Energy Communities Alliance
Local concerns. National impact.

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Washington State Department of Ecology
Daina McFadden
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Nuclear Waste Program

RE: Energy Communities Alliance Comments on Proposed Changes to the Tri-Party Agreement and Consent Decree on Hanford Site Tank Waste

Dear Daina McFadden,

Energy Communities Alliance (ECA)[1] is concerned about the 'forbearance' of the high-level waste (HLW) interpretation when disposing of treated waste or closing tank systems at Hanford's Waste Treatment and Immobilization Plant (WTP). ECA calls on DOE to do an independent analysis to evaluate the impacts of delaying implementation of the HLW interpretation and implementation of this new regulatory scheme and consider its adoption based on the results of that evaluation.

DOE's own web page[2] states:

On December 15, 2021, DOE signed the FRN affirming its interpretation of the statutory term "high-level radioactive waste." The HLW interpretation is consistent with the law, the best available science and data, and the recommendations of the Blue Ribbon Commission on America's Nuclear Future. In developing the interpretation, the views of members of the public and the scientific community were considered.

DOE lists the benefits of using the HLW interpretation as:

The HLW interpretation, if implemented through subsequent actions, could provide a range of benefits to both DOE and the public, including:

- *Reducing the length of time that radioactive waste is stored on-site at DOE facilities, increasing safety for workers, the public, and the environment.*

[1] ECA is the national association of local governments of communities that host or are affected by DOE and National Nuclear Security Administration (NNSA) activities. ECA's mission is to bring together leadership from DOE-affected communities to share information, establish policy positions, and advocate for common interests in order to effectively address and increasingly complex set or environmental, regulatory, and economic development. ECA board members include local elected officials and community leaders from communities across the DOE complex.

[2] https://www.energy.gov/em/high-level-radioactive-waste-hlw-interpretation

- *Removing reprocessing waste from the States where it has been stored for decades and providing for the disposal of these wastes in facilities constructed and regulated for such purposes.*
- *Enhancing safety at DOE sites by using lower-complexity waste treatment and immobilization approaches.*
- *Aligning the U.S. with international guidelines for management and disposal of radioactive waste based on radiological risk.*
- *Utilizing mature and available commercial facilities and capabilities to shorten mission completion schedules and reduce taxpayer financial liability.*

We believe what DOE has stated above to be true. We are concerned that further delay in implementing the HLW interpretation at Hanford has a cost and potential impact to the health and safety of the community. We understand that the State has been against the use, but the local community has supported the use – as they are the impacted communities. DOE should proceed with application of the HLW interpretation based on the independent analysis and reports of GAO, National Academies of Science and the Blue Ribbon Commission, the pilot Hanford project (Test-Bed Initiative) and other actions. The impacts of classifying waste currently "managed" as HLW as non-HLW by way of the HLW interpretation was also evaluated in DOE's 2020 Report to Congress. If the interpretation is not applied, what is the cost to the whole EM cleanup program, and is this safer for human health and the environment than a decision to use the HLW interpretation?

In 2019, ECA wrote in support of DOE's Federal Register Notice on DOE's interpretation of the definition of the statutory term of "high-level radioactive waste (HLW)" as set forth in the Atomic Energy Act of 1954 and the Nuclear Waste Policy Act of 1982[3]. The application of the HLW interpretation would base disposal decisions on actual radiological characteristics and risk to human health arising from the waste, rather than the artificial former policy standards that base waste classification on origin. This risk-based approach could reshape DOE's cleanup mission across the complex, saving taxpayer money and accelerating cleanup. DOE, through two Administrations has supported the policy. DOE is currently implementing the policy at the Savannah River Site.

The main considerations for the implementation of HLW interpretation at the Hanford site follow below.

1. **Avoid projected costs of $135 billion to $5 trillion as estimated by the Government Accountability Office in May 2023[4].**

If applied at Hanford, the HLW Interpretation could cut more than $100 billion in environmental cleanup costs and allow for expedited cleanup activities. That, in turn, would allow DOE to focus sooner on other high-priority cleanup projects, ultimately reducing risks across the complex. EM's

[3] Energy Communities Alliance Comments on the October 10, 2019, Federal Register Notice – DOE's Interpretation of High-Level Radioactive Waste based on actual radiological characteristics and risk to human health, January 8, 2019.
[4] Hanford Cleanup, DOE Should Validate Its Analysis of High-Level Waste Treatment Alternatives, GAO, May 2023.

environmental cleanup mission accounted for $406 billion in fiscal year 2020, and it is trending upwards with EM's environmental liability outpacing its spending on cleanup activities[5].

2. **Enables EM to better address one of its largest environmental risks/liabilities with a scientific, risk, and data-driven approach that protects the surrounding communities and environment.**

   The HLW Interpretation allows DOE to address some tank waste as non-HLW and dispose of it in accordance with its radiological characteristics. In our report, "Disposal Drives Cleanup: Re-energizing Momentum for Disposal Solutions for Radioactive Waste," ECA urges DOE to prioritize use of the HLW interpretation, stating "DOE should re-energize its use of the HLW interpretation, including pursuing a pilot implementation at Hanford for a single-specific waste stream. This would be intended to help foster broader support for the use of the HLW interpretation at Hanford, which could have significant benefits to DOE and the local communities near the site."

   DOE has already demonstrated that the HLW interpretation can be safely and successfully applied. At the Savannah River Site (SRS), the Department first used it to address small amounts of wastewater from the SRS Defense Waste Processing Facility that was sent to Waste Control Specialists LLX (WCS) for stabilization and disposal as non-HLW in late 2020. In December 2021, DOE announced their second HLW interpretation project with the release of Draft Environmental Assessment (EA) for the Commercial Disposal of Savannah River Site Contaminated Process Equipment (DOE/EA-2154) for public comment. In July 2023, the Savannah River Site Office issued a Finding on No Significant Impact and, based on the information and analysis collected in the Final EA, DOE will also send the contaminated process equipment to WCS for disposal. The SRS process equipment includes Tank 28F salt sampling drill string, glass bubblers, and glass pumps, all contaminated with reprocessing waste. In total DOE has moved eight gallons of waste from the Savannah River Site (SRS) to Texas in the last several years, but DOE can and must do better if they are going to save over $200 billion in cleanup costs.

3. **Reduces the amount of time that radioactive waste is stored onsite at DOE facilities, increasing safety for workers, host communities, and the environment.**
   If properly implemented, applying the high-level waste interpretation can cut years of DOE operations and reduce risk at Hanford and to the surrounding communities. The policy adoption would enable simplification and acceleration of treatment and disposal plans for the low activity fraction of the tank waste inventory, because once stabilized, a significant share of the tank waste volume will be low level waste (LLW). Optimized planning can make use of existing technologies and facilities, allowing tank retrieval and treatment actions to begin sooner.

   Any progress toward acceleration and implementation of tank retrieval and waste stabilization will directly contribute to reductions in the environmental and worker risks from the deteriorating tank storage system. This alternative provides needed redundancies that reduce future programmatic risk by providing a near-term path to disposal, mitigating costs, schedule and compliance impacts resulting from delays in WTP construction and commissioning, will shorten the extent of indefinite onsite storage for stabilized wastes.

[5] Environmental Liability Continues to Grow, but Opportunities May Exist to Reduce Costs and Risks, GAO, June 2021.

4. **Promotes environmental justice for the communities around the sites by potentially accelerating retrieval and disposition of reprocessing waste.**
Environmental justice and equity, as applied to waste disposition, means that the communities where this waste has been produced and stored should be given priority. Hanford and the surrounding communities fall under that commitment made by DOE, EPA, and Ecology. Innovative disposal alternatives for all the waste types for which DOE is responsible must be analyzed and, if there is informed support for an alternative approach, fully implemented.

Various external organizations (National Academies of Sciences, Engineering, and Medicine; seven national laboratory directors; NRC staff; and others) have stressed the benefits of the interpretation of EM's cleanup efforts. Opposition to the HLW interpretation could mean that the tank waste at Hanford, once treated, will remain at the site. Vitrified low-activity waste is intended for onsite disposal and vitrified HLW will remain in storage for the foreseeable future given the absence of a geological repository.

Again, ECA appreciates the opportunity to provide this input on the proposed changes to the Tri-Party Agreement, the consent decree on Hanford Site tank waste, and the evaluation of any alternative that accelerates safe, risk-based, technically feasible, and cost-effective cleanup. We look forward to working with you as partners to identify and support options for moving waste out of our communities more expeditiously. Many DOE sites across the complex were never intended to store waste yet serve now as *de facto* interim storage sites. Simply leaving waste in place is neither acceptable nor the safest option.

For any questions, or for addition information, please contact Faith Sanchez, ECA Program Director, faiths@energyca.org.

Sincerely,

Mayor Brent Gerry
ECA Chair