Alberta
Arizona
British Columbia
California
Colorado
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Andrew McAllister
Chair

Laura Rennick
Executive Director

September 1, 2024

Candice Robertson
Acting Assistant Secretary
U.S. Department of Energy – Office of Environmental Management
1000 Independence Ave. SW
Washington, D.C. 20585

Laura Watson
Director
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, WA 98504

The Honorable Casey Sixkiller
Regional Administrator, Region 10
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155
Seattle, WA 98102

Dear Acting Assistant Secretary Robertson, Director Watson, and the Hon. Casey Sixkiller,

The Western Interstate Energy Board (WIEB) High-Level Radioactive Waste (HLRW) Committee appreciates the opportunity to offer comments on the "Hanford holistic agreement," the result of the federally mediated negotiations between the U.S. Department of Energy (DOE), the Washington State Department of Ecology (Ecology), and the U.S. Department of Environmental Protection (EPA) which proposes to modify the Hanford Nuclear Waste Site Tri-Party Agreement and Consent Decree. WIEB is an organization of eleven Western states and two Canadian provinces which focuses on promoting energy policies developed through the cooperative efforts of WIEB's members in collaboration with the federal government. WIEB's HLRW Committee is composed of representatives from eleven Western states who have expertise in the field of spent nuclear fuel and high-level radioactive waste (SNF/HLW) transportation. For over thirty years, the HLRW Committee has examined the issues that surround this topic, offering comments, developing policies, and interacting with federal, industry, tribal, and other state interests in this space. The HLRW Committee would now like to leverage this experience in offering comments on the Hanford holistic agreement.

The HLRW Committee will center its comments on the changes proposed in the Settlement Agreement in Attachment J: Establish New TPA [Tri-Party Agreement] Milestone to Complete Retrieval of 22 Single Shell Tanks (SSTs) in S, SX, and U Farms, and Attachment

M: Establish New TPA Milestones to Create Alternative Treatment Capacity for LAW [low-activity waste] for 200 West Area SSTs. The four interrelated milestones detailed in Attachment J and Attachment M set forth, *inter alia*, the deadlines for retrieval and subsequent "alternative" treatment, transportation, and off-site disposal of the low-activity portion of the tank waste from 22 SSTs located in the 200 West Area. "Alternative" treatment in this context means grouting as an alternative to vitrification; in other words, this provides a pathway for the 200 West Area tank retrievals to proceed independent of the Waste Treatment and Immobilization Plant, which will begin its operations by treating waste from the 200 East Area.[1]

Per new Milestone M-062-64, "no grouted tank waste will be disposed of within the contiguous borders of the Hanford Nuclear Reservation." Thus, the grouted tank waste will instead likely be disposed of at one of the low-level waste disposal facilities managed by Energy*Solutions* in Clive, Utah, or by Waste Control Specialists in Andrews, Texas. This will require DOE to transport the waste through up to seven different Western states, depending on which destination is selected as well as the mode and route. Milestone M-062-64 also directs DOE to, "Make alternative selection for facilities and infrastructure needed to perform separation, pretreatment, and/or treatment, and mode of transport, for off-site disposal of low-activity waste (LAW) from 200 West Area Single-Shell Tanks (SST) and apprise Ecology of that selection" by 12/31/2024. In effect, this means that by the end of this year, DOE must determine whether to build grouting facilities at Hanford which would allow it to transport the solidified waste for disposal, or to ship the pretreated liquid waste to an off-site grouting facility, then dispose of it. It also means that the interrelated question of the mode of transport for this waste will be determined by the end of this year.

These decisions will have far-reaching consequences for the transportation program that DOE will have to stand up to treat and dispose of these tank wastes. Consider: at the 2024 spring meeting of the HLRW Committee, a representative from Ecology said that 15-18 million gallons was a very rough estimate of the volume of tank waste when it is immobilized and liquified as a part of tank retrieval, pre-grouting.[2] It was further indicated that grouting the waste would increase its volume by an approximate factor of two to three, bringing the total volume to around 30-54 million gallons. Thus, the choice of whether to ship the waste before or after grouting could have an up to threefold effect on the number of shipments that must be made for alternative treatment. Further, if the grouting facility is not at Hanford and is also not co-located with the disposal site, then two different transportation programs will have to be stood up: one for pretreated liquid tank waste being transported for grouting and one for the grouted tank waste being transported for disposal. This would bring the approximate maximum total volume of material being shipped to 72 million gallons.[3] Thus, a decision about where the tank wastes will be grouted and disposed of will affect the number of

[1] Mullin, M., Noyes, D., Schleif, S., Silberstein, M., Stickney, B., & Wood, K. "Holistic Agreement on Cleanup of Hanford Site Tank Waste." (2024, May 21). *Oregon Hanford Cleanup Board meeting*. [PowerPoint slides] https://www.oregon.gov/energy/safety-resiliency/Documents/OHCB-May-24-Comined-Meeting-PPT.pdf.
[2] "Minutes of the WIEB High-Level Radioactive Waste Committee and Waste Isolation Pilot Plant Transportation Technical Advisory Group." Western Interstate Energy Board, June 6, 2024, Denver, CO. Contact WIEB staff to request access.
[3] 18 million gallons of waste shipped to be grouted + 54 million gallons of grouted waste shipped for disposal = 72 million gallons total.

shipments that will have to be made by hundreds if not thousands.

Naturally, the choice of transportation mode will also have a great effect on the overall system. Since rail tank cars typically carry more freight volume than truck tankers, a choice between one or the other will significantly affect how many waste shipments will be needed. Further, it will determine what packaging options are available. Most importantly, the mode of transportation will decide which routes will be available to ship the waste. Routing of nuclear waste shipments is a key consideration for the Western states since it determines how they allocate resources for emergency preparedness and any other preparatory activities deemed necessary for the waste shipping campaign.

The preceding paragraphs illustrate that the decisions that Milestone M-062-64 directs DOE to make by the end of 2024 about the waste to be retrieved from 22 tanks in the 200 West Area will have profound consequences on the eventual transportation program(s) needed to treat and dispose of the wastes. Because of these consequences, and because up to seven Western states may be affected by these decisions as possible waste transportation corridor states, the HLRW Committee directs DOE to do the following:

- Fully analyze and consider, including through any necessary National Environmental Policy Act procedures, the effects on the future waste transportation program before deciding whether to build an on-site grouting facility or whether to ship pretreated liquid waste for grouting, then disposal.
- Consult with transportation corridor states on the determination of the mode and routes for shipping the waste retrieved from these tanks for disposal or for alternative treatment and disposal before making any decisions that will have a determinative effect on the future waste transportation program.

The HLRW Committee commends DOE, Ecology, and EPA on their ongoing efforts to handle Hanford's complex clean up mission. The HLRW Committee would be pleased to answer any questions that DOE, Ecology, or EPA may have about these comments, and would also be willing to help facilitate a dialogue between DOE, Ecology, EPA, and the transportation corridor states on the expected transportation program for disposal of grouted tank wastes from the 200 West Area. Please contact WIEB's Nuclear Energy Policy Program Manager, Melanie Snyder, at msnyder@westernenergyboard.org, for inquiries or further information.

Sincerely,

Landry Austin
Idaho Dept. of Environmental Quality
INL Oversight Program Manager
Chair, WIEB HLRW Committee

Eletha Trujillo
Bureau Chief, Hazardous Waste Planning/WIPP
New Mexico State Energy Office/EMNRD
Vice-Chair, WIEB HLRW Committee