comments were too specific and should be presented as comments on the rule. Below please find the question we have on the proposed financial responsibility calculator.

- 1) Please define in-situ flow rate more explicitly. From the provided Excel calculator the term discharge is used, but in the proposed rule in-situ flow is defined as flow in gallons per minute through in-situ leach features. Is this the same as the "bleed" rate? Please clarify the definition of in-situ flow rate.
- 2) Are the process ponds and tailings at uranium recovery facilities considered in the FR formula for in-situ sites?

#### H. Conclusion

Ensuring sufficient financial assurance and responsibility to cover possible CERCLA responses is an important goal. However, the stakeholder engagement, methodologies and logic the EPA utilized in its approach to this proposed rule development contains errors or is otherwise based on outdated and inaccurate information and data. The EPA would have benefited from consulting with states including the State of Wyoming on the operation and regulatory environment associated with uranium recovery facilities in the State which represent a majority of the uranium industry and regulatory expertise nationwide. The State appreciates that the EPA extended the public comment period to 180 days, to allow the public to fully synthesize all the supporting documents that went into this proposed rule. The additional time allowed EPA to post all supporting documentation that went into the development of the rule. The State of Wyoming also appreciates the opportunity to comment on the EPA's proposed rule, "Financial Requirements under CERCLA Section 108(b) of Facilities in the Hardrock Mining Industry". We look forward to ongoing dialogue and engagement with the EPA moving forward.

Sincerely,



Todd Parfitt  
Director

Cc: Kyle Wendtland  
Mike McGrady

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<sup>15</sup> Table X-1 Extrapolation FR from the Modeled Universe to the Potentially Regulated Universe