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 27, 2015

Air and Radiation Docket
Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: Environmental Standards for Uranium and Thorium Mill Tailings
80 Fed. Reg. 4156 (January 26, 2015)
Docket ID No. EPA-HQ-OAR-2012-0788

Dear Sir or Madame,

On behalf of the State of Wyoming Department of Environmental Quality ("Department"), I am writing to express the Department's comments and concerns regarding the Environmental Protection Agency's ("EPA") proposed Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings, 40 CFR Part 192 ("Proposed Rule"). As discussed in more detail below, the Department requests that EPA withdraw the Proposed Rule and consult with the Department and other state regulatory agencies already experienced with regulating uranium in situ recovery ("ISR") mining operations. Through meaningful consultation with state regulators, EPA will gain a thorough understanding of existing state regulations, research that should have been performed prior to EPA's determination that federal regulation of uranium ISR facilities is necessary. Consultation would also help EPA obtain more scientific data about uranium ISR operations, identify how to avoid duplicative regulations, fix issues with the Proposed Rule, and fulfill EPA's responsibility to conduct rulemaking using the principles of cooperative federalism.

The State of Wyoming has a long history of uranium production, and currently produces more uranium than any other state. The Department has been involved in the regulation and oversight of in-situ uranium mining for over 30 years. *See* Wyoming Statutes § 35-11-427 through 436 (first enacted in 1979). Wyoming also has authority to administer its own underground injection control ("UIC") program under the Safe Drinking Water Act ("SDWA"). Class III wells and aquifers used for underground in situ mining are regulated under the State's UIC program by the Department's Land Quality Division, which also issues mine permits for uranium ISR facilities (Wyoming Statutes 35-11-426 and 427).

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Wyoming's UIC program currently regulates in situ mining more robustly than the minimum standards established by the SDWA. The Department's regulation of uranium ISR facilities has always included extensive monitoring and reporting requirements, and post-mining groundwater restoration. *See* Land Quality Division Noncoal Rules ch. 11, §§ 2(b) and 5(a)(ii). In addition, the Department requires restoration of groundwater affected by ISR mining operations regardless of whether the operations occur within exempted areas in underground sources of drinking water ("USDWs") or in other groundwater not suitable for drinking water. To date, the Department has approved groundwater restoration of 11 mine units and several research and development operations. Throughout the successful history of this program, EPA has never informed the Department that Wyoming's UIC program does not adequately protect groundwater related to ISR mining operations, and yet EPA's Proposed Rule essentially assumes that existing state programs are ineffective. This assumption undermines cooperative federalism and suggests that EPA's Proposed Rule is arbitrary and capricious because it has not been developed with sufficient – and readily available – data that would enable EPA to make an informed and rational decision.

A. Lack of Consultation with the Department

EPA has apparently worked on the Proposed Rule for a number of years and has had ample time to consult with the Department and agencies in other states that already regulate groundwater affected by uranium ISR mining. Despite the Department's substantial experience regulating uranium ISR facilities, EPA did not consult with the Department before or while drafting the Proposed Rule.

EPA has a duty to consult with states before promulgating regulations that will impact state regulatory programs, economies, and sovereign authorities. Executive Order No. 13132, 64 Fed. Reg. 43255 (August 4, 1999), directs EPA to adhere to specified "fundamental federalism principles" and to meaningfully consult with state governments whenever the agency considers creating "policies that have federalism implications." *Id.* at § 2. Before "undertaking to formulate and implement" any policies of that type, agencies shall:

> (1) encourage States to develop their own policies to achieve program objectives and to work with appropriate officials in other States;
>
> (2) where possible, defer to the States to establish standards;
>
> (3) in determining whether to establish uniform national standards, consult with appropriate State and local officials as to the need for national standards and any alternatives that would limit the scope of national standards or otherwise preserve State prerogatives and authority; and
>
> (4) where national standards are required by Federal statutes, consult with appropriate State and local officials in developing those standards.

Id. at § 3(d). "With respect to Federal statutes and regulations administered by the States, the national government shall grant the States the maximum administrative discretion possible." *Id.* at § 3(c).

The Department disagrees with EPA's assertion that the Proposed Rule does not have "federalism implications" and that Executive Order No. 13132 is inapplicable in this context. *See* Proposed Rule, p. 4182. The Proposed Rule certainly will have "substantial direct effects" on Wyoming, its relationships with EPA and NRC, and "the distribution of power" between Wyoming's UIC program and EPA and NRC's UMTRCA regulations. *See* EO 13132, § 1(a). Promulgation of the Proposed Rule does not change the fact that Wyoming's UIC program is still enforceable law that the Department must implement to protect groundwater in Wyoming. EPA's Proposed Rule will create potentially conflicting, confusing and redundant regulatory burdens for uranium operators in this State, and will require staff and resources in the Department to resolve those differences in individual permitting contexts. These federalism implications should have prompted EPA to consult with the Department early in the rulemaking process, as mandated by Executive Order 13132. *See id.* § 6(b)(2)(A) ("no agency shall promulgate any regulation that has federalism implications . . . unless . . . the agency . . . consulted with State and local officials early in the process of developing the proposed regulation . . .") (emphasis added).

Given the Executive Order's clear language about early and meaningful consultation, EPA cannot honestly claim to act here "in the spirit of Executive Order 13132" by "specifically soliciting" comments from state and local officials during the mandatory public comment period. Proposed Rule, p. 4182. EPA is giving that which the states already have – the right to participate and submit comments during notice and comment rulemaking under the Administrative Procedure Act. EPA's solicitation in this context is disingenuous, at best. Acting in the "spirit" of the Executive Order – setting aside the fact that the agency is bound by that Order – would have required consultation during the formative stages of the proposed regulation.

The lack of state consultation for the Proposed Rule concerns the Department because we believe that early and meaningful state consultation makes for better regulation. In this case, consultation would have provided EPA with access to additional scientific and historical data collected by the Department over time. That data may have informed the agency as it formulated its preferred regulatory approach, and, at a minimum, would have addressed the scientific limitations identified by EPA in formulating the Proposed Rule. *See, e.g.,* Proposed Rule, at p. 4165.

More importantly, EPA would have benefitted from the experience of Department staff who are thoroughly versed in the State's regulatory UIC and mine permitting programs and in applying a complex regulatory structure to the unique conditions of uranium ISR sites in Wyoming. Consultation with the Department would have helped EPA better understand the requirements, history, and results of Wyoming's regulatory program, and may have convinced EPA that national regulations in this area are not necessary to accomplish the agency's stated goals. Alternatively, through consultation, EPA could have identified the best practices of the Department's existing programs and either added those practices into the federal program, or

accommodated the Department's continuing implementation of those practices. As a result, the Proposed Rule could have built upon the Department's longstanding efforts to protect state groundwater affected by uranium ISR activities, which seems like an inherently obvious foundation for a new federal regulation.

We wish EPA's lack of consultation on the Proposed Rule were an isolated incident, but unfortunately it is developing into a pattern and practice with this Administration. For example, approximately 35 states have opposed EPA's "Clean Water Rule". The predominant theme in state comments on the proposed Clean Water Rule was the lack of meaningful consultation during the formative stages of the regulation. Similar criticism has been lodged against EPA and sister agencies in several other contexts, including the stream protection rule and multiple Clean Air Act rules. To be meaningful regulatory partners, EPA should engage with the states early in the process. EPA has an opportunity to get that process right with the Proposed Rule by withdrawing the current draft and consulting with the states on whether and how to craft a revised version.

B. Conflict between UMTRCA and UIC programs

The Department is concerned that the Proposed Rule does not resolve the ongoing problem of overlapping regulation of groundwater affected by uranium ISR operations. NRC has historically recognized the inherent conflict between Wyoming's UIC program and existing groundwater protection standards under UMTRCA. *See* Proposed Rule, p. 4167 and footnote 35. In the spirit of cooperative federalism and the requirements of Executive Order 13132, NRC proposed to resolve the conflict by creating an MOU that would protect NRC priorities while allowing the Department to take the lead in regulating groundwater affected by Wyoming ISR facilities. *Id.* The Department agrees with NRC's approach.

EPA instead takes 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 ...." *See* Proposed Rule, p. 4167.[1] EPA further asserts that UIC programs, alone, are not sufficient to protect groundwater at ISR facilities. *Id.* Based on those positions, it is commendable that EPA has attempted through the Proposed Rule to make sure that the standards in 40 CFR part 192 can specifically address groundwater related to ISR mining. But, the Proposed Rule does not change the fact that Wyoming's EPA-authorized UIC program would still exist even with the new rules in effect. While the Department is not yet sure what the exact effects on the State's UIC program will be, the simultaneous existence of two different sets of groundwater regulatory standards, both based in federal law, would almost certainly create duplication or conflict with one another. Therefore, the Proposed Rule would likely perpetuate or even exacerbate the current

[1] In fact, EPA states that is has "always held that position" – that UMTRCA is the controlling legal authority. *Id.* But that is simply not true. When EPA adopted UMTRCA regulations in 1983, EPA took the exact opposite position – that rules for the protection of groundwater from in situ mining are properly developed under the SDWA. *See* 48 Fed. Reg. 45926, 45932-33 (Oct. 7, 1983). EPA needs to explain why it has failed to acknowledge that history, and more importantly, why its legal position has specifically changed.

issue of inconsistent regulations that cause unnecessary complications and costs for both NRC and the Department.

The Department also does not think that EPA has addressed the issue of the inconsistent treatment of production zone aquifers, at least in Wyoming. For example, EPA states in the preamble to the Proposed Rule that although an aquifer used for uranium ISR activities can be exempted from the SDWA's protections, UMTRCA does not allow any such exemptions. *See* Proposed Rule, p. 4173. Therefore, EPA asserts that although an ISR operator may not have the responsibility of restoring an exempted aquifer under the SDWA, the operator could not avoid the responsibility of restoring that aquifer under UMTRCA. *Id.* EPA's statements seem to imply that the UMTRCA standards under the Proposed Rule would apply within and protect the production zone, while UIC regulations would address surrounding USDWs.

But this analysis does not account for Wyoming's UIC program, which does require uranium ISR operators to restore groundwater in a production zone in order to protect the adjacent USDWs from contamination. In this situation, both the Department and NRC would have to ensure groundwater restoration complied with their own regulations.

C. Problems with 30-year long-term stability monitoring requirement

The Department has several concerns with the Proposed Rule's current requirement for long-term stability monitoring. The rule would require operators to initially plan for at least 30 years of long-term stability monitoring, with the option of shortening that monitoring period through technical modelling. *See* Proposed Rule, § 192.53(e). However, the Department believes that EPA should replace this requirement with the third alternative that EPA considered during its drafting process: a narrative standard without a fixed monitoring period. *See* Proposed Rule, p. 4177.

The Department does not believe that UMTRCA requires the adoption of the 30-year monitoring period from RCRA in order to maintain consistency between the two acts. As EPA correctly noted in the preamble to the Proposed Rule, man-made RCRA facilities and their contents are introduced into the environment, and are designed to prevent foreign waste from leaking from the site. *See* Proposed Rule, p. 4175. RCRA facilities utilize tools such as liners to prevent leakage, and their locations are even able to be selected for their protective characteristics. For a traditional mill tailings facility under UMTRCA, there is an easy analogy with a RCRA waste containment site.

However, an ISR aquifer is very different. The aquifer is pre-existing part of the environment, chosen not for its protective location, but for its mineral content. Most of the substances that an ISR aquifer is supposed to control following restoration are already present in the aquifer prior to ISR operations. *See* Proposed Rule, p. 4175. As a result, aquifers are not analogous to man-made RCRA facilities.

Instead of adopting a flat requirement of 30 years of monitoring, a narrative standard would help ensure that site-specific data drives the regulatory decisions at a site, rather than an

arbitrary clock. Wyoming's UIC program has had success utilizing narrative standards for uranium ISR facilities, and the Department believes they would be an improvement on the Proposed Rule's current provisions.

Even with the option of geologic modeling to shorten the long-term monitoring period, requiring 30 years of stability monitoring poses significant practical and regulatory problems. First, the Proposed Rule requires corrective action to be implemented within 90 days of detecting an excursion. *See* Proposed Rule, § 192.54(a). Depending on what is considered corrective action, this provision potentially would require an operator to keep all of its wellfield intact and operational for 33 years after mining is completed just to make sure that corrective action can be started quickly at any time during the two stability monitoring phases. This would be a dramatic change from historic practices. For the operator, it may affect what leases or purchases of property it would need, and what testing, staff, and investment into the site would have to be maintained during the monitoring period, assuming modeling was not able to shorten it. For the regulatory agency, maintaining the wellfield would significantly affect the reclamation bonding necessary to ensure completion of the three decades-long restoration process. It also raises significant staffing and resources concerns, and introduces the potential for increased risk of abandonment and bankruptcy given the longer-term, and ill-defined, operational periods under the Proposed Rule. These are very real issues that need to be addressed prior to the rule being finalized.

These risks also underscore another flaw in the procedural history of the Proposed Rule. EPA fails to identify, let alone acknowledge, the cost impacts to states if the Proposed Rule is finalized. EPA focuses in the preamble, at pages 4180-81, on the financial impact to ISR operators. EPA ignores the costs to state regulators. That evaluation must be completed before EPA can accurately characterize the economic impacts associated with the Proposed Rule.

D. EPA should change how it references constituent standards

EPA chose to not set a static set of constituent maximum concentration limits (MCLs), but instead refers to other existing sets of MCLs under the SDWA and RCRA. The Proposed Rule states that the lowest concentration limit in any of those referenced regulations is what governs under the Proposed Rule. *See* Proposed Rule, p. 4172 and § 192.52(ii). While the Department appreciates EPA's interest in attempting to reduce the number of rulemakings necessary to amend MCLs, the Department believes that EPA's approach creates more confusion than necessary. The Proposed Rule will require continually tracking rulemaking for many different sets of standards. If a person is interested in what standards apply under the Proposed Rule fails to see the publication of a change of standards in another part of the Code of Federal Regulations, that person will miss his or her opportunity to provide comment and the new standards will go into effect under Part 192 without any notice to that person.

EPA could address the Department's concerns in one of two ways. First, EPA could adopt its alternative approach of setting a specific set of MCLs in 40 CFR part 192 (*see* Proposed Rule, p. 4172), and make those numbers consistent with MCLs under drinking water standards. Alternatively, EPA could reference only SDWA standards and apply them to uranium ISR

operations. Then for constituents of concern in uranium ISR operations that are not covered by the drinking water standards, EPA could create a static set of MCLs in 40 CFR part 192. The SDWA standards are updated regularly to reflect current knowledge of safe consumption and exposure limits. Those standards are also what govern a USDW.

EPA has also not explained in the Proposed Rule why an already contaminated aquifer that is exempted under the SDWA and then used for ISR activities should be restored to a higher standard of quality and receive greater protection than a non-exempted aquifer that is legally a USDW. EPA should make sure that its approach in the Proposed Rule is consistent with its approach in other regulatory programs under its authority.

E. EPA should ensure that new standards are not retroactively applied

EPA intends to apply Subpart F of the Proposed Rule to operating and expanding wellfields, but certain facilities may not be able to comply with some of the new baseline data collection requirements that are proposed for implementation. EPA should clarify how existing and expanding facilities can satisfy new baseline data requirements if those facilities can no longer collect baseline data that is unaffected by prior operations.

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Thank you for providing the Department with an opportunity to comment on the Proposed Rule. We urge you, in the future, to engage with the states earlier in the process. That enhanced coordination and consultation will benefit both the federal-state relationship and will produce rules that are more effective. If you have any questions regarding these comments, please contact me at (307) 777-7937.

Sincerely,

Alan Edwards

for Todd Parfitt
Director