



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Mr. Aby Mohseni, Deputy Director  
Environmental Protection  
and Performance Assessment Directorate  
Division of Waste Management and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs  
U.S. Nuclear Regulatory Commission (Mail Stop T8D3)  
Washington, D.C. 20555-0001

Dear Mr. Mohseni:

The U.S. Environmental Protection Agency Region 8 has reviewed the Final Supplemental Environmental Impact Statement (Final SEIS) for the Dewey-Burdock In-Situ Uranium Recovery Project (CEQ #20140034) prepared by the U.S. Nuclear Regulatory Commission (NRC). Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609. Section 309 of the Clean Air Act directs the EPA to review and comment in writing on the environmental impacts of any major federal agency action.

We appreciate the opportunity to cooperate with the NRC in the EIS process. The EPA Region 8 office provided extensive comments on the scoping of this project and the Draft SEIS in January 2013, as well as participated in conference calls and reviews of draft material during the development of the Draft and Final SEIS. The EPA rated the Draft SEIS EC-2 (environmental concerns – insufficient information). We recognize and appreciate the many revisions made in the Final SEIS to address our concerns and the concerns of others. This letter reiterates our concerns regarding the applicability and requirements of the EPA's regulations in 40 CFR Part 61 Subpart W which are not addressed in the Final SEIS. We also include a suggestion to strengthen the assurance of groundwater protection. These issues are explained in the Comments section of this letter.

### **Background**

The issuance of an NRC license to possess and use source material for uranium milling requires compliance with NEPA and a Supplemental EIS to the NRC's Generic EIS for In-Situ Leach Uranium Milling Facilities. The Dewey-Burdock ISR Final SEIS analyzes environmental impacts of a proposal from Powertech (USA), Inc. to develop the uranium resource on the company's existing leases and private property in the Dewey-Burdock project area in South Dakota. In addition to the NRC license, the Final SEIS recognizes a number of other approvals and permits that are required for the project.

## Comments

Chapter 2 (pages 2-25 and 2-28) of the Final SEIS states that the “siting and design of retention ponds at ISR facilities **should also consider** the requirements of EPA’s national emission regulations under 40 CFR Part 61, Subpart W.” In the following sentence it states, “the applicant **may** need to acquire an approval from EPA prior to commencing operations in any well field to ensure compliance with 40 CFR Part 61, Subpart W,” (emphasis added). Similar language is used in numerous responses to comments in Appendix E.

Our concerns regard the applicability and requirements of 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants, Subpart A – General Provisions (Subpart A); and Subpart W National Emissions Standard for Radon Emissions from Operating Mill Tailings (Subpart W). Subpart W applies to “owners or operators of facilities licensed to manage uranium byproduct material during and following the processing of uranium ores, commonly referred to as uranium mills and their associated tailings.” (40 CFR 61.250). Subpart W defines “uranium byproduct material or tailings” as “the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content” (40 CFR 61.251(g)). Thus, any type of uranium recovery facility that is managing uranium byproduct material or tailings is subject to Subpart W. Based on the information contained in the Final SEIS, the EPA has determined that the requirements of Subpart W specifically apply to the structures at the proposed Dewey-Burdock uranium recovery facility that are used to contain the uranium byproduct material. This includes all impoundments or ponds where uranium byproduct material is stored or treated, including those storing treated uranium byproduct material prior to either land application or deep well injection.

As required by 40 CFR 61.252(c), these impoundments or ponds must be in compliance with the provisions in 40 CFR 192.32(a). In addition, the requirements in 40 CFR Part 61 Subpart A apply to Subpart W regulated structures. Subpart A requires owners or operators to submit to the EPA an application for approval for either construction or modification of Subpart W regulated structures (i.e., all ponds holding uranium byproduct material whether treated or not) before the construction or modification is planned to commence. (40 CFR 61.07). As you are aware, the EPA is considering revisions to 40 CFR Part 61, Subpart W, however, currently the regulations outlined in this letter apply to the proposed Dewey-Burdock facility.

As such, Subpart W requires ponds to meet the requirements of 40 CFR 192.32 (a), which in turn requires the ponds or surface impoundments to be “designed, constructed and installed in such a manner to conform to the requirements” of 40 CFR 264.221. In general, this means the ponds must have:

- 1) A composite bottom liner consisting of a least two components,
  - a) an upper component or liner that prevents migration of hazardous constituents, and
  - b) a secondary liner that will minimize migration if a breach of the upper component occurs;and
- 2) A leachate collection and removal system between the two liners.

If designed, constructed, and installed as described in the Final SEIS, several of the proposed ponds will not be in compliance with these regulations.

Additionally, 40 CFR Subpart W requires that there be no more than two ponds, each with a surface area of no more than 40 acres that are in operation at one time. In accordance with 40 CFR Part 61 Subpart A, the EPA must also approve the design of the ponds prior to construction. If the ponds are constructed as described in the Final SEIS, the Dewey-Burdock project will not meet these regulatory requirements.

We appreciate that the draft NRC license includes an overarching provision that the licensee (Powertech (USA), Inc.) must obtain all necessary permits, licenses, or approvals before commencing operations, (draft license condition 12.1). Although the Final SEIS provides a general list of the required approvals, permits and licenses, it does not include the construction approval required by Subpart A and the requirements in Subpart W. Similar to the other approvals listed in Final SEIS Table 1.6-1, we recommend the Record of Decision or final license clarify the requirement for the EPA approval of construction of the ponds regulated under Subpart W.

We commend the NRC for including monitoring of domestic wells within 1.2 miles downgradient of the well fields. A further suggestion is to expand this monitoring during the baseline period and periodically during the operation and post closure periods to include domestic well #18, (located in SW Sec 9, Township 7 South, Range 1 East). This well is outside of the 1.2 mile boundary measured from the well fields, but within 1.2 miles downgradient of the permit boundary. The addition of baseline sampling and periodic monitoring of domestic wells within 1.2 miles downgradient of the project area would help assure the protection of groundwater used as drinking water during the operation and post closure periods.

We appreciate the NRC's commitment to work with the EPA to assure protection of human health and the environment for the Dewey-Burdock ISR project. We hope our comments on the Final SEIS provide insight regarding project regulatory requirements and increased protection of groundwater resources. If you have any questions or would like to discuss our comments, please contact me at (303) 312-6704 or Lisa Lloyd, of my staff, at (303) 312-6537 or email at [lloyd.lisa@epa.gov](mailto:lloyd.lisa@epa.gov).

Sincerely,



Philip S. Strobel  
Acting Director, NEPA Compliance and Review Program  
Office of Ecosystems Protection and Remediation

cc: Haimanot Yilma, NRC (Mail Stop, T8-F5)

