

Responsiveness Summary for proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste

Public Review and Comment Period May 30 – Sept. 1, 2024

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¹ https://pdw.hanford.gov/document/AR-32540

² https://apps.ecology.wa.gov/publications/summarypages/2405013.html

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Introduction

In 1989 the Washington State Department of Ecology (Ecology), U.S. Department of Energy (USDOE) and the U.S. Environmental Protection Agency (EPA) signed the *Hanford Federal Facility Agreement and Consent Order*, more commonly called the Tri-Party Agreement (TPA). This is the governing document and roadmap to Hanford cleanup. The TPA helps ensure that cleanup of Hanford's dangerous and radioactive nuclear waste is in compliance with federal and state law.

The TPA includes enforceable milestones. A milestone is a deadline with expectations of cleanup and due dates for various tasks, projects or facilities.

Following litigation regarding delays associated with certain TPA milestones, USDOE and Ecology entered into a federal *Washington v. Energy* consent decree in 2010, establishing deadlines for certain tank waste retrievals and the construction and initial operation of the Waste Treatment and Immobilization Plant (WTP). The consent decree has been amended several times since 2010.

In 2020, USDOE, the EPA, and Ecology initiated mediated negotiations regarding the path forward for Hanford's tank waste retrieval and treatment mission and signed a settlement agreement in April 2024 with proposed new and revised cleanup deadlines in the TPA and consent decree. The agencies then held a 120-day public review and comment period on the proposed changes.

This responsiveness summary is one of the final steps prior to finalizing the proposed changes. The agencies reviewed and considered all comments received and discussed potential changes raised by the comments submitted.

This responsiveness summary contains the following:

A description of the public involvement actions completed

Summary of and responses to key public comments

Appendix A, with public involvement notices

Appendix B, with all comments received during the public comment period

For background information on Hanford, visit the <u>USDOE's Hanford website</u> and <u>Ecology's</u> website.

Proposed changes

The proposed changes uphold a shared commitment to the safe and effective cleanup of millions of gallons of radioactive and chemical waste from underground tanks at the Hanford Site.

Highlights of the proposed changes include the following:

- Maintaining existing timeframes for starting treatment of both low-activity and high-level waste by immobilizing it in glass via vitrification.
- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program.
- Building a vault storage system and second effluent management facility to support treating high-level waste.
- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040, including grouting the low-activity portion of the waste for off-site disposal.
- Designing and constructing 1-million gallons of additional capacity for multi-purpose storage
 of tank waste.
- Evaluating and developing new technologies for retrieving waste from tanks.

Under the settlement agreement, USDOE has also committed to refrain from applying its interpretation of what constitutes "high-level waste" when disposing of treated waste or closing tank systems at Hanford.

In response to comments received, USDOE has agreed to hold a 30-day review and comment period on a draft *National Environmental Policy Act* (NEPA) Supplement Analysis associated with the proposed plan for retrieving, grouting, and transporting some of Hanford's West Area tank waste for off-site, out-of-state disposal. The 30-day comment period is anticipated to begin in early 2025.

Public involvement actions

The TPA agencies encouraged public comment on the proposed TPA and consent decree changes during an initial 60-day public comment period held May 30 – Aug. 2, 2024. In response to public request, the comment period was extended an additional 30-days to Sept. 1, 2024, for a total of 90-days.

The agencies took the following actions to notify the public:

- Emailed a 30-day advance notice that included the settlement agreement and the proposed changes.
- Mailed a public notice announcing the comment period to 932 members of the public.
- Emailed a notice announcing the start of the comment period to the Hanford-Info and the Commercial-Mixed-Rad-Waste email lists which have a total of 1,853 recipients.
- Placed print and electronic advertisements in the Tri-City Herald, the Columbia Gorge News, and the Olympian.
- Posted the comment period information on the TPA agencies' social media.
- Emailed a notice announcing the 30-day extension of the comment period to the Hanford-Info and the Commercial-Mixed-Rad-Waste email lists.

The TPA agencies held three hybrid public meetings, with virtual participation options available.

- July 9, 6 p.m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352
- July 10, 6 p.m. PT, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501
- July 11, 6 p.m. PT, Hood River Hotel, 102 Oak St, Hood River, OR 97031

Recordings of these public meetings can be found on the Hanford Events Calendar.

The TPA agencies posted electronic and printed newspaper advertisements in the Tri-Cities and Olympia, Washington; and Hood River, Oregon. Electronic advertisements, including online ads and directed emails, were also placed in the greater Seattle and Portland markets.

The public notices for this comment period are in Appendix A of this document.

Attachment 1: Summarized comments and responses

Description of comments:

The TPA agencies accepted comments from May 30 to Sept. 1, 2024. This section provides a summary of comments that we received during the public comment period and our responses, as required by RCW 34.05.325(6)(a)(iii).

Topics from eComments:

- Public Input
- Tribal Consultation
- NEPA & SEPA (General)
- Budget
- Schedule (General)
- Alternative LAW Treatment (Grouting / Off-site Disposal)
- Alternative LAW Treatment (Treatment Location & Transportation / NEPA & SEPA)
- WTP (including direct-feed high-level waste)
- Secondary Waste
- Supplemental Treatment Decision
- Tank Retrieval Sequencing
- Leaking Tanks
- New Retrieval Technology
- New Tank Capacity
- Cross-site Transfer Lines
- HLW Forbearance
- Safety
- Other Comments (Beyond Scope of Tank Waste Mission)

Public Input

(Comment Numbers I-12-1, I-25-1, I-27-1, I-30-1, I-32-1, I-33-1, I-35-1, I-37-1, I-38-1, I-39-1, I-42-1, I-44-1, I-45-1, I-48-1, I-49-1, I-52-1, I-53-1, I-55-1, I-57-1, I-59-1, I-68-1, I-69-1, I-71-1, I-73-1, I-76-1, I-81-1, I-82-1, I-86-1, I-88-1, I-90-1, I-108-1, I-111-1, I-137-1, I-138-1, I-162-1, I-164-1)

Summary of comments:

A number of commenters criticized the Tri-Party Agreement (TPA) agencies for not holding public meetings in Seattle, Spokane, Portland, and a number of other local communities,

including Tribal communities. At least one commenter felt it was unfair that the public comment period was held over the summer.

Some commenters voiced concern that the agencies' settlement agreement itself was not subject to public comment, thus public comment on the proposed consent decree and TPA milestones was meaningless.

One commenter stated that the EPA has a vital role in ensuring the TPA incorporates the viewpoints of all those who will be impacted by the proposals, as per Executive Order (EO) 14096. The commenter said the EPA should seek an amendment to the TPA changes and consent order that establishes meaningful public process and comment opportunities, and a *National Environmental Policy Act* (NEPA) analysis that supports the EO 14096 goals.

Response:

The TPA agencies appreciate feedback about the public involvement process and will consider this feedback for future public involvement opportunities.

When considering a public meeting in Oregon, the agencies chose Hood River because of previous successful Hanford public meetings, and because it is a more centralized location for residents across Oregon to attend in person. Olympia, Washington was selected due its centralized location that allows people to travel from Portland or Seattle.

Some of the other factors the agencies considered when planning the meetings included venue availability, accessibility (e.g., walking distance from parking to meeting location), venue cost, and staff availability. The agencies did ensure all three meetings had a virtual component, to allow online attendance from those who couldn't attend in person.

The "settlement" in the settlement agreement is for the TPA agencies to present proposed modifications for comment, with finalization of the proposed changes contingent on the agencies' consideration of the comments received. This comment period is thus designed to receive input on the proposals to inform the agencies on whether to move forward to finalize the proposed milestones.

EO 14096 states it is the policy of the administration to pursue a whole-of-government approach to environmental justice, which includes providing opportunities for the meaningful engagement of people and communities with environmental justice concerns who are potentially affected by federal activities. USDOE and the EPA agree that we have a vital role to play in ensuring the proposed changes in the holistic agreement incorporate the viewpoints of all those who will be impacted by the proposals. As discussed herein, the TPA agencies worked to ensure that all interested parties had meaningful opportunities for input and participation in the decisions embodied in the holistic agreement. As discussed below, this included outreach to and consultation with tribal nations potentially impacted by the decisions. Ecology and the EPA both work closely with USDOE and will continue to do so as USDOE makes decisions about managing tank waste in accordance with the TPA and the Hanford Dangerous Waste Permit. Ecology and the EPA will both ensure that those decisions are made after providing opportunities for meaningful engagement and participation to those potentially affected. As described in the response section on NEPA comments below, USDOE is planning a public

comment period on a draft NEPA supplement analysis for retrieval of waste in tanks in the 200 West Area.

The agencies understand that for decisions to have overall acceptance from stakeholders, other organizations and the public, it is important that these groups be provided the opportunity to voice their values and concerns. Based on the feedback requesting extensions, the agencies extended the comment period by 30 days, making it effectively a 120-day review and comment period (30 days for review before the comment period and 90 days for comment). There is no "perfect" time of year to hold public comment and the 90-day duration of the comment period (concluding 120 days after the proposals were made public) was geared to allow for robust involvement.

Public input on cleanup activities plays a vital role in decision-making processes; it allows the agencies to consider public, stakeholder and Tribal values, concerns and ideas before making a decision.

Tribal Consultation

(Comment Numbers I-11-1, I-13-1, I-16-1, I-17-1, I-18-1, I-19-1, I-20-1, I-21-1, I-64-1, I-65-1, I-93-1, I-98-1, I-113-1, I-127-1, I-130-1, I-134-1, I-157-1, T-1-1, O-1-1, O-5-1, O-6-3, A-1-1)

Summary of comments:

Some commenters urged the Tri-Party Agreement agencies to delay finalizing any proposed changes until after consultation with Tribal nations regarding the proposals.

Response:

The agencies engaged in government-to-government consultation with the two Tribal nations that requested consultation in response to the TPA agencies' offer. Responses to the Tribes' comment letters will be addressed via joint letter by the parties.

NEPA & SEPA (General)

(Comment Numbers 1-6-1, I-10-1, I-11-1, I-16-1, I-17-1, I-18-1, I-19-1, I-20-1, I-21-1, I-22-1, I-24-1, I-28-1, I-29-1, I-31-1, I-34-1, I-36-1, I-40-1, I-41-1, I-43-1, I-46-1, I-47-1, I-50-1, I-50-1, I-54-1, I-56-1, I-58-1, I-60-1, I-64-1, I-65-1, I-66-1, I-67-1, I-70-1, I-72-1, I-74-1, I-75-1, I-77-1, I-80-1, I-83-1, I-85-1, I-87-1, I-89-1, I-91-1, I-93-1, I-96-1, I-97-1, I-104-1, I-106-1, I-106-1, I-107-1, I-109-1, I-110-1, I-112-1, I-113-1, I-116-1, I-122-1, I-123-1, I-125-1, I-130-1, I-135-1, I-136-1, I-139-1, I-145-1, I-146-1, I-147-1, I-148-1, I-153-1, I-155-1, I-157-1, I-159-1, I-161-1, I-166-1, O-6-1, O-6-3, O-10-4, O-10-8, O-10-9, A-1-1, A-1-7, Oth-1-1)

Summary of comments:

Some commenters urged the Tri-Party Agreement agencies to undertake an environmental impact statement (EIS) analysis of the proposed holistic agreement changes and provide that analysis for public review before finalizing any proposals.

One commenter stated that the Tank Closure & Waste Management EIS is outdated and needs supplementation.

One commenter specifically called for an EIS analysis of impacts of not removing leakable liquids from the leaking tanks and not prioritizing retrieval of wastes from tank farms with leaking tanks.

One commenter asserted that under the state of Washington's *Healthy Environment for All* (HEAL) *Act*, the Washington State Department of Ecology must consider the environmental justice impacts of actions that would come from the proposed changes before approving USDOE's proposed path.

Response:

The settlement agreement acknowledges USDOE's need to complete applicable regulatory processes such as the *National Environmental Policy Act* (NEPA), which requires federal agencies to assess the environmental effects of proposed major actions prior to making decisions. Most of the proposed changes, however, are modifications to the facilities and/or tank waste retrieval and treatment approach evaluated in the Tank Closure & Waste Management EIS and its associated Records of Decision. In addition, some parts of the proposed changes are similar to aspects of Hanford's Test Bed Initiative and actions analyzed in the Tank Waste Remediation Systems EIS.

Here USDOE has initiated the development of two supplement analyses (SAs), specifically one for direct-feed high-level waste (DFHLW) and new storage capacity, and the second for the retrieval and treatment of the 22 West Area tanks, because the proposed changes relate to actions analyzed in the aforementioned EIS and records of decision. The SAs will analyze all phases of DFHLW and new storage capacity and, separately, the retrieval and treatment of the 22 West Area tank waste, including transportation. Effects of both actions, and other past, present and reasonably foreseeable future actions, will be analyzed as cumulative effects in each SA. The Council on Environmental Quality NEPA regulations direct agencies to prepare a supplement to either a draft or final EIS when a major federal action is incomplete or ongoing and either "the agency makes substantial changes to the proposed action that are relevant to environmental concerns" or there are "substantial new circumstances or information about the significance of adverse effects that bear on the analysis" (40 CFR 1502.9(d)(1)(i)–(ii)). USDOE's NEPA regulations state that when it "is unclear whether or not an EIS supplement is required, USDOE shall prepare a Supplement Analysis." (10 CFR 1021.314(c)). The SA provides sufficient information for USDOE to determine whether (1) to supplement an existing EIS, (2) to prepare a new EIS, or (3) no further NEPA documentation is required (10 CFR 1021.314(c)(2)(i)–(iii)).

USDOE's current estimate is to complete the SA for DFHLW and new storage capacity, and the SA associated with the 22 tanks, by September 2025.

The Tri-Party Agreement agencies have heard the request for additional opportunities for public involvement. USDOE has committed to a 30-day public comment period on the draft NEPA SA associated with the 22 tanks. This public comment period is anticipated to start in early 2025. Decisions about whether any additional environmental analysis, including a new or supplemental EIS, is needed will be considered after this SA and public involvement is completed.

While it's up to USDOE to decide what type of NEPA analysis is done, where grouting will occur, the form of waste to be transported (liquid or solid) and transport mechanism (e.g., truck or train), Ecology and the U.S. Environmental Protection Agency will review any additional environmental analysis that USDOE prepares and provide comment.

In addition, for Ecology decisions that are issued for public comment, Ecology would need to adopt the USDOE NEPA evaluation for purposes of fulfilling *State Environmental Policy Act* (SEPA) requirements. If USDOE's NEPA analysis does not cover all applicable environmental impacts, Ecology may need to lead its own analysis to support our agency decisions.

With respect to applicability of the HEAL Act, the act mandates that covered agencies (including Ecology) prepare an environmental justice analysis for "significant agency actions" as defined under RCW 70A.02.010. These include 1) the development and adoption of significant legislative rules; 2) the development and adoption of any new grant or loan program; 3) a capital project, grant, or loan award of at least \$12,000,000 or a transportation project, grant or loan of at least \$15,000,000; 4) the submission of agency request legislation; and 5) any other agency actions deemed "significant" by a covered agency. Ecology has not yet deemed any additional agency actions as "significant," and the proposed changes do not meet the other statutory definitions of "significant agency actions." The HEAL Act thus does not mandate that an environmental justice analysis be prepared, with respect to the proposed changes.

Concerns associated with leaking tanks and "leakable liquids" are addressed under a separate comment heading below.

Lastly, finalizing the proposed changes in the holistic agreement (i.e., amending the consent decree and effectuating the Tri-Party Agreement changes) will not make final agency decisions about some of the specific implementing concerns submitted by commenters. For example, effectuating the Tri-Party Agreement change forms for alternative treatment (i.e., grouting) and retrieving, grouting and off-site disposal of 22 West Area tanks will not make final agency decisions about where the tank waste is ultimately grouted or the specific transportation routes to be taken for off-site disposal. Those decisions will come after the completion of applicable regulatory and decision-making processes, including NEPA.

Budget

(Comment Numbers 1-14-1, A-1-4, I-28-1, I-29-1, I-31-1, I-34-1, I-36-1, I-40-1, I-41-1, I-43-1, I-46-1, I-47-1, I-50-1, I-54-1, I-56-1, I-58-1, I-60-1, I-66-1, I-67-1, I-70-1, I-72-1, I-74-1, I-75-1, I-77-1, I-80-1, I-83-1, I-85-1, I-87-1, I-89-1, I-91-1, I-104-1, I-105-1, I-106-1, I-107-1, I-109-1, I-110-1, I-112-1, I-135-1, I-136-1, I-139-1, I-145-1, I-146-1, I-147-1, I-148-1, I-159-1, I-161-1)

Summary of comments:

A number of commenters asked for the budget implications of the proposed changes associated with the holistic agreement.

Response:

Negotiations about the Hanford tank waste retrieval and treatment mission focused on a plan that recognizes fiscal constraints.

The 2022 Hanford Lifecycle Scope, Schedule, and Cost Report summarizes the remaining scope of work, schedule and cost estimates for Hanford Site cleanup. The remaining estimated cleanup costs for Hanford include a low-range estimate of approximately \$293.2 billion and a high-range estimate of approximately \$633.6 billion.

USDOE continues to appreciate the strong support provided by Congress and we'll continue to work with our regulators to prioritize the work with the funding we receive from Congress that will contribute to the safety of our workforce and protect our community as we clean up the environment. Consistent with the Tri-Party Agreement, USDOE will take all necessary steps to integrate Hanford programs and to obtain timely funding in order to fully meet all its federal Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act obligations under the agreement.

The state of Washington has been vocal about the funding necessary to ensure the Hanford Site is cleaned up, and the need for Congress to provide compliant funding to USDOE to support its cleanup obligations as outlined in the TPA and consent decree.

Schedule (General)

(Comment Numbers I-6-1, I-10-1, I-23-1, I-60-1, I-79-1, I-84-1, I-92-1, I-116-1, I-121-1, I-126-1, I-130-1, I-144-1, O-7-1, O-8-1, O-10-2, O-10-3, O-10-7, O-11-1, A-1-4, A-1-8, A-1-9, A-1-11)

Summary of comments:

Some commenters said the holistic agreement is, in the words of one commenter, "kicking the proverbial high-level waste can down the road again" without a "realistic agreement." Some commenters questioned whether any schedule for the Waste Treatment and Immobilization Plant is realistic in light of past schedule slips.

A number of commenters stated that the Tri-Party Agreement agencies should identify a "Plan B" in the event it becomes apparent in the next five years that direct-feed high-level waste vitrification will be delayed or might not be completed.

Some commenters questioned why the scope of the holistic agreement only extends to the 2040 time frame and does not replace the current "end date" milestones for retrieving waste from all single-shell tanks (2040), closing the single-shell tank system (2043) and treating all tank waste (2047). Some commenters were concerned this diminishes enforceability around completing these missions and diminishes incentive for Congress to fund the efforts.

Some commenters expressed concern that the delay in establishing new end dates would negatively impact tank farm closure activities to prevent liquid intrusion into tanks, potentially necessitating already-retrieved tanks to be retrieved again.

Response:

The holistic agreement does not propose changing current Tri-Party Agreement "end dates" for retrieving waste from all single-shell tanks (2040), closing the single-shell tank system (2043) or treating all tank waste (2047). However, the agencies have proposed adding language to the milestones that recognizes the need to revise the dates in the future following additional information and experience gained in implementing the mission, including after the startup of

the direct-feed high-level waste treatment process. The intent is to allow the agencies to revise dates with greater confidence. In the meantime, over the next 15 years, the agreement outlines comprehensive process milestones that are necessary for completing Hanford's tank waste cleanup under any scenario leading to the "end dates." These include starting the treatment of both low-activity and high-level tank waste and further retrieving waste from single-shell tanks. And during this period, USDOE is expressly not excused from any obligation to exercise due diligence toward satisfying the end date obligations as expeditiously as possible.

As stated above, the "end date" milestones will be revised soon after Hanford's High-Level Waste Facility begins operating in a direct-feed configuration. At that time, the agencies will have much better information to base revised milestones on, including more experience in retrieving single-shell tanks; experience in treating low-activity tank waste through both a direct-feed approach to Hanford's Low-Activity Waste Facility and alternative treatment (grouting with off-site disposal); and experience with starting the treatment of high-level waste through a direct-feed approach to the High-Level Waste Facility. This information will allow the Tri-Parties to revise the "end dates" with far greater confidence than they could today.

The consent decree currently requires startup of low-activity waste treatment by August 2025, and for the High-Level Waste Facility and full Waste Treatment and Immobilization Plant (WTP), hot commissioning in 2033, with full operations reached by 2036. The proposed changes do **not** include changing these dates with respect to the Low-Activity Waste Facility or High-Level Waste Facility, although the High-Level Waste Facility dates may be adjusted once a more detailed project schedule is completed.

The Low-Activity Waste Facility is currently undergoing its "commissioning" process, which for a "first-in-kind" facility is comprehensive and dynamic. Several unforeseen technical obstacles that arose during the commissioning process have already been resolved. This is a normal part of the commissioning process. USDOE has made significant progress in preparing to immobilize low-activity tank waste in glass for safe disposal under the Direct-Feed Low-Activity Waste Program. This includes heating up both melters, starting cold commissioning and pouring containers of glass in 2024. USDOE is committed to starting hot commissioning of the Low-Activity Waste Facility and treating tank waste through the program in 2025.

Looking forward, the 2022 Hanford Lifecycle Scope, Schedule, and Cost Report summarizes the remaining scope of work, schedule and cost estimates for Hanford Site cleanup and projects a cleanup schedule to fiscal year 2078. A new Hanford Lifecycle Scope, Schedule and Cost Report will be published in 2025. That report will include any agreements or changes to schedule and cost based on the holistic agreement.

With respect to calls for a "Plan B," the consent decree governing WTP construction, commissioning and initial operations requires USDOE and the Washington State Department of Ecology to meet every three years to review consent decree progress and evaluate whether revisions are necessary. In addition, proposed language in Tri-Party Agreement Milestones M-062-46 and M-062-47 similarly align the agencies to negotiate "Contingency actions and milestones, if any" in response to, among other things, any portion of the WTP not meeting commissioning dates (see Milestone M-062-40, "Contingency Planning"). The agencies will use these opportunities to evaluate circumstances and evaluate whether any "Plan B" measures

need to be initiated. In addition, from a WTP project perspective, USDOE continues to incorporate lessons learned from past challenges into ongoing and future activities at the High-Level-Waste Facility, including completing the design before resuming significant construction activities.

Concerns associated with liquid intrusion and tank retrieval are addressed below.

Alternative LAW Treatment (Grouting / Off-site Disposal)

(Comment Numbers I-1-1, I-2-1, I-4-1, I-8-1, I-11-1, I-26-1', I-28-1, I-29-1, I-31-1, I-34-1, I-36-1, I-40-1, I-41-1, I-43-1, I-46-1, I-47-1, I-50-1, I-54-1, I-56-1, I-58-1, I-60-1, I-61-1, I-64-1, I-66-1, I-67-1, I-70-1, I-72-1, I-74-1, I-75-1, I-77-1, I-80-1, I-83-1, I-85-1, I-87-1, I-89-1, I-91-1, I-104-1, I-105-1, I-106-1, I-107-1, I-109-1, I-110-1, I-112-1, I-135-1, I-136-1, I-139-1, I-145-1, I-146-1, I-147-1, I-148-1, I-159-1, I-161-1, O-1-1, O-5-1, O-6-1, O-7-1, O-8-1, O-9-1, O-10-5)

Summary of comments:

Numerous commenters voiced support for the concept of off-site disposal of grouted low-activity waste (LAW).

One commenter asked how USDOE will demonstrate that the pretreated tank waste will meet the waste acceptance criteria at the respective off-site disposal facility.

One commenter stated they were not in support of "shallow storing" of grouted waste at disposal facilities in Texas or Utah and questioned how the holistic agreement ensures that waste will "not get stranded at Hanford while awaiting shipment."

Some commenters asked whether cost analyses have been done to compare the cost of grouting LAW versus vitrifying it, as well as the cost of on-site LAW disposal versus off-site LAW disposal.

Some commenters also asked the Washington State Department of Ecology and the EPA to address "why the standard 'good as glass' applies to treated and immobilized waste in Washington state, but not elsewhere."

Response:

Some cost analyses were done in a report by the Federally Funded Research and Development Centers and the High-Level Waste Analysis of Alternatives comparing the cost of LAW glass disposed of on-site versus grouted LAW disposed of off-site. These analyses showed a cost favorable to off-site disposal. The analyses also showed that Hanford's West Area grouted LAW disposed of off-site, when paired with East Area LAW glass disposed of on-site, allowed for sooner and a greater number of waste retrievals, key risk constituents not remaining on-site, and a lower lifetime mission and cost.

The state of Washington is opposed to grouted LAW being disposed of at Hanford based on its perspective that analysis in the Tank Closure & Waste Management EIS and other risk assessments indicates that grouted tank waste disposed of at Hanford would result in future groundwater impacts that the state deems unacceptable (i.e., exceeding current safe drinking water standards). The state sees this as a function of both the waste form (in contrast to vitrified LAW) and the characteristics of Hanford's disposal location, which is above permeable

sand and gravel with groundwater below. The state believes the geologic settings of the proposed out-of-state landfills are more protective than what exists at Hanford, with both being located above aquifers that are either saline with no beneficial use or where a significant clay layer (up to 800 feet) serves as an additional protective barrier. The EPA's treatability variance and USDOE's environmental assessment discuss the disposal of Hanford's Test Bed Initiative (TBI) waste at Texas and Utah. However, EPA's TBI treatability variance did not make a decision on whether a variance would be appropriate for disposal in landfills other than those evaluated in USDOE's petition and is limited to the 2,000-gallon TBI. The EPA expressed no view as to the appropriateness of proposals USDOE may advance in the future for treatment of other Hanford tank waste.

To mitigate the potential for any waste slated for off-site disposal in a grouted form to become "stranded" at Hanford, proposed Tri-Party Agreement Milestone M-62-64 includes language providing that USDOE can only "separate, pretreat, and/or treat" low-activity tank waste to be grouted for off-site disposal "in a manner that does not result in an inventory of grouted tank waste stored onsite awaiting shipment for off-site disposal in excess of the approximate amount of grouted tank waste that USDOE could reasonably ship over a 3-month period." This three-month volume will be based on the capacity of the selected shipping capability and the capacity and waste processing capabilities of the selected receiving facility. The limit will be established in the Hanford Sitewide Permit that Ecology issues to USDOE.

With respect to questions concerning meeting waste acceptance criteria, waste retrieved and pretreated from the single-shell tanks will be sampled and analyzed at an analytical laboratory to ensure it meets applicable waste acceptance criteria, including for facilities receiving the waste for processing and treatment activities as well as for waste disposal. Consistent with standard federal *Resource Conservation and Recovery Act* hazardous-waste transportation manifest requirements, each shipment will use the sampling analytical results to certify the final wastes for compliance with applicable waste acceptance criteria prior to shipments.

Alternative LAW Treatment (Treatment Location & Transportation / NEPA & SEPA)

(Comment Numbers I-5-4, I-11-1, I-16-1, I-17-1, I-18-1, I-19-1, I-20-1, I-21-1, I-22-1, I-24-1, I-28-1, I-29-1, I-31-1, I-34-1, I-36-1, I-40-1, I-41-1, I-43-1, I-46-1, I-47-1, I-50-1, I-54-1, I-56-1, I-58-1, I-60-1, I-64-1, I-65-1, I-66-1, I-67-1, I-70-1, I-72-1, I-74-1, I-75-1, I-77-1, I-80-1, I-83-1, I-85-1, I-87-1, I-89-1, I-91-1, I-93-1, I-96-1, I-97-1, I-104-1, I-105-1, I-106-1, I-107-1, I-109-1, I-110-1, I-112-1, I-113-1, I-122-1, I-123-1, I-125-1, I-130-1, I-135-1, I-136-1, I-139-1, I-145-1, I-146-1, I-147-1, I-148-1, I-153-1, I-155-1, I-157-1, I-159-1, I-161-1, I-166-1, O-4-1, O-6-3, O-9-1, O-10-1, O-10-4, O-10-8, O-10-9, A-1-1, A-1-7, Oth-1-1)

Summary of comments:

Under proposed Tri-Party Agreement milestone M-62-64, USDOE must decide by Dec. 31, 2024, whether pretreated low-activity waste (LAW) retrieved from the 22 tanks identified in proposed Milestone M-45-135 will be grouted at or near Hanford or shipped in liquid form to be treated at one or more out-of-state disposal locations. A number of commenters indicated that they think this milestone date is too soon to be informed by National Environmental Policy Act (NEPA) analysis, public comment and results from Hanford's current Test Bed Initiative pilot

project, with some suggesting the milestone date should be changed to occur 12 months after "all relevant information" is received from the Test Bed Initiative. Some commenters called on USDOE to consult with transportation corridor states and Tribal nations before making any decisions.

Many commenters indicated that they oppose potential shipping of pretreated LAW in liquid form for treatment at a disposal location.

A commercial disposal facility in Utah commented that it is capable of accepting LAW waste in liquid form and grouting it for disposal at the facility.

In addition to indicating concern about potential liquid waste transport, a representative from the city of Bend, Oregon, echoed the state's concern that emergency responder training and hazmat capability be provided for central Oregon if it is chosen as a transport corridor.

Response:

USDOE anticipates completing its NEPA review, as well as a business case analysis, around the end of 2025, on matters including where the waste will be treated and transportation routes. These analyses will inform USDOE's decision on how to proceed. USDOE has also committed to additional public engagement as it conducts the necessary analyses and makes its decisions. Based on public and Tribal comments on this issue, USDOE intends to issue a draft NEPA supplement analysis for a 30-day public comment period in early 2025. A separate 90-day public comment period and meeting are planned, at the same time for Hanford's West Area tank waste treatment mission, using USDOE's Waste Incidental to Reprocessing process (the 22 tanks by 2040). To accommodate this process, the Tri-Pary Agreement agencies have agreed to revise the due date for proposed Milestone M-62-64 to Dec. 31, 2025. USDOE has also heard and is taking under advisement the preference of several commentors for shipping the pretreated LAW in a solid form as opposed to a liquid form.

With respect to the potential shipment of pretreated liquid LAW, USDOE notes that it has a long history of safely transporting radioactive materials, including significant quantities of liquid radioactive materials, without incident. These transports are conducted in compliance with U.S. Department of Transportation (DOT), EPA and other regulations. Examples include transportation of liquid waste from New York and Ohio to Texas, as well as liquid radioactive waste transported during the closure of the Rocky Flats Site in Colorado. USDOE plans routing of radioactive material in accordance with DOT regulations — including those in 49 CFR 173 for packaging of liquids, and 49 CFR 397 Subpart D. In addition, USDOE works closely with federal, Tribal, state and local authorities to ensure preparedness along transport routes.

The Test Bed Initiative environmental assessment evaluated various alternatives for the treatment and disposal of pretreated liquid tank waste, including transportation to off-site, permitted treatment and disposal facilities. That analysis demonstrated that the probability of a severe transportation accident resulting in a material release was expected to be "extremely unlikely" to "beyond extremely unlikely." Regardless, USDOE has not yet decided where the waste from the 22 tanks will be grouted (locally or at the respective disposal facilities) or which transportation routes will used to transport the waste.

From the perspective of the EPA and Washington State Department of Ecology, it is within USDOE's decision-making authority to decide whether pretreated tank waste will be grouted on-site or off-site, and how and where the waste will be transported. Potential impacts on the environment due to these decisions will be evaluated by USDOE under its NEPA process. Ecology and EPA will review any NEPA documentation that USDOE develops for this action. If USDOE builds a grout facility at Hanford, there are proposed milestones in the holistic agreement that require USDOE to provide Ecology a critical path schedule. This schedule would detail the permitting, constructing and commissioning of facilities and infrastructure needed to perform separation, pretreatment and/or treatment, and mode of transport for off-site disposal of LAW from Hanford's West Area single-shell tanks. In addition, follow-on milestones require USDOE to negotiate and commit to milestones to provide Ecology any permit modification material to support a grout facility at the Hanford Site. Ecology would satisfy *State Environmental Policy Act* requirements in conjunction with any permitting decisions.

WTP (including Direct-Feed High-Level Waste)

(Comment Numbers 1-14-1, I-62-1, I-23-1, I-167-1, A-1-2)

Summary of Comments:

One commenter indicated support for moving forward with a direct-feed configuration of the High-Level Waste Facility without further interruption.

One commenter stated that redesign of the High-Level Waste (HLW) Facility to support a direct-feed configuration is a particular area of concern, stating that difficulties experienced by Hanford's Direct-Feed Low-Activity Waste Program melter with respect to the forming of feedstock and process additives will "pail [sic] in comparison to the challenges that will be encountered by the DFHLW melter" because of the variety of components the forming process needs to blend and feed into the HLW melter. The commenter urges the Tri-Party Agreement agencies to avail themselves of expertise in the public by "being more transparent during the design and startup operation phases."

Another commenter questioned whether a direct-feed configuration will have an impact on waste chemistry, whether it's wise to move forward with a direct-feed configuration before all pretreatment capabilities are in place, and whether it makes more sense to look for "ways to more safely store the waste while developing a permanent disposal solution."

Another commenter stated that the interface between Hanford's Tank Farms and Waste Treatment and Immobilization Plant is not adequately addressed in the holistic agreement, citing concerns about particle sizes and hardness in the waste (an erosion concern) and unknowns about the processes that will be used to address particle size.

The same commenter suggested that because the vitrification process is untested at the Hanford scale, the agencies should remain open to alternative waste-treatment approaches, including critically examining the volume of waste that needs to be treated as HLW.

One commenter raised three questions about converting the HLW Facility into a direct-feed configuration: 1) how the current consent decree milestone for, by 2036, achieving HLW vitrification at a rate of 4.2 metric tons of glass per day will be met without additional

pretreatment proposed for completion after 2036; 2) whether waste glass produced from a direct-feed configuration of the HLW Facility will meet the waste acceptance criteria of a deep geologic repository; and 3) if aluminum leaching is performed in double-shell tanks, whether there is a risk of thermal cycle strain on those tanks.

Response:

The agencies have negotiated a priority order for engineering, procuring, constructing and commissioning of the various systems and components to enable a process flow to treat waste for ultimate disposal more quickly, and at a lower cost, than building new storage capacity for all the waste. The items noted in the comments are included in that overall approach. Operation of the HLW Facility in a direct-feed approach does not require pretreatment (as it relates to changing the chemical composition of the waste) before HLW can be vitrified. Such pretreatment is an efficiency measure to reduce the number of HLW glass cannisters produced, by greatly reducing the volume of HLW needing treatment and the mission duration. The agreement includes milestones for the construction and commissioning of additional pretreatment capabilities after startup of the HLW Facility.

All systems and components performing waste treatment, including the HLW Facility, will be designed and constructed to treat tank waste safely and efficiently. Any potential concerns with the direct-feed configuration, waste chemistry or waste feed from tank farms will be addressed as part of the design processes that will incorporate lessons learned from other USDOE facilities and expertise within USDOE's national laboratories.

With respect to the questions posed by the last commenter:

- 1) USDOE and the Washington State Department of Ecology have proposed that consent decree Milestone A-1 (the current 2036 milestone for the Waste Treatment and Immobilization Plant to achieve HLW vitrification at a rate of 4.2 metric tons of glass per day) be subject to an asterisk, as described in footnote 1 to the proposed sixth amended consent decree. That asterisk denotes that while the milestone is currently retained without modification, the agencies anticipate that it will be revisited and revised in the future, as appropriate, under proposed Milestone A-28.a., the negotiation of which will occur in conjunction with the Tri-Party Agreement "System Plan" negotiations that will establish (among other things) new "end date" milestones for completing single-shell tank retrievals and treating all tank waste. Additionally, USDOE and Ecology think that the throughput of the HLW Facility will not be affected by whether additional pretreatment is implemented.
- 2) The same performance standards currently in place for vitrified HLW (based on waste acceptance criteria for a deep geologic repository) will apply to vitrified HLW produced from the HLW Facility in a direct-feed configuration.
- 3) USDOE does not currently plan to perform aluminum leaching in double-shell tanks during initial direct-feed high-level waste configuration. There will be blending of tank waste in double-shell tanks, with the blended waste then fed directly to the HLW Facility to be incorporated into a vitrified HLW product.

Secondary Waste

(Comment Numbers I-5-2, I-5-4, I-93-1, I-98-1, I-113-1, I-133-1, O-6-3, A-1-7)

Summary of comments:

One commenter asked why there is a proposed consent decree milestone for completing an Effluent Management Facility that comes after High-Level Waste (HLW) Facility startup, when under other consent decree milestones the Low-Activity Waste Facility will have already been in operation for years. The commenter asserts this is much too late.

Response:

The proposed consent decree milestone is specific to secondary waste from the HLW Facility. The proposed milestone in the holistic agreement for the High-Level Effluent Management Facility is for a separate new facility that will support the HLW Facility only. Effluent from the Low-Activity Waste Facility will be processed through its own, existing Effluent Management Facility. Both the Low-Activity Waste Facility and its Effluent Management Facility will be operational in 2025.

Supplemental Treatment Decision

(Comment Numbers 1-5-4, A-1-7)

Summary of comments:

One commenter questioned the logic of revising Tri-Party Agreement Milestone M-062-21 to delay, until 18 months after hot commissioning of the High-Level Waste (HLW) Facility, proof that Hanford's Waste Treatment and Immobilization Plant (WTP) with supplemental treatment has capacity to treat 100% of tank waste (as demonstrated by flow sheets) when, in the commenter's understanding, the WTP was supposed to be designed to treat all HLW tank waste and pretreat all low-activity waste (LAW) tank waste.

Response:

The due date in Milestone M-062-21 (Aug. 31, 2024) was intended to occur after the original consent decree milestone dates for hot commissioning and achieving initial operations of the entire WTP complex (2019 and 2023, respectively). The M-062-21 date was never updated to reflect the 2016 modification of these consent decree dates by the federal district court, which staggered the hot commissioning dates for the LAW Facility (now 2025) and Pretreatment and HLW Facilities (now 2033) and set a new initial operations date for the WTP complex as a whole (now 2036).

The current proposal addresses this disconnect in dates. With startup of the HLW Facility now sequenced to begin in a direct-feed configuration after the LAW Facility, the Tri-Party Agreement agencies agreed to finalize the scale of additional pretreatment functions, make a decision on whether supplemental LAW treatment capacity is necessary (and at what scale), and require the certification in Milestone M-062-21 **after** startup of the HLW Facility. Better information will be available at that time to "right-size" the additional pretreatment functions (e.g., sludge washing) to determine whether and what supplemental treatment capacity is

necessary (given actual future experience with waste-loading in glass and future knowledge of new glass formulations) and inform the M-062-21 certification.

More generally, with respect to supplemental treatment, the change package revising system plan negotiations between the parties includes a requirement that, within 18 months of the date for achieving HLW Facility hot commissioning under the consent decree, the agencies complete negotiations on a number of matters, including making a supplemental treatment selection and establishing additional interim milestones. Between now and then, the emphasis on grouting as an alternative treatment technology, which is part of the holistic agreement, will help educate the agencies on the path for Hanford's supplemental LAW.

Tank Retrieval Sequencing

(Comment Numbers I-23-1, I-93-1, I-113-1, O-10-7)

Summary of comments:

One commenter said retrieving waste from single-shell tanks in the S, SX and U Tank Farms tanks selected for near-term retrievals should be those with larger amounts of liquids and saltcake and minimal amounts of sludges, to better mitigate the possibility of future leaking tanks and minimize additional sludge storage in double-shell tanks before the High-Level Waste facility is functioning.

The same commenter advised that the Tri-Party Agreement agencies should delay retrieving sludge from Tanks A-104, A-105 and A-106 until sludge waste can be processed by the High-Level Waste Facility.

Other commenters stated that the next tank farms to be retrieved should be T Tank Farm (containing leaking Tanks T-101 and T-111), not the S, SX or U Tank Farm.

Another commenter stated that USDOE should be required to retrieve waste from tank farms in Hanford's 200 East Area while also starting to retrieve waste from the 200 West Area.

Response:

Proposed Tri-Party Agreement Milestone M-45-135 outlines a retrieval sequencing selection process for the 22 S, SX and U Tank Farms tanks to be retrieved by that milestone's due date. The process calls for USDOE and the Washington State Department of Ecology to determine the total number of tanks to be retrieved in each six-year period leading to the due date. This will be done in every three-year system plan negotiation under M-062-45. In those negotiations, USDOE will also identify, for informational purposes, the specific tanks it anticipates retrieving and the anticipated waste retrieval sequence of those tanks to accomplish the set number of retrievals. The final identification of specific tanks to be retrieved will be set when USDOE submits Tank Waste Retrieval Work Plans to Ecology for approval. In that selection, the general retrieval sequencing factors identified in M-062-40 ("Tank Waste Retrieval") still come into play; namely single-shell tank integrity information, risk prioritization strategy, waste treatment feed optimization, and Waste Management Area closure considerations.

One of the subjects the agencies discussed in negotiations was retrieval sequencing and, more specifically, the next single-shell tanks to be retrieved after completing ongoing retrievals in A

and AX Tank Farms. It is important to recognize that the legal requirement for USDOE to close leaking or unfit-for-use single-shell tanks — and at the earliest practicable time remove as much waste as is necessary to prevent further release — already applies to the entire single-shell tank system (see WAC 173-303-640(7)). The decision of which tanks to retrieve next is thus one of choosing where to start when everything is a priority. The retrieval sequence and the selection of S, SX and U Tank Farms is designed to maximize environmental risk reduction by removing as much highly radioactive materials from the single shell-tank system as soon as practicable. Completion of the retrievals in single-shell Tank Farms C, AX and A has, and will, result in removal of over 40% of the total radioactive inventory from all of the Hanford single-shell tanks (see USDOE's Waste Tank Summary Reports available in the Hanford Administrative Record at https://pdw.hanford.gov/). The S, SX and U Tank Farms contain another 40% of the total radioactive inventory and include 12 tanks identified as assumed past leakers. When all S, SX and U retrievals are complete, over 80% of the initial single-shell tanks radioactive materials will be in double-shell tanks staged for final treatment and disposal (or in the case of waste from the 22 tanks, treated immobilized and disposed of). By way of comparison, the T, TX and TY and B, BX and BY Tank Farms contain only approximately 7% and 9%, respectively, of the radioactive inventory. As discussed in the next response section, however, USDOE and Ecology are pursuant to a separate agreement currently in negotiations to determine whether it is practicable to accelerate retrieval of T Tank Farm and B Tank Farm, given confirmed leaks in those farms, and, if so, establish the date for those retrievals.

The consent decree milestone for retrieving Tanks A-104 and A-105 has been proposed for extension to 2040 to allow time for new retrieval technologies to be evaluated pursuant to proposed new TPA milestones. This also aligns with hot commissioning of the High-Level Waste Facility in a direct-feed configuration.

Leaking Tanks

(Comment Numbers I-7-1; I-23-1, I-93-1, I-94-1, I-95-1, I-96-1, I-97-1, I-98-1, I-99-1, I-100-1, I-102-1, I-103-1, I-113-1, I-115-1, I-117-1, I-119-1, I-120-1, I-122-1, I-143-1, I-155-1, I-156-1, I-157-1, I-165-1, O-3-1, O-10-4, O-10-7, A-1-11, T-1-1, B-1-1)

Summary of comments:

Many commenters asked the Tri-Party Agreement agencies to do more in the proposed changes to address leaks from currently known, actively leaking single-shell tanks. Some commenters specifically call on USDOE to implement saltwell pumping in conjunction with an in-tank pretreatment system as a leak response action. One commenter pointed out that selective pumping of tanks has been employed in the past in the interim stabilization program and as a response to specific leaking single-shell tanks.

Response:

A fundamental priority for the agencies is to advance the tank waste retrieval and treatment mission. The holistic agreement does this through initiating low-activity and high-level waste treatment as soon as possible, maintaining a steady progression of single-shell tank retrievals, requirements for USDOE to develop additional retrieval technologies, and designing and constructing 1 million gallons of new, multipurpose tank-waste storage capacity. In addition,

USDOE has already taken a broad range of actions to limit the impact of leaking tanks, including removal of pumpable liquids during interim stabilization, efforts to prevent additional liquid from getting into the tanks, and a robust groundwater remediation system that captures and removes contaminants caused by leaks should those contaminants reach groundwater.

Leaking single-shell Tanks B-109 and T-111 were addressed outside of and ahead of the holistic agreement in Agreed Order No. 21304 between USDOE and the Washington State Department of Ecology, signed in August 2022. In addition, Tank T-101 was recently addressed via an addendum to the agreed order.

That agreed order requires USDOE to develop a leak response plan to address any future leaking single-shell tanks. This plan will be a part of the Hanford Sitewide Permit renewal that Ecology will put out for public comment. The agreed order and addendum set out a process whereby Ecology and USDOE will evaluate whether it is practicable to accelerate the waste retrievals of B Tank Farm and/or T Tank Farm and negotiate milestones for the retrieval of Tanks B-109, T-111 and T-101 based on, among other things, the *River Protection Project System Plan*, Revision 10 evaluation. Those negotiations are ongoing.

With respect to comments regarding the deployment of saltwell pumping, in-tank pretreatment system or additional interim stabilization activities, there is not a current consensus regarding the practicability or effectiveness of those actions to either stop or address leaking tanks. Proposed Tri-Party Agreement Milestone M-045-136 calls on an independent expert panel to provide "analysis and recommendations regarding saltwell pumping as a selective liquid removal technology for potential use on actively leaking single-shell tanks [sic]" and proposed Milestone M-045-137 provides that, after consultation with Ecology, USDOE may "choose to include testing on saltwell pumping as a selective liquid removal technology for use on actively leaking single-shell tank" if recommended by an expert panel.

New Retrieval Technology

(Comment Numbers O-10-2, A-1-10, A-1-11)

Summary of comments:

One commenter encouraged the continued development and implementation of technologies that maximize waste retrieval from tanks, particularly those that minimize the addition of liquids to leaking tanks. In addition, there were recommendations about establishing a long-term process for technology evaluation and development; that the technologies be applicable to all future tank retrievals; and that dry-retrieval technologies be specified in the milestone.

One commenter stated that the language of the technology development milestones will "impermissibly delay" action to remove leakable liquids from leaking single-shell tanks.

Response:

The holistic agreement includes proposed milestones for USDOE to conduct phased research, testing and development of new waste-retrieval technologies, including dry-retrieval technologies, to address certain retrieval challenges and tank condition issues. USDOE will also convene an expert panel to provide analysis and recommendations on the technology evaluation. The expert panel will also be tasked with providing analysis and recommendations

regarding saltwell pumping as a selective liquid removal technology for potential use on actively leaking single-shell tanks to inform the final technology evaluation document.

However, the evaluation and development of potential new or improved retrieval technologies is not a one-time action nor is it limited to a particular subset of tanks. The proposed milestone package is a part of a larger ongoing USDOE program effort to refine, improve and develop new technologies that may aid the tank waste storage and treatment mission. Through programs such as USDOE's ongoing technology research and development programs and experience gained from completed retrievals, USDOE continues to add "tools to the toolbox" to benefit near-term and future tank farm mission execution.

With respect to the comment pertaining to removal of "leakable liquids," proposed Tri-Party Agreement Milestone M-045-136 calls on an independent expert panel to provide "analysis and recommendations regarding saltwell pumping as a selective liquid removal technology for potential use on actively leaking single-shell tanks [sic]" and proposed Milestone M-045-137 provides that, after consultation with the Washington State Department of Ecology, USDOE may "choose to include testing on saltwell pumping as a selective liquid removal technology for use on actively leaking single-shell tank" if recommended by the expert panel. As discussed above, whether saltwell pumping is practicable as a selective liquid removal technology in actively leaking tanks is a matter on which there is current lack of consensus. The proposed milestone is to help inform this matter.

New Tank Capacity

(Comment Numbers I-28-1, I-29-1, I-31-1, I-34-1, I-36-1, I-40-1, I-41-1, I-43-1, I-46-1, I-47-1, I-50-1, I-54-1, I-56-1, I-58-1, I-60-1, I-64-1, I-66-1, I-67-1, I-70-1, I-72-1, I-74-1, I-75-1, I-77-1, I-80-1, I-83-1, I-85-1, I-87-1, I-89-1, I-91-1, I-93-1, I-96-1, I-97-1, I-104-1, I-105-1, I-106-1, I-107-1, I-109-1, I-110-1, I-112-1, I-135-1, I-136-1, I-139-1, I-145-1, I-146-1, I-147-1, I-148-1, I-159-1, I-161-1, O-5-1, O-6-1, O-7-1, O-8-1, O-10-6, A-1-3, A-1-5, A-1-6)

Summary of comments:

Some commenters applauded the proposal to build 1 million gallons of new tank-waste storage capacity in Hanford's 200 West Area. Some commenters were concerned that the proposed 2040 date for the capacity to become operational is too late. Some commenters asserted that 1 million gallons of capacity is not enough, while others questioned why it was the volume chosen. Other commenters argued that building any additional new tank-waste storage capacity is unnecessary and a diversion of funds and effort from other priorities.

Response:

The agreement to propose building 1 million gallons of new tank capacity in Hanford's 200 West Area is a compromise reached by the Tri-Party Agreement agencies in negotiation that balances a number of considerations, including competing priorities for budget and supporting future operational flexibility in the West Area of the Hanford Site. The additional capacity could take the form of a 1-million-gallon double-shell tank, multiple smaller tanks, or something else. The Washington State Department of Ecology is concerned about a shortage of available compliant tank-waste storage capacity in the SY Tank Farm, which contains the only

double-shell tanks in the 200 West Area. Although the precise configuration and purpose of the tank-waste storage capacity is not yet determined, building the additional capacity will serve a number of possible needs, including providing additional storage capacity for retrieved waste; additional contingency capacity in the event of operational issues with current double-shell tanks; additional emergency space capacity; and greater operational flexibility. USDOE remains committed to retrieving, treating and safely disposing of all Hanford tank waste. That includes continuing to ensure there is enough capacity in USDOE's tank system to receive waste retrieved from single-shell tanks and transfer waste for treatment.

Cross-site Transfer Lines

(Comment Numbers I-23-1, I-116-1, O-11-1, O-12-1, A-1-3, A-1-4)

Summary of comments:

Some commenters suggested there should be a program to determine the status of, and make any necessary upgrades to, the cross-site transfer lines subject to proposed new milestone dates for becoming operational.

Some commenters urged that the operational deadlines in proposed Tri-Party Agreement Milestones M-042-03 and M-042-04 be accelerated and that completion of upgrades to the supernatant line "should include the option to reach DFLAW tanks."

Response:

The holistic agreement proposes interim milestones for USDOE to activate the cross-site transfer lines connecting double-shell tanks in Hanford's 200 West Area to double-shell tanks in the 200 East Area. The distance between the West and East areas is approximately 7 miles. Activation of these lines is necessary to allow the transfer of tank waste supernatant and tank waste sludge, respectively, so that the two waste forms may be staged and then treated at the Waste Treatment and Immobilization Plant. USDOE and the Washington State Department of Ecology will determine status and make necessary upgrades to the cross-site transfer lines as part of the activation process. This will be completed under the Hanford Sitewide Permit.

The proposed activation milestones are structured before any near-term programmatic needs for cross-site transfers and were negotiated to provide tank farms operational flexibility and support Direct-Feed Low-Activity Waste Program operations.

HLW Forbearance & Other Settlement Agreement Comments

(Comment Numbers I-11-1, I-65-1, I-116-1, O-2-1, O-5-1, O-7-1, O-8-1, O-12-1)

Summary of comments:

Some commenters questioned USDOE's intent to forbear from applying its high-level waste interpretation at Hanford, stating that, among other benefits, applying the definition will allow more waste to be treated as low-activity waste. One commenter called on USDOE and the Washington State Department of Ecology to identify "opportunities to test" the interpretation at Hanford and another called on USDOE to do an "independent analysis" of the impacts of not applying the interpretation at Hanford.

Other commenters criticized USDOE for not abandoning its interpretation or making its intent in a more binding form. Specific suggestions included having a more specific, formal notification if USDOE intends to abandon the forbearance and inclusion of Tribes and the state of Oregon in consultation on any such intent to abandon.

One commenter suggested a change to Paragraph 6 of the settlement agreement's provisions, which states that by June 2038, USDOE and Ecology will meet to discuss future grouted tankwaste treatment and disposal, if any. The suggestion is to include a cross-reference to proposed Tri-Party Agreement Milestone M-062-45, Paragraph 7, where such discussions are also referenced.

The same commenter also suggested the Tri-Party Agreement agencies extend the date for concluding negotiations on Tri-Party Agreement Appendices H and I updates to allow time for consideration and resolution of holistic agreement public comments and allow for public participation in the H and I negotiations.

One commenter pointed out a typo in the paragraph numbering of the proposed consent decree changes.

Response:

The forbearance does not affect any other USDOE authority to determine that certain waste is not low-activity waste, including waste-incidental-to-reprocessing determinations. The holistic agreement establishes a path to continue to explore alternative tank-waste treatment (e.g., grout) and off-site disposal without needing to use the "high-level waste interpretation," and while avoiding litigation or dispute over of what is and is not "high-level waste."

This forbearance was important to Ecology to ensure that USDOE does not unilaterally apply the "high-level waste" interpretation to Hanford's high-level tank waste as a means for disposing of grouted tank waste or in situ residual tank waste on-site at Hanford. And Ecology believes that the benefits commenters feel can be realized through application of the interpretation can already be realized through application of other existing USDOE authorities.

With respect to the comment suggesting a change to Paragraph 6 of the settlement agreement's provisions and a cross-reference to proposed Tri-Party Agreement Milestone M-062-45, Paragraph 7, the settlement agreement already includes the suggested cross-reference in Paragraph 6.

Regarding Tri-Party Agreement Appendices H and I, the agencies anticipate that additional time will be needed to negotiate potential changes to the respective appendices. The agencies have heard and are taking under advisement the request for additional public involvement opportunities.

USDOE and Ecology will correct the noted typographical error in the consent decree paragraph numbering.

Other Comments

(Comment Numbers I-3-1, I-22-1, I-115-1, I-132-1, I-151-1, O-11-1, A-2-1, Oth-1-1)

Summary of comments:

One commenter urged the Washington State Department of Ecology to exercise active oversight over USDOE's activities at Hanford. Some commenters expressed concern over the earthquake vulnerability of Hanford facilities and waste.

Response:

Within the resources available to it, Ecology's mission includes overseeing effective and efficient cleanup of USDOE's Hanford Site to restore, protect and preserve the land, air and water for beneficial use by the people of the state of Washington, ensuring sound management of mixed hazardous wastes in Washington, and protecting the state's air, water and land at and adjacent to the Hanford Site.

With respect to concerns associated with earthquakes or seismic activity, among other documents, the Tank Closure & Waste Management environmental impact statement evaluated the historical seismicity of the Hanford region, including the frequency and magnitude of historic and recent earthquakes, and presents the most recent seismic risk estimates for Hanford. In addition, Appendix K in the Tank Closure & Waste Management environmental impact statement analyzes and provides the results of a number of accident scenarios that could be caused by seismic events at Hanford.

(Comment Number I-4-1)

Summary of comment:

The commenter asserted that there is "no true disposal of a radionuclide that is not decay, fission or fusion of the radionuclide to a nonradioactive isotope or complete antimatter annihilation of the radionuclide" and that they "believe it is immoral and unconscionable to support the claims that waste vitrification is a form of nuclear waste disposal."

Response:

The treatment and disposal paths for Hanford tank waste are dictated by existing applicable laws and regulations. The changes being proposed in the holistic agreement are within the confines of this existing legal and regulatory framework.

(Comment Number I-23-1)

Summary of comment:

The commenter said that single-shell tank retrieval criteria should be revised to be "risk-informed" instead of "just a volume calculation."

Response:

The holistic agreement does not propose any changes to existing tank-waste retrieval criteria. Pursuant to the Tri-Party Agreement agencies' settlement agreement, however, the agencies

did agree to negotiations to seek to reach agreement on updates to Appendices H (concerning tank retrievals) and I (concerning tank closure) to the Tri-Party Agreement Action Plan.

(Comment Number I-149-1)

Summary of comment:

The commenter advocated for Tribal nations to be added as parties to the Tri-Party Agreement.

Response:

The Tri-Party Agreement agencies have heard the comment to add the Tribal nations to the Tri-Party Agreement. The holistic agreement does not propose any changes to the parties or the construct of the Tri-Party Agreement which, is between USDOE, as the owner of the Hanford Site, and Ecology and the EPA, as the Site regulatory agencies. In sum, the Tri-Party Agreement is the legal document that binds USDOE to actions to comply with the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the State of Washington Hazardous Waste Management Act (HWMA).

Although the Tribes are not parties to the Tri-Party Agreement, the Tri-Party Agreement agencies are committed to continuing meaningful and early engagement with Tribal nations within respective federal and state policies and orders regarding the path forward for cleanup of the Hanford Site.

Comments Beyond Scope of Proposed Changes Associated with the Holistic Agreement

A number of comments submitted were outside the scope of the proposed changes in the holistic agreement. The Tri-Party Agreement agencies appreciate the time and effort taken to submit comments and recognize that, although beyond the scope of the Tri-Party Agreement, there are number of outstanding questions or comments about the Hanford cleanup mission. The agencies encourage continued participation in future public engagement and feedback opportunities. To learn more about ongoing and future engagement opportunities, please visit the Hanford Site's <u>outreach webpage</u> and the Washington State Department of Ecology's <u>Public comment periods</u> webpage.

If you have general questions about Hanford, you may also contact Hanford@ecy.wa.gov.

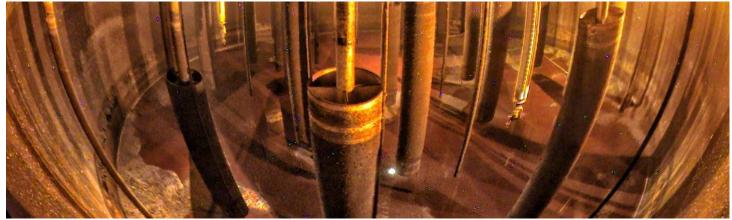
Appendix A: Copies of public notices

Public notices for this comment period:

- Focus sheet
- Advertisements in the Tri-Cities, Seattle and Olympia, Washington; and Hood River, Oregon
- Notices sent to the Hanford-Info and the Commercial-Mixed-Rad-Waste email lists
- Notices posted on USDOE and Ecology social media outlets



Proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste



Fisheye view of the inside of a tank

- Public comment period May 30 Aug. 2, 2024
- Three regional public meetings in July
- Proposed changes on aspects of tank waste retrieval, treatment, and disposal

Public comment invited

The U.S. Department of Energy (USDOE), Washington State Department of Ecology (Ecology), and U.S. Environmental Protection Agency (EPA) have signed a settlement agreement and are proposing new and revised cleanup deadlines in the Tri-Party Agreement (TPA) and *Washington v. Energy* consent decree.

This followed mediated negotiations that began in 2020, also known as Holistic Negotiations.

The agencies are holding a 60-day public comment period on the proposed changes to the Tri-Party Agreement and consent decree.

Background

Producing plutonium at the Hanford Site left a legacy of about 56 million gallons of radioactive and chemically hazardous waste stored in 177 underground tanks. USDOE is responsible for the Hanford Site and its cleanup. Ecology and EPA are regulatory agencies overseeing USDOE's cleanup under several key documents including the Tri-Party Agreement (a federal facility compliance agreement), a judicial consent decree and various permits.

For background information on Hanford, visit USDOE's Hanford Site website¹ and Ecology's website².

Highlights of proposed changes

• Maintaining existing time frames for starting treatment of both low-activity and high-level waste by immobilizing it in glass via vitrification.

¹ Hanford.gov

² Ecology.wa.gov/Hanford







- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program.
- Building a waste transfer vault and second effluent management facility to support treating high-level waste.
- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040, including grouting the low-activity portion of the waste for offsite disposal.
- Designing and constructing 1-million gallons of multi-purpose storage capacity to support tank waste retrievals.
- Evaluating and developing new technologies for retrieving waste from tanks.

Proposed Consent Decree changes

Low-Activity Waste Facility

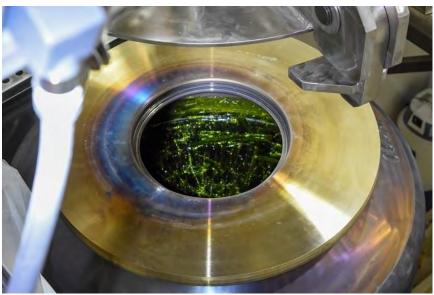
August 2025 low-activity waste vitrification startup milestone unchanged.

High-Level Waste Facility

- Facility will be converted to a direct-feed configuration with the addition of a high-level waste effluent management facility and a waste-transfer vault.
- Current commissioning date (2033) remains the same but may be adjusted after detailed startup schedule is developed.

Pretreatment capabilities

- In 2029, USDOE selects additional pretreatment capabilities to implement after hot commissioning of direct-feed high-level waste.
- Full Waste Treatment and Immobilization Plant startup and initial operations dates will also be revised after high-level waste treatment begins.



Top of a stainless-steel container showing vitrified test glass

Single-shell tank retrievals

- No change to current dates for completing retrieval of waste from five of the remaining single-shell tanks in the A/AX Tank Farms.
- Date for completing retrieval of two other tanks, A-104 and A-105, is extended to allow for development of new retrieval technology. If USDOE determines that retrieving these two tanks is not feasible by the extended deadline, two substitute tanks can be retrieved.



Proposed Tri-Party Agreement changes

End dates

- No change to current dates for retrieving all single-shell tanks (2040), closing the single-shell tank system (2043), and treating all tank waste (2047).
 - However, the agencies acknowledge these dates must be revised (without excusing USDOE from obligation to satisfy milestones as soon as possible).
- Dates will be revised in a "one-time" *Hanford Site River Protection Project System Plan (System Plan)*; these negotiations will occur after high-level waste treatment begins.
 - o This negotiation will happen at the same time as the above Consent Decree negotiations.

System Plan negotiations

- Negotiation frequency changed.
- Every three years the agencies will discuss:
 - o Retrieval sequencing for single-shell tanks for the next eight years.
 - Contingency actions, including need for new tank capacity.
- Every six years the agencies will discuss all other System Plan topics.

Single-shell tank retrievals

- Retrieve waste from 22 additional single-shell tanks by 2040.
 - o All are in S, SX, and U Tank Farms.
 - This retrieval will occur in the 200 West Area, independent of the Waste Treatment and Immobilization Plant.
 - Low-activity portion of waste will go through pretreatment, followed by alternative treatment (grouting) and be disposed of off-site.
- Tank A-103 retrieval date adjusted from 2022 to 2028.

Alternative treatment

 By the end of 2024, USDOE will select how and where grouting will occur before offsite disposal.



Aerial view of the 200 area of the Hanford Site

- After USDOE apprises Ecology of these selections, additional milestones will be developed to create a critical-path schedule and incorporate these decisions into the Hanford Sitewide Permit.
- Off-site disposal conditions:
 - Grouted waste will be disposed of at facilities outside the state of Washington.
 - o "Just in time" production: USDOE will not treat or store more waste than it can reasonably ship.
- Offsite disposal conditions will remain in place at least through 2040; Ecology and USDOE will meet no later than 2038 to discuss future conditions (if any).







New tank capacity

- One million gallons of new, multi-purpose storage capacity will be ready to operate by 2040.
 - o Will be built in the 200 West Area.
 - o An analysis of alternatives will be conducted to determine the form for the storage.

Retrieval technology evaluation and development

- USDOE will prepare a technology evaluation document to assess new or refined technologies for retrieval challenges and tank condition issues.
- An expert advisory panel will be tasked with providing analysis and recommendations.
- USDOE will carry forward at least two technologies into development.
- Expert panel will also analyze saltwell pumping for potential use in actively leaking single-shell tanks.

Other proposed changes

- Two new interim milestones to activate cross-site transfer lines.
- New permit modification and construction requirements for the facility that will store containers of immobilized high-level waste until a national storage site is established.
- Interim milestones created for Waste Management Areas Closure, to support closure plan submissions for Waste Management Areas A-AX, B-BX-BY, C, S-SX, T, TX-TY, and U into the Hanford Sitewide Permit.

Reviewing the proposed changes

The TPA agencies invite you to review and comment on these proposed changes. See the last page for comment period dates and information on how to submit comments.

Copies of the settlement agreement, the proposed TPA changes, and the consent decree changes will be available during the public comment period online on Ecology's³ and USDOE's⁴ websites. The documents will also be available electronically at the Hanford Public Information Repositories listed on page 5.

The TPA agencies will consider and respond to comments received during the public comment period and publish those in a response to comments document on the Ecology and USDOE webpages.^{3, 4}

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³ Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods

⁴ https://www.hanford.gov/pageaction.cfm/calendar



Public meetings

The agencies are holding three hybrid (in-person and virtual) public meetings. You may participate virtually using Microsoft Teams.

July 9, 6 p.m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3K26lal

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 982 736 013#

July 10, 6 p.m. PT, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3wDxZHV

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 122 171 560#

July 11, 6 p.m. PT, Hood River Hotel, 102 Oak St, Hood River, OR 97031.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3K27mQ4

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 595 516 379#

Presentations for the public meetings will be posted prior to each meeting and recordings will be added after.



Workers installing waste transfer line

Hanford's Information Repositories

You can find the Hanford Information Repositories, information on other comment periods, or ways to get involved, at ecology.wa.gov/Hanford and click "Public comment periods" on the left bar or visit Hanford.gov "public involvement opportunities".

Nuclear Waste Program 3100 Port of Benton Blvd Richland WA 99354

Proposed Changes to the Tri-Party Agreement and Consent Decree Public comment period

May 30 - Aug. 2, 2024

Electronic submission (preferred): https://tinyurl.com/TPA-CD-Changes

Public hearings are scheduled on: July 9, 10 and 11

To mail or hand-deliver comments:

Daina McFadden (509) 372-7950 3100 Port of Benton Blvd. Richland, WA 99354 Hanford@ecy.wa.gov







Questions?

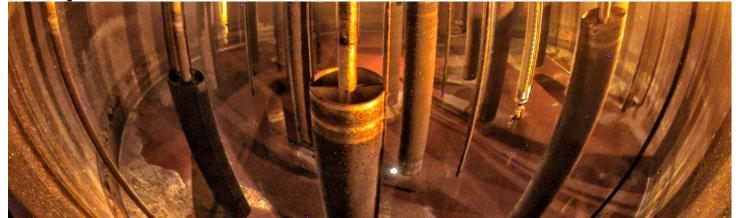
Ecology's Ryan Miller at Ryan.Miller@ecy.wa.gov

USDOE's Jennifer Colborn at Jennifer.Colborn@rl.doe.gov

EPA's Beth Clemons at Clemons.Beth@epa.gov



Cambios propuestos al Acuerdo Tripartito y decreto de consentimiento sobre desechos de tanques del Hanford Site



Vista de ojo de pez del interior de un tanque.

- Período de comentarios públicos del 30 de mayo al 2 de agosto de 2024
- Tres reuniones públicas regionales en julio
- Cambios propuestos sobre aspectos de recuperación, tratamiento y eliminación de residuos de tanques.

Comentario público invitado

El Departamento de Energía de EE. UU. (USDOE), el Departamento de Ecología del Estado de Washington (Ecología) y la Agencia de Protección Ambiental de EE. UU. (EPA) han firmado un acuerdo de conciliación y proponen nuevas y revisadas fechas límite de limpieza en el Acuerdo Tripartito (TPA) y *Washington. v. Decreto de consentimiento energético*.

A partir de 2020 se continuó con negociaciones mediadas, también conocidas como Negociaciones Holísticas.

Las agencias están celebrando un período de comentarios públicos de 60 días sobre los cambios propuestos al Acuerdo Tripartito y al decreto de consentimiento.

Antecedentes

La producción de plutonio en Hanford Site dejó un legado de aproximadamente 56 millones de galones de desechos radiactivos y químicamente peligrosos almacenados en 177 tanques subterráneos. El USDOE es responsable del Hanford Site y su limpieza. Ecología y la EPA son agencias reguladoras que supervisan la limpieza del USDOE en virtud de varios documentos clave, incluido el Acuerdo Tripartito (un acuerdo federal de cumplimiento de instalaciones), un decreto de consentimiento judicial y varios permisos.

Para obtener información general sobre Hanford, visite el sitio web del Hanford Site del USDOE. 1 y el sitio web de Ecología 2 .

¹Hanford.gov

²Ecología.wa.gov/Hanford



Aspectos destacados de los cambios propuestos

- Mantener los plazos existentes para iniciar el tratamiento de residuos tanto de baja actividad como de alta actividad mediante su inmovilización en vidrio mediante vitrificación.
- Utilizar un enfoque de alimentación directa para inmovilizar residuos de alto nivel en vidrio, similar al Programa de alimentación directa de residuos de baja actividad.
- Construcción de una bóveda de transferencia de residuos y una segunda instalación para el manejo de efluentes para apoyar el tratamiento de residuos de alta actividad.
- Recuperar desechos de 22 tanques en el área 200 Oeste de Hanford para 2040, incluida la aplicación de lechada a la porción de baja actividad de los desechos para su eliminación fuera del sitio.
- Diseño y construcción de 1 millón de galones de capacidad de almacenamiento multipropósito para respaldar la recuperación de desechos de tanques.
- Evaluación y desarrollo de nuevas tecnologías para la recuperación de residuos de los tanques.

Cambios propuestos en el Decreto de Consentimiento

Instalación de residuos de baja actividad

Agosto de 2025: hito de inicio de la vitrificación de residuos de baja actividad sin cambios.

Instalación de residuos de alta actividad

- La instalación se convertirá a una configuración de alimentación directa con la adición de una instalación de gestión de efluentes residuales de alto nivel y una bóveda de transferencia de residuos.
- La fecha de puesta en servicio actual (2033) sigue siendo la misma, pero puede ajustarse después de que se desarrolle un cronograma de puesta en marcha detallado .

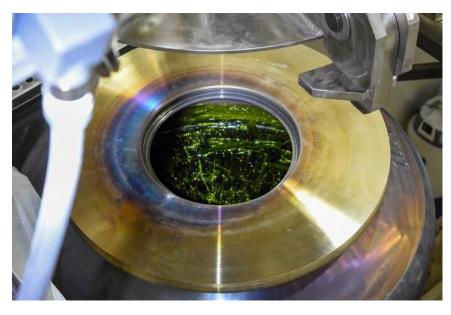
Capacidades de pretratamiento

- En 2029, el USDOE selecciona capacidades de pretratamiento adicionales para implementar después de la puesta en marcha en caliente de residuos de alto nivel de alimentación directa.
- Las fechas de puesta en marcha y operación inicial de la Planta de Tratamiento e Inmovilización de Residuos Completos también serán revisadas una vez que comience el tratamiento de residuos de alta actividad.









Parte superior de un recipiente de acero inoxidable que muestra vidrio de prueba vitrificado.

Recuperaciones de tanques de un solo proyectil

- No hay cambios en las fechas actuales para completar la recuperación de desechos de cinco de los tanques de un solo casco restantes en los parques de tanques A/AX.
- La fecha para completar la recuperación de otros dos tanques, A-104 y A-105, se amplía para permitir el desarrollo de nueva tecnología de recuperación. Si el USDOE determina que recuperar estos dos tanques no es factible antes de la fecha límite extendida, se pueden recuperar dos tanques sustitutos.

Cambios propuestos al Acuerdo Tripartito

Fechas de finalización

- No hay cambios en las fechas actuales para recuperar todos los tanques de un solo proyectil (2040), cerrar el sistema de tanques de un solo proyectil (2043) y tratar todos los residuos de tanques (2047).
 - o Sin embargo, las agencias reconocen que estas fechas deben revisarse (sin eximir al USDOE de la obligación de cumplir los hitos lo antes posible).
- Las fechas se revisarán en un Plan del Sistema del Proyecto de Protección del Río del Hanford Site "único" (Plan del Sistema); estas negociaciones se producirán después de que comience el tratamiento de residuos de alta actividad.
 - Esta negociación se llevará a cabo al mismo tiempo que las negociaciones del Decreto de Consentimiento mencionadas anteriormente.

Negociaciones del plan del sistema

- La frecuencia de las negociaciones cambió.
- Cada tres años las agencias discutirán:
 - o Secuenciación de recuperación de tanques de un solo casco durante los próximos ocho años.
 - Acciones de contingencia, incluida la necesidad de nueva capacidad de tanques.
- Cada seis años, las agencias discutirán todos los demás temas del Plan del Sistema.







Recuperaciones de tanques de un solo proyectil

- Recuperar residuos de 22 tanques monocasco adicionales para 2040.
 - Todos se encuentran en los parques de tanques S, SX y U.
 - Esta recuperación se realizará en el Área 200 Oeste, independiente de la Planta de Tratamiento e Inmovilización de Residuos.
 - La porción de residuos de baja actividad pasará por un pretratamiento, seguido de un tratamiento alternativo (lechada) y se eliminará fuera del sitio.
- Fecha de recuperación del tanque A-103 ajustada de 2022 a 2028.



Vista aérea del área 200 del Hanford Site

Tratamiento alternativo

- Para fines de 2024, el USDOE seleccionará cómo y dónde se realizará la inyección antes de su eliminación fuera del sitio.
 - Después de que el USDOE informe a Ecología sobre estas selecciones, se desarrollarán hitos adicionales para crear un cronograma de ruta crítica e incorporar estas decisiones en el Permiso para todo el Hanford Site.
- Condiciones de eliminación fuera del sitio:
 - o Los desechos inyectados se eliminarán en instalaciones fuera del Estado de Washington.
 - o Producción "justo a tiempo": El USDOE no tratará ni almacenará más residuos de los que razonablemente pueda enviar.
- Las condiciones de eliminación fuera del sitio seguirán vigentes al menos hasta 2040; Ecología y USDOE se reunirán a más tardar en 2038 para discutir las condiciones futuras (si las hubiera).

Nueva capacidad del tanque

- Un millón de galones de nueva capacidad de almacenamiento multipropósito estará lista para operar en 2040.
 - o Se construirá en el Área 200 Oeste.
 - Se realizará un análisis de alternativas para determinar la forma de almacenamiento.

Evaluación y desarrollo de tecnología de recuperación.

- El USDOE preparará un documento de evaluación de tecnología para evaluar tecnologías nuevas o refinadas para desafíos de recuperación y problemas de condición de tanques.
- Un panel asesor de expertos tendrá la tarea de proporcionar análisis y recomendaciones.
- El USDOE llevará adelante al menos dos tecnologías para su desarrollo.
- Un panel de expertos también analizará el bombeo de pozos salados para su uso potencial en tanques de una sola carcasa con fugas activas.







Otros cambios propuestos

- Dos nuevos hitos provisionales para activar líneas de transferencia entre sitios.
- Nuevas modificaciones de permisos y requisitos de construcción para la instalación que almacenará contenedores de desechos de alto nivel inmovilizados hasta que se establezca un sitio de almacenamiento nacional.
- Hitos provisionales creados para el cierre de áreas de manejo de desechos, para respaldar la presentación de planes de cierre para las áreas de manejo de desechos A-AX, B-BX-BY, C, S-SX, T, TX-TY y U en el permiso para todo el Hanford Site.

Revisión de los cambios propuestos

Las agencias de la TPA lo invitan a revisar y comentar sobre estos cambios propuestos. Consulte la última página para conocer las fechas del período de comentarios e información sobre cómo enviar comentarios.

Las copias del acuerdo de conciliación, los cambios propuestos a la TPA y los cambios al decreto de consentimiento estarán disponibles durante el período de comentarios públicos en línea en los sitios web de Ecología³ y el USDOE⁴. Los documentos también estarán disponibles electrónicamente en los Depósitos de Información Pública de Hanford que figuran en la página 5.

Las agencias de la TPA considerarán y responderán a los comentarios recibidos durante el período de comentarios públicos y los publicarán en un documento de respuesta a comentarios en las páginas web de Ecología y USDOE. ^{3, 4}

³Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods

⁴https://www.hanford.gov/pageaction.cfm/calendar



Reuniones públicas

Las agencias están celebrando tres reuniones públicas híbridas (presenciales y virtuales). Puede participar virtualmente utilizando Microsoft Teams.

9 de julio, 6 p. m. hora del Pacífico, Biblioteca Pública de Richland, 955 Northgate Drive, Richland, WA 99352.

Únase desde su computadora o aplicación móvil <u>Haga clic aquí para unirse a la reunión</u> bit.ly/3K26lal

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita)

Conferencia telefónica 982 736 013#

10 de julio, 6 p. m. (hora del Pacífico), DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

Únase desde su computadora o aplicación móvil

Haga clic aquí para unirse a la reunión bit.ly/3wDxZHV

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita) Conferencia telefónica 122 171 560#

11 de julio, 6 p. m. hora del Pacífico, Hood River Hotel, 102 Oak St, Hood River, OR 97031.

Únase desde su computadora o aplicación móvil

Haga clic aquí para unirse a la reunión bit.ly/3K27mQ4

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita) Conferencia telefónica 595 516 379#

Las presentaciones para las reuniones públicas se publicarán antes de cada reunión y las grabaciones se agregarán después.



Trabajadores instalando línea de transferencia de residuos

Depósitos de información de Hanford

Puede encontrar los repositorios de información de Hanford, información sobre otros períodos de comentarios o formas de participar en <u>ecology.wa.gov/Hanford</u> y haga clic en "Períodos de comentarios públicos" en la barra izquierda o visite <u>Hanford.gov</u> "oportunidades de participación pública".

Programa de residuos nucleares 3100 Port of Benton Blvd. Richland WA 99354

Cambios propuestos al Acuerdo Tripartito y al Decreto de Consentimiento Período de comentarios públicos

30 de mayo – 2 de agosto de 2024

Envío electrónico (preferido): https://tinyurl.com/TPA-CD-Changes

Las audiencias públicas están programadas para los días: 9, 10 y 11 de julio

Para enviar comentarios por correo o entregarlos personalmente:

Daina McFadden (509) 372-7950 3100 Port of Benton Blvd. Richland, WA 99354

Hanford@ecv.wa.gov







¿Preguntas?

Ryan Miller de Ecología en Ryan.Miller@ecy.wa.gov

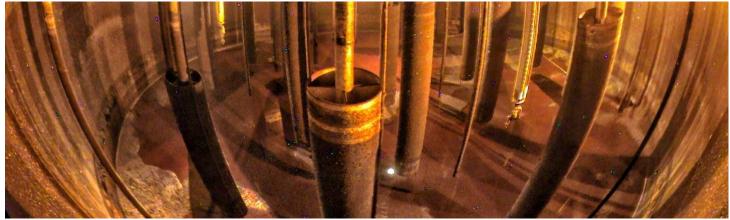
Jennifer Colborn del USDOE en Jennifer.Colborn@rl.doe.gov

Beth Clemons de la EPA en Clemons.Beth@epa.gov

Para solicitar una adaptación según la ADA, comuníquese con el Departamento de Ecología por teléfono al (509) 372-7950, envíe un correo electrónico a Daina.McFadden@ecy.wa.gov, o visite ecology.wa.gov/Accessibility. Para servicio de retransmisión o TTY, llame al 711 o al (877) 833-6341.



Proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste



Fisheye view of the inside of a tank

- Public comment period May 30 Aug. 2 Sept. 1, 2024
- Three regional public meetings in July
- Proposed changes on aspects of tank waste retrieval, treatment, and disposal

Public comment invited

The U.S. Department of Energy (USDOE), Washington State Department of Ecology (Ecology), and U.S. Environmental Protection Agency (EPA) have signed a settlement agreement and are proposing new and revised cleanup deadlines in the Tri-Party Agreement (TPA) and *Washington v. Energy* consent decree.

This followed mediated negotiations that began in 2020, also known as Holistic Negotiations.

The agencies are holding a 60 90-day public comment period on the proposed changes to the Tri-Party Agreement and consent decree.

Background

Producing plutonium at the Hanford Site left a legacy of about 56 million gallons of radioactive and chemically hazardous waste stored in 177 underground tanks. USDOE is responsible for the Hanford Site and its cleanup. Ecology and EPA are regulatory agencies overseeing USDOE's cleanup under several key documents including the Tri-Party Agreement (a federal facility compliance agreement), a judicial consent decree and various permits.

For background information on Hanford, visit USDOE's Hanford Site website¹ and Ecology's website².

Highlights of proposed changes

• Maintaining existing time frames for starting treatment of both low-activity and high-level waste by immobilizing it in glass via vitrification.

¹ Hanford.gov

² Ecology.wa.gov/Hanford







- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program.
- Building a waste transfer vault and second effluent management facility to support treating high-level waste.
- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040, including grouting the low-activity portion of the waste for offsite disposal.
- Designing and constructing 1-million gallons of multi-purpose storage capacity to support tank waste retrievals.
- Evaluating and developing new technologies for retrieving waste from tanks.

Proposed Consent Decree changes

Low-Activity Waste Facility

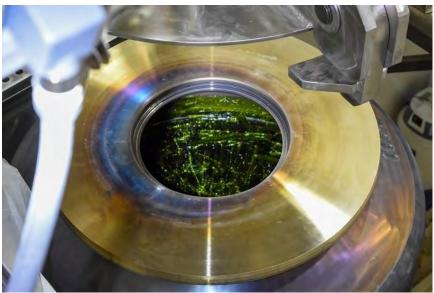
August 2025 low-activity waste vitrification startup milestone unchanged.

High-Level Waste Facility

- Facility will be converted to a direct-feed configuration with the addition of a high-level waste effluent management facility and a waste-transfer vault.
- Current commissioning date (2033) remains the same but may be adjusted after detailed startup schedule is developed.

Pretreatment capabilities

- In 2029, USDOE selects additional pretreatment capabilities to implement after hot commissioning of direct-feed high-level waste.
- Full Waste Treatment and Immobilization Plant startup and initial operations dates will also be revised after high-level waste treatment begins.



Top of a stainless-steel container showing vitrified test glass

Single-shell tank retrievals

- No change to current dates for completing retrieval of waste from five of the remaining single-shell tanks in the A/AX Tank Farms.
- Date for completing retrieval of two other tanks, A-104 and A-105, is extended to allow for development of new retrieval technology. If USDOE determines that retrieving these two tanks is not feasible by the extended deadline, two substitute tanks can be retrieved.



Proposed Tri-Party Agreement changes

End dates

- No change to current dates for retrieving all single-shell tanks (2040), closing the single-shell tank system (2043), and treating all tank waste (2047).
 - However, the agencies acknowledge these dates must be revised (without excusing USDOE from obligation to satisfy milestones as soon as possible).
- Dates will be revised in a "one-time" *Hanford Site River Protection Project System Plan (System Plan)*; these negotiations will occur after high-level waste treatment begins.
 - o This negotiation will happen at the same time as the above Consent Decree negotiations.

System Plan negotiations

- Negotiation frequency changed.
- Every three years the agencies will discuss:
 - o Retrieval sequencing for single-shell tanks for the next eight years.
 - Contingency actions, including need for new tank capacity.
- Every six years the agencies will discuss all other System Plan topics.

Single-shell tank retrievals

- Retrieve waste from 22 additional single-shell tanks by 2040.
 - All are in S, SX, and U Tank Farms.
 - This retrieval will occur in the 200 West Area, independent of the Waste Treatment and Immobilization Plant.
 - Low-activity portion of waste will go through pretreatment, followed by alternative treatment (grouting) and be disposed of off-site.
- Tank A-103 retrieval date adjusted from 2022 to 2028.

Alternative treatment

 By the end of 2024, USDOE will select how and where grouting will occur before offsite disposal.



Aerial view of the 200 area of the Hanford Site

- After USDOE apprises Ecology of these selections, additional milestones will be developed to create a critical-path schedule and incorporate these decisions into the Hanford Sitewide Permit.
- Off-site disposal conditions:
 - Grouted waste will be disposed of at facilities outside the state of Washington.
 - o "Just in time" production: USDOE will not treat or store more waste than it can reasonably ship.
- Offsite disposal conditions will remain in place at least through 2040; Ecology and USDOE will meet no
 later than 2038 to discuss future conditions (if any).







New tank capacity

- One million gallons of new, multi-purpose storage capacity will be ready to operate by 2040.
 - Will be built in the 200 West Area.
 - o An analysis of alternatives will be conducted to determine the form for the storage.

Retrieval technology evaluation and development

- USDOE will prepare a technology evaluation document to assess new or refined technologies for retrieval challenges and tank condition issues.
- An expert advisory panel will be tasked with providing analysis and recommendations.
- USDOE will carry forward at least two technologies into development.
- Expert panel will also analyze saltwell pumping for potential use in actively leaking single-shell tanks.

Other proposed changes

- Two new interim milestones to activate cross-site transfer lines.
- New permit modification and construction requirements for the facility that will store containers of immobilized high-level waste until a national storage site is established.
- Interim milestones created for Waste Management Areas Closure, to support closure plan submissions for Waste Management Areas A-AX, B-BX-BY, C, S-SX, T, TX-TY, and U into the Hanford Sitewide Permit.

Reviewing the proposed changes

The TPA agencies invite you to review and comment on these proposed changes. See the last page for comment period dates and information on how to submit comments.

Copies of the settlement agreement, the proposed TPA changes, and the consent decree changes will be available during the public comment period online on Ecology's³ and USDOE's⁴ websites. The documents will also be available electronically at the Hanford Public Information Repositories listed on page 5.

The TPA agencies will consider and respond to comments received during the public comment period and publish those in a response to comments document on the Ecology and USDOE webpages.^{3, 4}

Publication 24-05-006 May 2024 Page 4

³ Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods

⁴ https://www.hanford.gov/pageaction.cfm/calendar



Public meetings

The agencies are holding three hybrid (in-person and virtual) public meetings. You may participate virtually using Microsoft Teams.

July 9, 6 p.m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3K26lal

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 982 736 013#

July 10, 6 p.m. PT, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3wDxZHV

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 122 171 560#

July 11, 6 p.m. PT, Hood River Hotel, 102 Oak St, Hood River, OR 97031.

Join on your computer or mobile app

Click here to join the meeting bit.ly/3K27mQ4

Or call in (audio only)

- +1 (509) 600-2010 United States, Spokane
- +1 (833) 633-0875 United States (Toll-free)

Phone Conference 595 516 379#

Presentations for the public meetings will be posted prior to each meeting and recordings will be added after.



Workers installing waste transfer line

Hanford's Information Repositories

You can find the Hanford Information Repositories, information on other comment periods, or ways to get involved, at ecology.wa.gov/Hanford and click "Public comment periods" on the left bar or visit Hanford.gov "public involvement opportunities".

Nuclear Waste Program 3100 Port of Benton Blvd Richland WA 99354

Proposed Changes to the Tri-Party Agreement and Consent Decree Public comment period

May 30 - Aug. 2 Sept. 1, 2024

Electronic submission (preferred): https://tinyurl.com/TPA-CD-Changes

Public hearings are scheduled on: July 9, 10 and 11

To mail or hand-deliver comments:

Daina McFadden (509) 372-7950 3100 Port of Benton Blvd. Richland, WA 99354 Hanford@ecy.wa.gov







Questions?

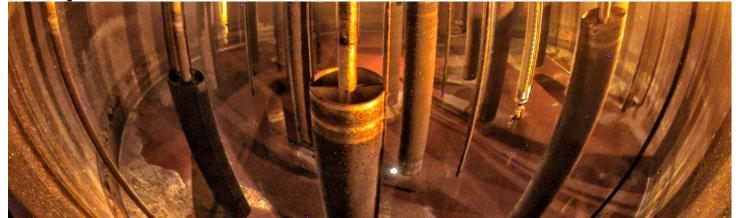
Ecology's Ryan Miller at Ryan.Miller@ecy.wa.gov

USDOE's Jennifer Colborn at Jennifer.Colborn@rl.doe.gov

EPA's Beth Clemons at Clemons.Beth@epa.gov



Cambios propuestos al Acuerdo Tripartito y decreto de consentimiento sobre desechos de tanques del Hanford Site



Vista de ojo de pez del interior de un tanque.

- Período de comentarios públicos del 30 de mayo al 2 de agosto 1 de septiembre 2024
- Tres reuniones públicas regionales en julio
- Cambios propuestos sobre aspectos de recuperación, tratamiento y eliminación de residuos de tanques.

Comentario público invitado

El Departamento de Energía de EE. UU. (USDOE), el Departamento de Ecología del Estado de Washington (Ecología) y la Agencia de Protección Ambiental de EE. UU. (EPA) han firmado un acuerdo de conciliación y proponen nuevas y revisadas fechas límite de limpieza en el Acuerdo Tripartito (TPA) y *Washington. v. Decreto de consentimiento energético*.

A partir de 2020 se continuó con negociaciones mediadas, también conocidas como Negociaciones Holísticas.

Las agencias están celebrando un período de comentarios públicos de 60 90 días sobre los cambios propuestos al Acuerdo Tripartito y al decreto de consentimiento.

Antecedentes

La producción de plutonio en Hanford Site dejó un legado de aproximadamente 56 millones de galones de desechos radiactivos y químicamente peligrosos almacenados en 177 tanques subterráneos. El USDOE es responsable del Hanford Site y su limpieza. Ecología y la EPA son agencias reguladoras que supervisan la limpieza del USDOE en virtud de varios documentos clave, incluido el Acuerdo Tripartito (un acuerdo federal de cumplimiento de instalaciones), un decreto de consentimiento judicial y varios permisos.

Para obtener información general sobre Hanford, visite el sitio web del Hanford Site del USDOE.¹ y el sitio web de Ecología² .

¹Hanford.gov

²Ecología.wa.gov/Hanford



Aspectos destacados de los cambios propuestos

- Mantener los plazos existentes para iniciar el tratamiento de residuos tanto de baja actividad como de alta actividad mediante su inmovilización en vidrio mediante vitrificación.
- Utilizar un enfoque de alimentación directa para inmovilizar residuos de alto nivel en vidrio, similar al Programa de alimentación directa de residuos de baja actividad.
- Construcción de una bóveda de transferencia de residuos y una segunda instalación para el manejo de efluentes para apoyar el tratamiento de residuos de alta actividad.
- Recuperar desechos de 22 tanques en el área 200 Oeste de Hanford para 2040, incluida la aplicación de lechada a la porción de baja actividad de los desechos para su eliminación fuera del sitio.
- Diseño y construcción de 1 millón de galones de capacidad de almacenamiento multipropósito para respaldar la recuperación de desechos de tanques.
- Evaluación y desarrollo de nuevas tecnologías para la recuperación de residuos de los tanques.

Cambios propuestos en el Decreto de Consentimiento

Instalación de residuos de baja actividad

Agosto de 2025: hito de inicio de la vitrificación de residuos de baja actividad sin cambios.

Instalación de residuos de alta actividad

- La instalación se convertirá a una configuración de alimentación directa con la adición de una instalación de gestión de efluentes residuales de alto nivel y una bóveda de transferencia de residuos.
- La fecha de puesta en servicio actual (2033) sigue siendo la misma, pero puede ajustarse después de que se desarrolle un cronograma de puesta en marcha detallado .

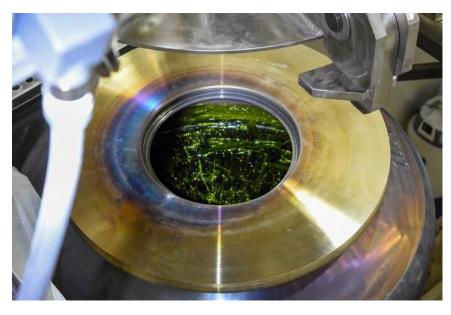
Capacidades de pretratamiento

- En 2029, el USDOE selecciona capacidades de pretratamiento adicionales para implementar después de la puesta en marcha en caliente de residuos de alto nivel de alimentación directa.
- Las fechas de puesta en marcha y operación inicial de la Planta de Tratamiento e Inmovilización de Residuos Completos también serán revisadas una vez que comience el tratamiento de residuos de alta actividad.









Parte superior de un recipiente de acero inoxidable que muestra vidrio de prueba vitrificado.

Recuperaciones de tanques de un solo proyectil

- No hay cambios en las fechas actuales para completar la recuperación de desechos de cinco de los tanques de un solo casco restantes en los parques de tanques A/AX.
- La fecha para completar la recuperación de otros dos tanques, A-104 y A-105, se amplía para permitir el desarrollo de nueva tecnología de recuperación. Si el USDOE determina que recuperar estos dos tanques no es factible antes de la fecha límite extendida, se pueden recuperar dos tanques sustitutos.

Cambios propuestos al Acuerdo Tripartito

Fechas de finalización

- No hay cambios en las fechas actuales para recuperar todos los tanques de un solo proyectil (2040), cerrar el sistema de tanques de un solo proyectil (2043) y tratar todos los residuos de tanques (2047).
 - o Sin embargo, las agencias reconocen que estas fechas deben revisarse (sin eximir al USDOE de la obligación de cumplir los hitos lo antes posible).
- Las fechas se revisarán en un Plan del Sistema del Proyecto de Protección del Río del Hanford Site "único" (Plan del Sistema); estas negociaciones se producirán después de que comience el tratamiento de residuos de alta actividad.
 - Esta negociación se llevará a cabo al mismo tiempo que las negociaciones del Decreto de Consentimiento mencionadas anteriormente.

Negociaciones del plan del sistema

- La frecuencia de las negociaciones cambió.
- Cada tres años las agencias discutirán:
 - o Secuenciación de recuperación de tanques de un solo casco durante los próximos ocho años.
 - Acciones de contingencia, incluida la necesidad de nueva capacidad de tanques.
- Cada seis años, las agencias discutirán todos los demás temas del Plan del Sistema.







Recuperaciones de tanques de un solo proyectil

- Recuperar residuos de 22 tanques monocasco adicionales para 2040.
 - Todos se encuentran en los parques de tanques S, SX y U.
 - Esta recuperación se realizará en el Área 200 Oeste, independiente de la Planta de Tratamiento e Inmovilización de Residuos.
 - La porción de residuos de baja actividad pasará por un pretratamiento, seguido de un tratamiento alternativo (lechada) y se eliminará fuera del sitio.
- Fecha de recuperación del tanque A-103 ajustada de 2022 a 2028.



Vista aérea del área 200 del Hanford Site

Tratamiento alternativo

- Para fines de 2024, el USDOE seleccionará cómo y dónde se realizará la inyección antes de su eliminación fuera del sitio.
 - Después de que el USDOE informe a Ecología sobre estas selecciones, se desarrollarán hitos adicionales para crear un cronograma de ruta crítica e incorporar estas decisiones en el Permiso para todo el Hanford Site.
- Condiciones de eliminación fuera del sitio:
 - o Los desechos inyectados se eliminarán en instalaciones fuera del Estado de Washington.
 - o Producción "justo a tiempo": El USDOE no tratará ni almacenará más residuos de los que razonablemente pueda enviar.
- Las condiciones de eliminación fuera del sitio seguirán vigentes al menos hasta 2040; Ecología y USDOE se reunirán a más tardar en 2038 para discutir las condiciones futuras (si las hubiera).

Nueva capacidad del tanque

- Un millón de galones de nueva capacidad de almacenamiento multipropósito estará lista para operar en 2040.
 - o Se construirá en el Área 200 Oeste.
 - Se realizará un análisis de alternativas para determinar la forma de almacenamiento.

Evaluación y desarrollo de tecnología de recuperación.

- El USDOE preparará un documento de evaluación de tecnología para evaluar tecnologías nuevas o refinadas para desafíos de recuperación y problemas de condición de tanques.
- Un panel asesor de expertos tendrá la tarea de proporcionar análisis y recomendaciones.
- El USDOE llevará adelante al menos dos tecnologías para su desarrollo.
- Un panel de expertos también analizará el bombeo de pozos salados para su uso potencial en tanques de una sola carcasa con fugas activas.







Otros cambios propuestos

- Dos nuevos hitos provisionales para activar líneas de transferencia entre sitios.
- Nuevas modificaciones de permisos y requisitos de construcción para la instalación que almacenará contenedores de desechos de alto nivel inmovilizados hasta que se establezca un sitio de almacenamiento nacional.
- Hitos provisionales creados para el cierre de áreas de manejo de desechos, para respaldar la presentación de planes de cierre para las áreas de manejo de desechos A-AX, B-BX-BY, C, S-SX, T, TX-TY y U en el permiso para todo el Hanford Site.

Revisión de los cambios propuestos

Las agencias de la TPA lo invitan a revisar y comentar sobre estos cambios propuestos. Consulte la última página para conocer las fechas del período de comentarios e información sobre cómo enviar comentarios.

Las copias del acuerdo de conciliación, los cambios propuestos a la TPA y los cambios al decreto de consentimiento estarán disponibles durante el período de comentarios públicos en línea en los sitios web de Ecología³ y el USDOE⁴. Los documentos también estarán disponibles electrónicamente en los Depósitos de Información Pública de Hanford que figuran en la página 5.

Las agencias de la TPA considerarán y responderán a los comentarios recibidos durante el período de comentarios públicos y los publicarán en un documento de respuesta a comentarios en las páginas web de Ecología y USDOE. ^{3, 4}

³Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods

⁴https://www.hanford.gov/pageaction.cfm/calendar



Reuniones públicas

Las agencias están celebrando tres reuniones públicas híbridas (presenciales y virtuales). Puede participar virtualmente utilizando Microsoft Teams.

9 de julio, 6 p. m. hora del Pacífico, Biblioteca Pública de Richland, 955 Northgate Drive, Richland, WA 99352.

Únase desde su computadora o aplicación móvil <u>Haga clic aquí para unirse a la reunión</u> bit.ly/3K26lal

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita)

Conferencia telefónica 982 736 013#

10 de julio, 6 p. m. (hora del Pacífico), DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

Únase desde su computadora o aplicación móvil

Haga clic aquí para unirse a la reunión bit.ly/3wDxZHV

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita) Conferencia telefónica 122 171 560#

11 de julio, 6 p. m. hora del Pacífico, Hood River Hotel, 102 Oak St, Hood River, OR 97031.

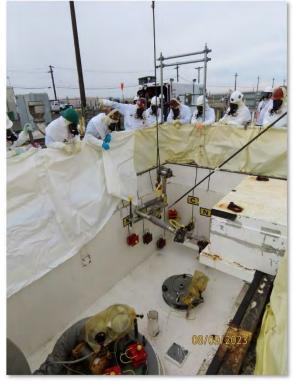
Únase desde su computadora o aplicación móvil

Haga clic aquí para unirse a la reunión bit.ly/3K27mQ4

O llame (solo audio)

- +1 (509) 600-2010 Estados Unidos, Spokane
- +1 (833) 633-0875 Estados Unidos (Llamada gratuita) Conferencia telefónica 595 516 379#

Las presentaciones para las reuniones públicas se publicarán antes de cada reunión y las grabaciones se agregarán después.



Trabajadores instalando línea de transferencia de residuos

Depósitos de información de Hanford

Puede encontrar los repositorios de información de Hanford, información sobre otros períodos de comentarios o formas de participar en ecology.wa.gov/Hanford y haga clic en "Períodos de comentarios públicos" en la barra izquierda o visite Hanford.gov "oportunidades de participación pública".

Programa de residuos nucleares 3100 Port of Benton Blvd. Richland WA 99354

Cambios propuestos al Acuerdo Tripartito y al Decreto de Consentimiento Período de comentarios públicos

30 de mayo – 2 de agosto 1 de septiembre de 2024

Envío electrónico (preferido): https://tinyurl.com/TPA-CD-Changes

Las audiencias públicas están programadas para los días: 9, 10 y 11 de julio

Para enviar comentarios por correo o entregarlos personalmente:

Daina McFadden (509) 372-7950 3100 Port of Benton Blvd. Richland, WA 99354







¿Preguntas?

Ryan Miller de Ecología en Ryan.Miller@ecy.wa.gov

Jennifer Colborn del USDOE en Jennifer.Colborn@rl.doe.gov

Beth Clemons de la EPA en Clemons.Beth@epa.gov

Para solicitar una adaptación según la ADA, comuníquese con el Departamento de Ecología por teléfono al (509) 372-7950, envíe un correo electrónico a Daina.McFadden@ecy.wa.gov, o visite ecology.wa.gov/Accessibility. Para servicio de retransmisión o TTY, llame al 711 o al (877) 833-6341.

A Landmark Agreement

The U.S. Department of Energy (USDOE), Washington State Department of Ecology (Ecology), and U.S. Environmental Protection Agency (EPA) have reached a landmark agreement that proposes a realistic and achievable course for cleaning up millions of gallons of radioactive and chemical waste from large, underground tanks at the Hanford Site.

Following voluntary, mediated negotiations that began in 2020, also known as Holistic Negotiations, the agencies have signed a settlement agreement and are proposing new and revised cleanup deadlines in the Tri-Party Agreement and Washington v. Energy consent decree. The proposed changes uphold a shared commitment to the safe and effective cleanup of tank waste.

Highlights of the Agreement

- Maintaining existing timeframes for starting treatment of both low-activity and high-level waste by immobilizing it in glass via vitrification
- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program
- Building a vault storage system and second effluent management facility to support treating high-level waste

- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040, including the low-activity portion of the waste for offsite disposal
- Designing and constructing 1-million gallons of capacity for multi-purpose storage of tank waste
- Evaluating new technologies for retrieving waste from tanks

Under the settlement agreement, USDOE has also committed to refrain from applying its interpretation of what constitutes "high-level waste" when disposing of treated waste or closing tank systems at Hanford.

Public Comment

A 90-day public comment period will run from May 30 through Sept. 1, with three regional meetings. All meetings will be hybrid, so you may participate in person or virtually. Tri-Party Agreement leaders will listen, answer your questions and consider your input.

 July 9, 6 p.m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352

July 10, 6 p.m. PT,
 DoubleTree Hotel, 415
 Capitol Way North,
 Olympia, WA 98501 /

July 11, 6 p.m. PT, Hood River Hotel,
 102 Oak St, Hood River, OR 97031

Changes to milestones and deadlines are not final until the public comment period is complete, a response to comments is issued, the federal district court accepts proposed amendments to the consent decree, and the agencies implement the proposed revisions.





Statements from **Agency Leadership**

"We have alignment on a plan that lays out a realistic and achievable path forward for Hanford's tank waste mission," said Brian Vance, Hanford's DOE manager of the River Protection and Richland Operations offices. "Our One Hanford team is ready to get down to the business of more fully conducting the tank waste mission resulting in benefits for the environment, the people of Washington state and the nation."

"We've negotiated a durable framework that aligns our agencies and accelerates work while maintaining a robust and safe cleanup. The communities we all serve deserve no less," said Ecology Director Laura Watson. "This agreement will get more tank waste retrieved, treated, and disposed of on schedule and gives us a roadmap for Hanford cleanup through 2040 and beyond."

"The disposal of tank waste is a critical component of the complex, site-wide cleanup efforts at Hanford," said EPA Region 10 Administrator Casey Sixkiller. "This agreement builds on decades of work and collaboration between the Department of Energy, State of Washington, and the EPA, and will guide the tank waste mission as it enters a new phase of operation. We encourage all impacted Tribes, community members, and other stakeholders to participate in the public review process."



Geoff Tyree

U.S. Department of Energy Geoffrey.Tyree@rl.doe.gov



Ryan Miller

Washington State Department of Ecology Ryan.Miller@ecv.wa.gov



Beth Clemons

U.S. Environmental Protection Agency Clemons.Beth@epa.gov









Un acuerdo histórico

El Departamento de Energía de Estados Unidos (U.S. Department of Energy, USDOE), el Departamento de Ecología (Ecología) del estado de Washington y la Agencia de Protección Ambiental (Environmental Protection Agency, EPA) de Estados Unidos han llegado a un acuerdo histórico que propone un camino realista y alcanzable para limpiar millones de galones de residuos químicos y radiactivos de grandes tanques subterráneos en Hanford Site.

Tras las negociaciones voluntarias y mediadas que comenzaron en 2020, también conocidas como Negociaciones Holísticas, las agencias firmaron un acuerdo de conciliación y proponen plazos de limpieza nuevos y revisados en el Acuerdo Tripartito y el decreto de consentimiento de *Washington v. Energy*.

Los cambios propuestos mantienen un compromiso compartido con la limpieza segura y eficaz de los residuos de los tanques.

Aspectos destacados del acuerdo

- Mantenimiento de los plazos existentes para iniciar el tratamiento de residuos tanto de baja actividad como de alto nivel inmovilizándolos en vidrio mediante vitrificación
- Uso de un enfoque de alimentación directa para inmovilizar residuos de alto nivel en vidrio, similar al Programa de Residuos de Baja Actividad de Alimentación Directa

- Construcción de un sistema de almacenamiento en bóveda y una segunda instalación de gestión de efluentes para apoyar el tratamiento de residuos de alto nivel
- Recuperación de residuos de 22 tanques en el área 200 Oeste de Hanford antes de 2040, lo que incluye la porción de baja actividad de los residuos para su eliminación fuera del sitio
- Diseño y construcción de 1 millón de galones de capacidad para almacenamiento multipropósito de residuos de tanques
- Evaluación de nuevas tecnologías para la recuperación de residuos de los tanques

Según el acuerdo de conciliación, el USDOE también se ha comprometido a abstenerse de aplicar su interpretación de lo que constituye "residuos de alto nivel" al eliminar residuos tratados o cerrar sistemas de tanques en Hanford.

Audiencia pública

Se llevará a cabo un período de audiencias públicas de 90 días desde el 30 de mayo hasta el 1 de septiembre, con tres reuniones regionales. Todas las reuniones serán híbridas, por lo que podrá participar de forma presencial o virtual. Los líderes del Acuerdo Tripartito escucharán, responderán sus preguntas y considerarán sus aportes.

9 de julio, 6 p. m. (hora del Pacífico),
 Biblioteca Pública de Richland, 955
 Northgate Drive, Richland, WA
 99352

10 de julio, 6 p. m. (hora del Pacífico), Hotel DoubleTree, 415 Capitol Way North, Olympia, WA 98501 11 de julio, 6 p. m. (hora del Pacífico), Hotel Hood River, 102 Oak St, Hood River, OR 97031

Los cambios en las metas y los plazos no son definitivos hasta que se complete el período de audiencias públicas, se emita una respuesta a los comentarios, el tribunal de distrito federal acepte las enmiendas propuestas al decreto de consentimiento y las agencias implementen las revisiones propuestas.





Declaraciones de los directivos de las agencias

"Estamos alineados con un plan que establece un camino realista y alcanzable para la misión de residuos de tanques de Hanford", dijo Brian Vance, gerente del DOE de las oficinas de Protección del Río y Operaciones de Richland de Hanford. "Nuestro equipo de One Hanford está listo para ponerse manos a la obra y llevar a cabo, de manera más completa, la misión de residuos de tanques, lo que generará beneficios para el medio ambiente, la gente del estado de Washington y la nación".

"Hemos negociado un marco duradero que alinea a nuestras agencias y acelera el trabajo mientras mantenemos una limpieza sólida y segura. Es lo mínimo que se merecen las comunidades a las que todos servimos", dijo la directora de Ecología, Laura Watson. "Este acuerdo permitirá recuperar, tratar y eliminar más residuos de tanques a tiempo y nos brinda una hoja de ruta para la limpieza de Hanford hasta 2040 y más allá".

"La eliminación de los residuos de los tanques es un componente crítico de los complejos esfuerzos de limpieza en todo el sitio en Hanford", dijo el administrador de la Región 10 de la EPA, Casey Sixkiller. "Este acuerdo se basa en décadas de trabajo y colaboración entre el Departamento de Energía del estado de Washington y la EPA, y guiará la misión de residuos de tanques a medida que entra en una nueva fase de operación. Alentamos a todas las tribus afectadas, miembros de la comunidad y otras partes interesadas a participar en el proceso de revisión pública".



Geoff Tyree

Departamento de Energía de Estados Unidos Geoffrey.Tyree@rl.doe.gov



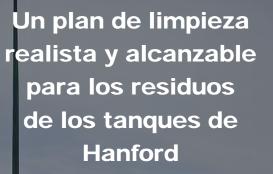
Ryan Miller

Departamento de Ecología del estado de Washington Ryan.Miller@ecy.wa.gov



Roberto Armijo

Agencia de Protección Ambiental de Estados Unidos Armijo.Roberto@epa.gov









Biden administration report admits the harm of Columbia, Snake dams on Indigenous people

BY ISABELLA BREDA The Seattle Times

The hydropower dams on the Columbia River flooded villages, disrupted economies and ways of life and continue to harm people indigenous to the Pacific Northwest, according to a first-of-its-kind federal report released Tuesday.

The report by the Department of Interior was produced as part of a major agreement last year between tribes and the United States, in which the federal government promised \$1 billion to restore wild salmon, produce clean energy and more — but ultimately stopped short of dam removal, an intensely controversial subject.

The report provides a summary of the historic, ongoing and cumulative harm to eight Columbia Basin tribes caused by 11 dams built in the Columbia and Snake rivers. It marks the first time the federal government has detailed these harms.

From the displacement of people to the silencing of rushing flows and the decline of salmon, the report evaluates how the Columbia River Basin, and the Indigenous people intrinsically tied to it, was dramatically altered in less than a century after the construction of dams. The report calls for federal agencies to recognize tribes' expertise in restoring salmon runs, and to take impactful, immediate next steps.

Today, 13 runs of Columbia Basin salmon and steelhead are listed for protection under the Endangered Species Act. The causes of salmon decline are numerous and include water withdrawals for irrigation, habitat lost to farming and development, overfishing by non-Native settlers, poor hatchery practices, climate change and fish killed by the

Warming and development continue to heighten the risk of salmon extinction, especially in the impounded Snake, which has seen toxic algae blooms and water temperatures exceeding the lethal threshold for salmon.

The Columbia Basin agreement was announced in December between the U.S. government, the states of Washington and Oregon, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Nez Perce Tribe — and a coalition of conservation, fishing and renewable energy groups represented by Earthjustice.



STEVE RINGMAN The Seattle Times

tion in the southernmost

tip of the basin before the

Owyhee Dam cut off their

historic habitat. The salm-

lions, up the Snake and its

Wild Snake River salm-

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United States entered into

"This story was repli-

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June Hogs, the big Chi-

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Columbia River coho,

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River coho and Snake

The report explained

how early mitigation ef-

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Mid-Columbia River sock-

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states.

An aerial view of Lower Granite Dam on the Snake River.

It stems from years of mediated negotiations in a decadeslong court battle over dam operations. Tribal nations helped draw up a road map for the future of the region's energy and salmon. Under the agreement, approved by a federal judge this year, tribes will help restore wild fish and lead in the construction of at least 1 to 3 gigawatts of cleanenergy production.

A stay of litigation is in place for up to five years and could continue for as long as 10.

RESTORING NATIVE FISH

The 70-page report comes alongside the creation of a new Columbia River Task Force that will oversee the efforts to fulfill the Biden administration's commitments to restore native fish populations and expand tribally sponsored clean energy. Nik Blosser, former chief of staff for Oregon Gov. Kate Brown and a former vice president at Portland General Electric, will serve as the task force's first executive director and members will include representatives from federal agencies.

"We are able to identify that there are issues surrounding the Columbia River system of operations and its devastating impacts on the environment, the salmon and what depends on them," Nez Perce Chairman Shannon Wheeler said in an interview. "There has to be that common understanding so we can look forward with clarity. Reflecting on the past is what needs to happen in order to reaffirm our commitments to one another

through the treaty." For thousands of years, Indigenous people lived in harmony with a flourishing Columbia River ecosystem. Some salmon would grow big enough to feed the orcas, others would come back and feed the people, provide nutrients for the soil, trees, critters and spawn

future generations. Tribes honor these foods at ceremonial feasts. According to Umatilla tradition, the foods are served "in the order in which these foods promised to care for the Indian people."

For many tribes, salmon is of paramount importance, the report states.

Confederated Tribes of the Colville Reservation consider salmon "sacred relatives." The Nez Perce Tribe describes this relationship as creating a covenant between the Nez Perce people and the salmon. Yakama Nation has described salmon as the Creator's second gift to the people, and in return for the gift the people are to care for the waters that sustain the salmon.

One report estimates that treaty tribes harvested 2.5 million to 5.6 million pounds of salmon annually prior to settlers'

In signing treaties with the United States in the mid-1800s, the Lower Columbia tribes reserved the right to fish in perpetuity at their usual and accustomed places, in exchange for ceding millions of acres to the federal government.

As the Columbia and Snake rivers were transformed from free flowing to a series of pools serving other purposes, the report details how the annual returns of salmon to the basin dwindled.

FOCUSED ON 11 DAMS

The report is centered on 11 dams: the four lower Columbia dams — Bonneville, The Dalles, John Day and McNary; the two upper Columbia dams -Chief Joseph and Grand Coulee; the four lower Snake dams — Ice Harbor, Lower Monumental, Little Goose, and Lower Granite; and Dworshak dam, located on the North Fork Clearwater River just upstream of a tributary to the lower Snake River.

Salmon migrated hundreds of miles to the Shoshone-Paiute people of the Duck Valley Reservahistoric habitat were centered around raising the fish in hatcheries. Despite the Bonneville Power Administration, a federal agency that markets electricity from the dams, spending billions of dollars in ratepayer funds on salmon in the basin, not a single run has recovered. The failure to meet

and steelhead from their

abundance goals contributes to salmon harvest deficits. At no point since the beginning of Columbia River Basin development have Tribal fishers been able to harvest more than a fraction of their historic share of salmon returns," the report continues.

Dams, the report describes, silenced sites that for thousands of years were "filled with the noise of rushing water and people communing, praying, fishing, trading, and celebrating.

Celilo Falls was "a place of wonder. A symphony of nature, the river was in constant motion," the report stated, quoting from book "The Si'lailo Way." "Native men climbed onto the wood scaffolds and reached into the river with long poles that had nets on the ends. Using these dip nets, they caught migrating salmon."

The reservoir behind Grand Coulee Dam, known today as Lake Roosevelt, reaches 151 miles upstream, inundating well over 100 miles of salmonhabitat on the mainstem, and dozens more on the Spokane, Kettle and San Poil rivers, and many small tributaries, along with Kettle Falls

The inundation of Kettle Falls spurred the Ceremony of Tears, a gathering of at least 1,000 peo-

ple, with representatives of multiple tribes, to mourn the impending loss of the falls in 1940. The construction of Grand Coulee also forced the relocation of many tribal homes and burial sites as it flooded portions of the Colville and Spokane reservations — lands that those tribes just decades before had reserved from their vast ancestral territo-

"And yet, Celilo and Kettle Falls are only the largest and busiest fishing sites flooded by the federal dams," the report states, acknowledging further harm.

"The flourishing of Basin Tribes is inextricably linked to the health of the Columbia River and its tributaries. The holistic nature of the impacts on the Tribes documented in this report makes clear that the government must aim for more than compliance with the ESA and other environmental statutes," the report states. "The government should support actions that achieve healthy and abundant populations of salmon, other fish, and wildlife throughout the Basin."

The National Oceanic and Atmospheric Administration in a comprehensive report on the river released in September 2022 stated that dam removal on the Lower Snake will be necessary along with other actions to boost salmon abundance.

'The Yakama Nation has always spoke for the water, fish, and cultural resources that cannot speak-up for themselves. I am hopeful that through this report, federal entities will listen to Yakama People," said Gerald Lewis, Yakama Tribal Council chairman, in a statement. "We will know that we have been heard when the hydro-system agencies start prioritizing their commitments to salmon recovery and our tribal fishers.









Fisheye view of the inside of a tank

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Autopsy done on Tri-Cities man found inside tanker trailer at fertilizer plant

BY TRI-CITY HERALD STAFF

An autopsy was done Friday afternoon on a man who died June 7 inside a tanker truck trailer at a Pasco fertilizer company.

However, a determination of the cause of death is pending toxicology test results, Franklin County **Coroner Curtis McGary** told the Herald on Friday evening.

Viktor Voloshin, 56, was cleaning the trailer with water from a hose at Two Rivers Terminal when he fell in or climbed inside.

Two Rivers Terminal is a fertilizer and chemical formulator, distributor and importer on Glade North Road near Pasco, according to the company's website.

Franklin County Sheriff's officials say foul play is not suspected.

The chemicals he was hauling gave off hydrogen sulfide and sulfur dioxide fumes, but no determination has been made about whether they played a role in Voloshin's death.

Family members told the Herald that they believe he climbed inside the tanker.

Voloshin was last seen on security cameras about 4:15 p.m. standing on a ladder spraying water on the inside of the tanker.

People noticed he had disappeared about 45 minutes later and called 911.

He was found dead inside of the tanker and his body was recovered by Franklin County Fire District 3 rescuers.

The Washington state Department of Labor and Industries has been waiting on the autopsy report before determining whether to launch a formal investigation.

A GoFundMe for Voloshin was organized by Andrew Lavrentiev, who said he leaves behind his wife of 34 years, 12 children — six of them still living at the family home and 16 grandchildren.

"He was the best father we could ever ask for," said a statement from the family included in the GoFundMe. "He was always the friendliest person in the room."

Annette Cary: 509-416-6136, @HanfordNews

Olympia council considers decriminalizing shrooms and other psychedelics. Here's what to know

BY TY VINSON tvinson@theolympian.com

The Olympia City Council will consider a proposal to decriminalize psilocybin and other fungal and plant-based medicines within city limits.

Two council members voiced hesitation during a conversation about the proposal Tuesday night, worried that abuse of psychoactive drugs will rise in the state's capital if approved.

The referral was drafted by council member Clark Gilman and brought to the City Council on June 18. It was backed by council members Dani Madrone

and Robert Vanderpool.
Gilman said it's time the city of Olympia joins other cities across the country, and the state of Oregon, in decriminalizing entheogenic substances, including psilocybin and other

fungal and plant-based medicines. He said they've been shown to assist in the treatment of post-traumatic stress, anxiety and depression.

"We had in particular advocates coming from the veterans community talking about the impacts of PTSD and the rates of suicide in their community, and what they've experienced with the efficacy of these sorts of treatments," Gilman said.

Entheogens refer to any living, fresh, dried or processed plant or fungal material that may contain psychoactive compounds such as indolamines, tryptamines and phenethylamines. They include teas, powders, psilocybin mushrooms, ayahuasca tea, mescaline and iboga.

If passed, arrests and prosecutions of people engaging in activities with these substances would become a low-level priority for the Olympia Police Department. Uses of the substances listed include for spiritual and religious reasons, healing and personal growth practices.

Gilman's proposal states no city funds or resources should be used to investigate, prosecute or arrest individuals solely for entheogenic plants and fungi.

The council stated its unanimous support for the full decriminalization of use of these psychoactive substances at the state and federal level.

It also referred Gilman's proposal to staff and the police department for review. Gilman said the plan is to have the Chief of Police report to the council on current enforcement of nature-based psychedelics.

Mayor Pro Tem Yên Huỳnh said she had a lot of questions when she first heard about the proposal. She wondered if enforcement is an issue in Olympia now and what the perception would be of such a move by the City. But she recognizes that it's part of a larger effort.

"There is an opportunity for me to check my own biases with this one, because I will tell you I did not like it," Huỳnh said. "I thought, 'What? Mushrooms? What are we doing with that? Why now? We have enough things on our plate."

Council member Lisa
Parshley said the majority
of medicine comes from
natural sources. She said
St. John's wort has been
used as an antidepressant.
A cancer drug was made
out of Pacific yew bark.

But while supporting alternative medicines, she said there's always the potential for abuse and self medication. She thinks people should still be charged with a low-level misdemeanor.

"I do worry — and I'm of the age, eight Grateful Dead concerts — that I do know that it's an extreme potential," Parshley said. "I'd hate to tie the hands of our police department."

She also asked that the Social Justice and Equity Commission review the proposal, specifically how treatments involving psychedelic drugs have affected community members who are Black, Indigenous and other people of

Mayor Dontae Payne

said he supports moving the proposal forward for review, but he doesn't want the city to get too far ahead of other jurisdictions — or science.

Payne said in 2022 the state Legislature directed the Health Care Authority to create a work group whose purpose was studying making psilocybin and other psychoactive substance-therapy services available in Washington.

Gilman said as far as he knows, those groups are still in the research phase.

"This one has taken me some time to think about, and obviously I think about the people who spoke against the legalization of marijuana and how wrong those people were," Payne said. "We're in a place of, we just don't know, and I want to acknowledge that."

Ty Vinson: 360-357-0201, ty_vinson_

FROM PAGE 1A

BEAR

wasn't considered habituated in any way."

WDFW recommends following these tips to keep from attracting bears:

- Never intentionally feed bears or other backyard wildlife.
- Always keep garbage cans in a garage or a sturdy building until
- collection day.
- Take down seed, suet, and hummingbird feeders until late fall.
- Clean up fallen fruit or other possible attractants around your home.
- Remove pet food from wildlife-accessible areas and feed your pets inside.
- Thoroughly clean barbecue grills after each use and store them in a secure building.
- Cage and electric fence your domestic fowl and
- livestock pens.
- Avoid storing food in your car.
- If you see a bear on your property, clap your hands loudly and make your presence known.

To report other nonemergency predatory wildlife incidents like this one to WDFW, call 877-933-9847, text "tip" to 847411 or submit a report online.

Gabrielle Feliciano: 360-357-0203











Fisheye view of the inside of a tank

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Artists Denise Jiminez, Jan Byrkit, Abigail Kaehler, and Barbara Kilkenny make up the "Freedom Sisters Roadshow" at The Dalles Art Center, featuring upcycled furniture.

Contributed photo

Sponsored Content

Discover 'Freedom Sisters Roadshow' at The Dalles Art Center

THE DALLES — Step into a world of innovation and substainability at The Dalles Art Center with the "Freedom Sisters Roadshow," an extraordinary exhibit of artistic upcycled furniture running from the month of June through

This unique showcase transforms discarded items into stunning, functional art, highlighting the creative potential in what many see as waste.

The "Freedom Sisters Roadshow" is a group of four women who bonded during COVID with vision of upcycling forgotten, discarded and unwanted furniture. The artists are Denise Jiminez, Jan Byrkit, Abigail Kaehler, and Barbara Kilkenny.

Visitors will experience a wide array of designs with many techniques using chalk paints, hand crafted molds, stencils, stamping, sanding, dry brushing, and waxing. These furniture pieces have been brought back to life and created into bold statements, all telling stories of their transformation.

Located in the heart of The Dalles, The Dalles

Art Center is dedicated to showcasing contemporary art and innovative design. The "Freedom Sisters Roadshow" not only underscores the aesthetic and functional value of upcycled furniture but also emphasizes the importance of sustainable practices in today's world.

Don't miss this opportunity to witness the artistic functional upcycled furniture gallery showing. The Dalles Art Center is open Thursday through Sunday from 11 a.m.to 5 p.m. at 220 E. Fourth St., The Dalles.

Council seat to be filled

■ By Nan Noteboom For Columbia Gorge News

 ${\it CASCADE\ LOCKS-An}$ incomplete Cascade Locks City Council met June 10 after the resignation of Councilor Tamara Farrell. Filling the empty council slot was on the evening's agenda.

Prior to the regular meeting, the council held a work session to discuss EMS fees and a public safety levy. City Administrator Jordon Bennett told the council that the fire and EMS budget were being heavily subsidized by the city's general fund, an unsustainable and inadequate funding situation. Bennett and Fire Chief John Logan proposed re-newing the EMS fee levy this November, and pursuing an additional operational levy at a later date to be determined by council.

The regular meeting opened with an impassioned plea by Councilor Eric Keller asking for the city to recognize Juneteenth as a holiday. Keller believes that City Hall should not be open on the federally-recognized holiday. Bennett pointed out that a resolution must be prepared; Keller asked for it to be put into motion. The council then moved

to approve or deny the liquor license for Thunder Island Brewing Co. The license was approved with only Counselor Butch Miller voting to deny. Next on the agenda was to adopt the 2024-25 budget, which had been recommended by the budget committee. At the committee's recommendation, the \$16.5 million budget yet because Hood River

passed with only Miller voting no.

With Farrell stepping down, the council next addressed filling the empty seat. With the November

election months away, the seat would be appointed. While the majority of the council agreed that the seat should be filled as soon as possible, Miller

objected to the fast-tracking of the process, saying the process was happening "way too fast. This council has a habit of doing things way too fast and making mistakes."

Keller pointed

out that folks who

follow the coun-

Butch Miller Cascade Locks City Council

cil knew about the empty seat in May, and Councilor Pete Happy agreed that those who might be interested are "already plugged into what's happening on the council." Ultimately they decided to advertise the opening immediately via social media; applications with a letter of interest are due by Wednesday, June 19 at 6 p.m.

Council then discussed how much to increase utility rates. The budget, adopted earlier in the meeting, requires an increase of 5-7% as recommended by Bennett. Council chose to increase utility rates by 6%.

Project updates followed. The city has received a FEMA grant to fix the roof, add solar panels and as generator, but cannot access the funds

County's Hazard Mitigation Plan has lapsed. Bennett reported that the wastewater plant improvement project was completed and ready to

close out. In council comments, Miller opened with a suggestion that Overlook Park be renamed Captain Tom

Park, referring to longtime

captain of the Sternwheeler Tom Cramblett. He then alluded to a recent "incident" in which a person "high on mushrooms" was confronted by police and told the officers who his source was, but the event led to "no arrest. Why not?" Miller argued that

it qualifies as reasonable cause for a search. He then questioned why a local business owner was allowed to convert an artist's studio into a real estate office without a Conditional Use Permit.

Councilor Denise Emmerling-Baker's comments focused on recognition of May as Asian Pacific-Islander Month and June as Pride Month; she recognized those folks in Cascade Locks who helped bring diversity to the community. Keller wrapped up the commentary with a reminder to the council that they had 373 days left to make Juneteenth a city holiday.

The Cascade Locks City Council meets on the second and fourth Monday of each month at 7 p.m.

Wasco Co. district attorney results certified

Davis wins by 60

■ Staff report $Columbia\ Gorge\ News$

WASCO CO. — Wasco County Clerk Lisa Gambee reported June 12 that the county's May 21 Primary

Election had been certified.

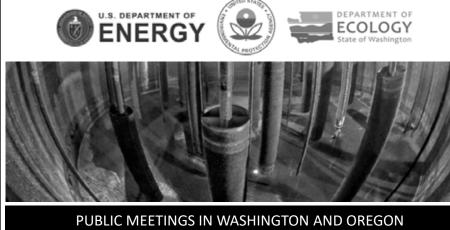
The Wasco County District Attorney race was close, with Kara K. Davis garnering 3,166 votes (50.39%) to Travis J. Marston's 3,106 (49.43%). Marston would have had to come within 13 votes to trigger an automatic recount.

In the Wasco County Commissioner Position 2 contest, Jeff Justesen received 1,878 votes (29.73%) and Brian Lauterbach 1,678 (26.56%). The two will receive Certificates of Nomination, and their names will appear in the Nov. 7 General Election ballot.





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From: Washington Department of Ecology

To: <u>McFadden, Daina (ECY)</u>

Subject: Public Involvement on the Future of Tank Waste Cleanup at the Hanford Site / Participación pública en el futuro de la

limpieza de desechos de tanques en Hanford Site

Date: Thursday, May 30, 2024 8:22:41 AM







Public Involvement on the Future of Tank Waste Cleanup at the Hanford Site / Participación pública en el futuro de la limpieza de desechos de tanques en Hanford Site

This is a message from the Tri-Party Agreement agencies

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A 60-day public comment period will run from May 30 through Aug. 2, with three regional meetings in Washington and Oregon July 9–11. All meetings will be hybrid, so you may participate in person or virtually. Tri-Party Agreement leaders will listen, answer your questions and consider your input. All public comments must be submitted in writing.

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For more information, please see the fact sheet (<u>English</u> or <u>Spanish</u>) or visit the <u>Hanford</u> <u>events calendar</u> or <u>Ecology website</u>. Presentations for the public meetings will be posted prior

to each meeting and recordings will be added after.

Please submit any comments by Aug. 2, <u>electronically</u> (preferred) or mail to:

Washington State Department of Ecology Attn: Daina McFadden 3100 Port of Benton Blvd. Richland, WA 99354

Questions? Contact DOE's Jennifer Colborn at <u>Jennifer.Colborn@rl.doe.gov</u>, EPA's Beth Clemons at <u>Clemons.Beth@epa.gov</u> or Ecology's Ryan Miller at <u>Ryan.Miller@ecy.wa.gov</u>.

Participación pública en el futuro de la limpieza de desechos de tanques en Hanford Site

Este es un mensaje de las agencias del Acuerdo Tripartito

El Departamento de Energía de Estados Unidos (U.S. Department of Energy, USDOE), el Departamento de Ecología (Ecología) del estado de Washington y la Agencia de Protección Ambiental (Environmental Protection Agency, EPA) de Estados Unidos anunciaron, recientemente, un acuerdo histórico que establece un camino realista y alcanzable para limpiar millones de galones de desechos químicos y radiactivos de grandes tanques subterráneos en Hanford Site.

Tras las negociaciones mediadas que comenzaron en 2020, también conocidas como Negociaciones Holísticas, las agencias firmaron un <u>acuerdo de conciliación con plazos de limpieza nuevos y revisados propuestos</u> en el Acuerdo Tripartito y el decreto de consentimiento de *Washington v. Energy*. Los cambios propuestos mantienen un compromiso compartido con la limpieza segura y eficaz de los desechos de los tanques.

Se llevará a cabo un período de audiencias públicas de 60 días desde el 30 de mayo hasta el 2 de agosto, con tres reuniones regionales en Washington y Oregón del 9 al 11 de julio. Todas las reuniones serán híbridas, por lo que podrá participar de forma presencial o virtual. Los líderes del Acuerdo Tripartito escucharán, responderán sus preguntas y considerarán sus aportes. Todos los comentarios del público deben presentarse por escrito.

Las tres reuniones públicas regionales serán las siguientes:

- **9 de julio**, 6 p. m. (hora del Pacífico), Biblioteca Pública de Richland, 955 Northgate Drive, Richland, WA 99352. Puede participar virtualmente usando <u>Microsoft Teams</u>.
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97031. Puede participar virtualmente usando Microsoft Teams.

Para obtener más información, consulte la hoja informativa (en inglés o en español) o visite el calendario de eventos de Hanford o el sitio web de Ecología. Las presentaciones para las reuniones públicas se publicarán antes de cada reunión, y las grabaciones se agregarán después.

Envíe cualquier comentario antes del 2 de agosto <u>electrónicamente</u> (de ser posible) o por correo a:

Departamento de Ecología del estado de Washington A la atención de: Daina McFadden 3100 Port of Benton Blvd. Richland, WA 99354

¿Preguntas? Comuníquese con Jennifer Colborn, del DOE, escribiendo a Jennifer.Colborn@rl.doe.gov; con Beth Clemons, de la EPA, escribiendo a Clemons.Beth@epa.gov, o con Ryan Miller, de Ecología, escribiendo a Ryan.Miller@ecy.wa.gov.

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From: Washington Department of Ecology

To: <u>McFadden, Daina (ECY)</u>

Subject: Comment period extension - Public Involvement on the Future of Tank Waste Cleanup at the Hanford Site / Extensión

del período de comentarios - Participación pública en el futuro de la limpieza de desechos de tanques en Hanford Site

Date: Monday, June 24, 2024 9:33:17 AM







Public Involvement on the Future of Tank Waste Cleanup at the Hanford Site / Participación pública en el futuro de la limpieza de desechos de tanques en Hanford Site

This is a message from the Tri-Party Agreement agencies

The U.S. Department of Energy (USDOE), Washington State Department of Ecology (Ecology), and U.S. Environmental Protection Agency (EPA) recently announced a landmark agreement that lays out a realistic and achievable course for cleaning up millions of gallons of radioactive and chemical waste from large, underground tanks at the Hanford Site.

Following mediated negotiations that began in 2020, also known as Holistic Negotiations, the agencies have signed a <u>settlement agreement with proposed new and revised cleanup</u> <u>deadlines</u> in the Tri-Party Agreement and *Washington v. Energy* consent decree. The proposed changes uphold a shared commitment to the safe and effective cleanup of tank waste.

The agencies received requests to extend the 60-day public comment period on the proposed changes. The agencies considered those requests, as well as the additional 30 days the proposed changes were available to the public before the comment period began on May 30. Having considered these and other factors, the agencies are extending the comment period by 30 days.

A 60 90-day public comment period will run from May 30 through Aug. 2, Sept. 1, with three regional meetings in Washington and Oregon July 9–11. All meetings will be hybrid, so you may participate in person or virtually. Tri-Party Agreement leaders will listen, answer your questions and consider your input. All public comments must be submitted in writing.

The three regional public meetings will be as follows:

- **July 9**, 6 m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352. You may participate virtually using <u>Microsoft Teams</u>.
- July 10, 6 p.m. PT, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501. You

may participate virtually using Microsoft Teams.

• **July 11**, 6 p.m. PT, Hood River Hotel, 102 Oak St, Hood River, OR 97031. You may participate virtually using <u>Microsoft Teams</u>.

Doors will open at each meeting venue at 5:30 p.m.

For more information, please see the fact sheet (<u>English</u> or <u>Spanish</u>) or visit the <u>Hanford</u> <u>events calendar</u> or <u>Ecology website</u>. Presentations for the public meetings will be posted prior to each meeting and recordings will be added after.

Please submit any comments by Aug. 2 Sept 1, electronically (preferred) or mail to:

Washington State Department of Ecology

Attn: Daina McFadden 3100 Port of Benton Blvd. Richland. WA 99354

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Tras las negociaciones mediadas que comenzaron en 2020, también conocidas como Negociaciones Holísticas, las agencias firmaron un <u>acuerdo de conciliación con plazos de limpieza nuevos y revisados propuestos</u> en el Acuerdo Tripartito y el decreto de consentimiento de *Washington v. Energy*. Los cambios propuestos mantienen un compromiso compartido con la limpieza segura y eficaz de los desechos de los tanques.

Las agencias recibieron solicitudes para extender un período de comentarios públicos de 60 días sobre los cambios propuestos. Las agencias consideraron esas solicitudes, así como los 30 días adicionales que los cambios propuestos estuvieron disponibles para el público antes de que comenzara el período de comentarios el 30 de mayo. Habiendo considerado estos y otros factores, las agencias están ampliando el período de comentarios por 30 días.

Se llevará a cabo un período de audiencias públicas de 60 90 días desde el 30 de mayo hasta el 2 de agosto 1 de septiembre, con tres reuniones regionales en Washington y Oregón del 9 al 11 de julio. Todas las reuniones serán híbridas, por lo que podrá participar de forma presencial o virtual. Los líderes del Acuerdo Tripartito escucharán, responderán sus preguntas y considerarán sus aportes. Todos los comentarios del público deben presentarse por escrito.

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- **11 de julio**, 6 p. m. (hora del Pacífico), Hotel Hood River, 102 Oak St, Hood River, OR 97031. Puede participar virtualmente usando <u>Microsoft Teams</u>.

En cada junta las puertas se abrirán a las 5:30 p.m.

Para obtener más información, consulte la hoja informativa (<u>en inglés</u> o <u>en español</u>) o visite <u>el calendario de eventos de Hanford</u> o <u>el sitio web de Ecología</u>. Las presentaciones para las reuniones públicas se publicarán antes de cada reunión, y las grabaciones se agregarán después.

Envíe cualquier comentario antes del 2 de agosto **1 de septiembre** <u>electrónicamente</u> (de ser posible) o por correo a:

Departamento de Ecología del estado de Washington A la atención de: Daina McFadden 3100 Port of Benton Blvd. Richland, WA 99354

¿Preguntas? Comuníquese con Jennifer Colborn, del DOE, escribiendo a <u>Jennifer.Colborn@rl.doe.gov</u>; con Beth Clemons, de la EPA, escribiendo a <u>Clemons.Beth@epa.gov</u>, o con Ryan Miller, de Ecología, escribiendo a <u>Ryan.Miller@ecy.wa.gov</u>.

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Proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank

Proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste

May 30 - Aug. 2, 2024

and U.S. Environmental Protection Agency (EPA) have signed a settlement agreement and are proposing new and revised cleanup deadlines in the Tri-Party Agreement (TPA) and Washington v. Energy consent decree. This followed mediated negotiations that began in 2020, also known as Holistic Negotiations.

The U.S. Department of Energy (USDOE), Washington State Department of Ecology (Ecology),

The agencies are holding a 60-day public comment period on the proposed changes to the

Tri-Party Agreement and consent decree. Highlights of proposed changes

Maintaining existing time frames for starting treatment of both low-activity and highlevel waste by immobilizing it in glass via vitrification.

- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program.
- Building a waste transfer vault and second effluent management facility to support treating high-level waste.
- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040, including grouting the low-activity portion of the waste for offsite disposal.
- support tank waste retrievals. Evaluating and developing new technologies for retrieving waste from tanks.

Designing and constructing 1-million gallons of multi-purpose storage capacity to

Cambios propuestos al Acuerdo Tripartito y decreto

de consentimiento sobre desechos de tanques del **Hanford Site** 30 de mayo – 2 de agosto de 2024

El Departamento de Energía de EE. UU. (USDOE), el Departamento de Ecología del Estado de

Washington (Ecología) y la Agencia de Protección Ambiental de EE. UU. (EPA) han firmado un

acuerdo de conciliación y proponen nuevas y revisadas fechas límite de limpieza en el Acuerdo Tripartito (TPA) y Washington. v. Decreto de consentimiento energético. A partir de 2020 se continuó con negociaciones mediadas, también conocidas como Negociaciones Holísticas.

cambios propuestos al Acuerdo Tripartito y al decreto de consentimiento. Aspectos destacados de los cambios propuestos

Las agencias están celebrando un período de comentarios públicos de 60 días sobre los

• Mantener los plazos existentes para iniciar el tratamiento de residuos tanto de baja

vitrificación. • Utilizar un enfoque de alimentación directa para inmovilizar residuos de alto nivel en

- vidrio, similar al Programa de alimentación directa de residuos de baja actividad. • Construcción de una bóveda de transferencia de residuos y una segunda instalación para el manejo de efluentes para apoyar el tratamiento de residuos de alta actividad.
- Recuperar desechos de 22 tanques en el área 200 Oeste de Hanford para 2040, incluida la aplicación de lechada a la porción de baja actividad de los desechos para su eliminación fuera del sitio.
- multipropósito para respaldar la recuperación de desechos de tanques. Evaluación y desarrollo de nuevas tecnologías para la recuperación de residuos de los tanques.

Diseño y construcción de 1 millón de galones de capacidad de almacenamiento

The agencies are holding three hybrid (in-person and virtual) public meetings. You may

Puede participar virtualmente utilizando Microsoft Teams.

Public meetings / Reuniones públicas

participate virtually using Microsoft Teams.

6 p.m. PT, Richland Public Library, 955 Northgate Drive, Richland, WA 99352. 6 p. m. hora del Pacífico, Biblioteca Pública de Richland, 955 Northgate Drive, Richland, WA

Or call in (audio only) / O llame (solo audio) +1 (509) 600-2010 United States, Spokane / Estados Unidos, Spokane

Join on your computer or mobile app 2 / Únase desde su computadora o aplicación

+1 (833) 633-0875 United States (Toll-free) / Estados Unidos (Llamada gratuita)

<u>móvil</u> €

6 p.m. hora del Pacífico, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

6 p.m. PT, Hood River Hotel, 102 Oak St, Hood River, OR 97031

Oylmpia, WA - July 10 / 10 de julio July 10, 6 p.m. PT, DoubleTree Hotel, 415 Capitol Way North, Olympia, WA 98501.

+1 (833) 633-0875 United States (Toll-free) / Estados Unidos (Llamada gratuita) Phone Conference / Conferencia telefónica 122 171 560#

Hood River, OR - July 11 / 11 de julio

6 p. m. hora del Pacífico, Hood River Hotel, 102 Oak St, Hood River, OR 97031.

+1 (509) 600-2010 United States, Spokane / Estados Unidos, Spokane

Or call in (audio only) / O llame (solo audio) +1 (509) 600-2010 United States, Spokane / Estados Unidos, Spokane

+1 (833) 633-0875 United States (Toll-free) / Estados Unidos (Llamada gratuita)

Presentations for the public meetings will be posted prior to each meeting and recordings will be added after.

- Reviewing the proposed changes / Revisión de los cambios propuestos

Las agencias de la TPA lo invitan a revisar y comentar sobre estos cambios propuestos. Electronic submission (preferred):

Phone Conference / Conferencia telefónica 595 516 379#

Proposed changes to the TPA and consent decree on Hanford Site tank waste

Documents / Documentos

<u>Settlement Agreement, proposed changes to the consent decree, and proposed changes to </u>

Focus sheet - English @ / En Español @

Questions? / ¿Preguntas?

Ecology's Ryan Miller

the TPA &

actividad como de alta actividad mediante su inmovilización en vidrio mediante

Las agencias están celebrando tres reuniones públicas híbridas (presenciales y virtuales). Richland, WA - July 9 / 9 de julio

99352.

Phone Conference / Conferencia telefónica 982 736 013#

Join on your computer or mobile app ♥ / Únase desde su computadora o aplicación móvil 🗈 Or call in (audio only) / O llame (solo audio)

Join on your computer or mobile app ₾ / Únase desde su computadora o aplicación móvil @

Las presentaciones para las reuniones públicas se publicarán antes de cada reunión y las grabaciones se agregarán después.

The TPA agencies invite you to review and comment on these proposed changes.

Envío electrónico (preferido): Cambios propuestos al Acuerdo Tripartito y decreto de consentimiento sobre desechos de

tanques del Hanford Site &

A Realistic and Achievable Cleanup Plan for Tank Waste at Hanford 😉

USDOE's Jennifer Colborn **EPA's Beth Clemons**



Ecology - Hanford @ecyHanford · 35m

Today, the Tri-Party Agreement agencies began a 60-day public comment period involving the future of tank waste cleanup at the Hanford Site. In July, the agencies will host hybrid public meetings. For more info, visit: ecology.wa.gov/NWP-comment-pe...













The Tri-Party Agreement agencies are holding public meetings to discuss revised plans for cleaning up millions of gallons of radioactive and chemical waste from large, underground tanks at the Hanford Site in Washington State,

Join us for hybrid public meetings and get involved! July 9, 2024, 6 p.m. - Richland, WA. July 10, 2024, 6 p.m. - Olympia, WA, or

July 11, 2024, 6 p.m. - Hood River, OR

Doors open at 5:30 p.m.

Get the details on our website: ecology.wa.gov/NWP-comment-periods.





The Tri-Party Agreement agencies are holding public meetings to discuss revised plans for cleaning up millions of gallons of radioactive and chemical waste from large, underground tanks at the Hanford Site in Washington State.

X

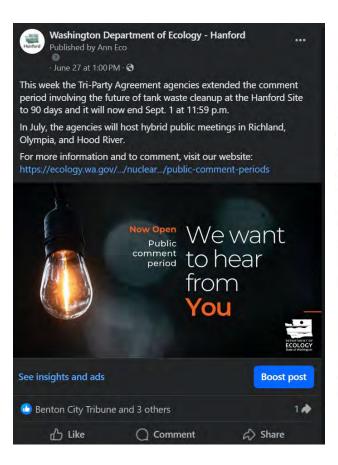
Join us for hybrid public meetings and get involved!

July 9, 2024, 6 p.m. - Richland, WA July 10, 2024, 6 p.m. - Olympia, WA, or July 11, 2024, 6 p.m. - Hood River, OR

Doors open at 5:30 p.m.

Get the details on our website: ecology.wa.gov/NWP-comment-periods.







This week the Tri-Party Agreement agencies extended the comment period involving the future of tank waste cleanup at the Hanford Site to 90 days and it will now end Sept. 1 at 11:59 p.m. In July, the agencies will host hybrid public meetings in Richland, Olympia, and Hood River.



1:00 PM · 6/27/24 From Earth · 81 Views



Appendix B: Public comments received

I-1: Paul Johnson

Comment I-1-1

Has a cost analysis been done to compare the cost of disposal of the grouted low-activity waste outside the contiguous borders of the Hanford Nuclear Reservation to the cost of disposal of the waste within those borders? If this analysis has not been done, it must be done to ensure effective use of taxpayer dollars. I expect that the transportation costs for the grouted waste form would be substantial. If disposal of the grouted waste form can be performed in a RCRA-compliant manner at an offsite facility, then that same RCRA-compliant disposal could be done at an onsite facility, such as the Integrated Disposal Facility or an expansion of that facility.

I-2: John Lovelace

Comment I-2-1

Regarding M-062-65. Why can grout not be stored on the Hanford site? I'm unaware of any regulation that would prohibit storing grouted low level waste at Hanford where the infrastructure and workforce are already present. Has there been any cost benefit analysis done for shipping grouted wasted offsite vs grouting and storing it here? If the Savanah River Site can safety store millions of gallons of low level grouted salt waste why cant we? Also you have spent billions to attempt to vitrify low level waste, which isn't even necessary. You will have to grout the high level waste but you should have focused on that the whole time. I support grouting the low level waste in the most cost effective way possible. Also what is the cost difference between grouting and vitrifying the low level waste? It seems like grouting would be much cheaper but you have to committed to vitrification because.... That is what I would like an answer too.

I-3: Anonymous

Comment I-3-1

I am deeply concerned about USDOE's oversight and follow through as cleanup drags on. They are not ensuring facility reps are properly trained and ACTUALLY ENTERING THE FIELD.

WA ECY should request an accounting of the number of USDOE facility reps in the Tank Farms and how often they are supervising the work of contractors.

Ecology ALSO needs to have tank waste oversight and regular visits to the tank farms to ensure the promised work is being done correctly and with safety guidelines in mind. The contractors have a history of short cuts to meet deadlines and bonuses. That has the potential to put workers and the environment in danger.

Also, Ecology should hire more staff with proven design build experience (of any sort, Waste Water Treatment, bridges, packing plants, server warehouses... something tangible!). Please don't rely solely on engineers-on-paper.

I-4: David Manglano

Comment I-4-1

There is no true disposal of a radionuclide that is not decay, fission, or fusion of the radionuclide to a nonradioactive isotope or complete antimatter annihilation of the radionuclide. The plan at the Hanford Site does not plainly include the use of fast neutron reactors or another technology to make what is currently radioactive something that is not radioactive. The ongoing risk to human life and ecology is therefore not properly mitigated. The use of natural decay for the disposal of the Hanford Site nuclides is not an appropriate response to the knowledgeable and intentional production of concentrated industrial radionuclides. We cannot guarantee that vitrified waste will not be dispersed irreversibly by a volcano or an earthquake. Volcanic distribution of vitrified material is a possible outcome of unknown consequence. We cannot guarantee that the inhabitants of the future will be capable of understanding warnings about vitrified waste, nor can we guarantee that they will be capable of properly disposing of vitrified waste. We cannot guarantee that silica will be available for vitrification disposal at present. Silica is not considered renewable, its nuclei will be contaminated by the vitrification process, and humanity utilizes silica for things such as windows and the purification of drinking water. Silica should not be relied upon as a vehicle for disposal of radioactive substances. The reasonable, scientific process for disposal of the Hanford site waste is a controlled reaction to a non-radioactive substance. Scientific literature about the nuclear waste fuel loop is plain about the realities of the waste, of non-reprocessed uranium fuel, and so on. The harm done to the public by vitrifying waste which could have been reacted into non-radioactive substances is not reversible. The burden of the pseudoscience of "nuclear waste disposal" that does not reduce the amount of radioactive material by a means other than natural decay must be lifted from the American public. Despite decades of research indicating that nuclear fission fuels can be fully utilized by reprocessing reactors and fast neutron reactors, not only has the United States failed to fully react and dispose of its nuclear waste, but I further recall that as a boy in a public school the false-disposal method of vitrification was proposed to me by a person presenting a public-school assembly during which the speaker also challenged the veracity of the Warren Commission report to a room of children. I believe it is immoral and unconscionable to support the claims that waste vitrification is a form of nuclear waste disposal. The United States deserves a safe and scientific resolution to its scientific processes including but not limited to nuclear research. The United States should reasonably pursue legal action against any party claiming that there is a disposal of radionuclides which is not a complete decay, fission, or fusion into non-radioactive particles or a complete antimatter annihilation of the radionuclide. The state of Washington deserves a true, non-radioactive outcome to the wastes at Hanford State, and the other 49 US States deserve that outcome to the betterment of Washington and their union with it.

I-5: Anonymous

Comment I-5-1

The public is not allowed to comment on the proposed settlement agreement, but rather is limited to commenting on how the agreement is implemented in the TPA. As a result, no fundamental changes to the agreement appear possible. The holistic negotiations took years,

were completely obscured from public view, and were completely void of public perspective. The sad part is that these milestones have already been missed repeatedly. Milestones have been missed far more often than they have been met for WTP, so we should not expect anything different from the new TPA package. Commenting on due dates therefore is a waste of time.

However, the order in which milestones are scheduled could still be important, to avoid fundamentally bad decisions.

Comment I-5-2

For example, DOE flowsheets have been creating more and more secondary effluent, with plans to transfer it and its risk to Perma-Fix Northwest (PFNW) inside the Richland City Limits, just 1 O feet above the water table, and upstream of groundwater beneath many homes and businesses, including mine. My greatest concern is in Attachment "O". Attachment O changes the due date for completing the work to manage secondary waste (tank waste treatment facility liquid effluents) from WTP. The original date would have been before the startup of the integrated LAW/HLW facilities. The new due date is not until the completion of commissioning of the HLW facility (at present, 12/31/2033). The year 2033 is long after the DFLAW facility has started. I think this is way too late! Effluent facility capabilities should be available ONSITE, now, in advance of DFLAW startup. Offsite is an unacceptable risk for both public exposures and Hanford Site operability bottleneck prevention. Startup without any knowledge of future combined effluent volumes is a recipe for continued fraud.

Comment I-5-3

Ecology can help by asking DOE for an annual integrated effluent flow sheet. ETF was originally supposed to service all WTP needs on a capacity of 150 gallons a minute (see the history of Interface Control Documents). How much effluent per minute will be produced now among all the new, planned, and existing effluent facilities? How much of that effluent plus other wastes (government and non- 1 government) will be sent to PFNW? How much will be vitrified in the "Geomelt" process for which the Benton Clean Air Agency is assisting?

Comment I-5-4

Dear Ms. McFadden: RECEIVED JUN 2 4 2024

Department of Ecology NWP - Richland This letter provides comments on the Proposed Hanford Tri-Party Agreement (TPA) changes inspired by the recent Holistic Negotiations Settlement Agreement. The comment period ends August 2, 2024. I appreciate having the opportunity to write to you.

1. The public is not allowed to comment on the proposed settlement agreement, but rather is limited to commenting on how the agreement is implemented in the TPA. As a result, no fundamental changes to the agreement appear possible. The holistic negotiations took years, were completely obscured from public view, and were completely void of public perspective. The sad part is that these milestones have already been missed repeatedly. Milestones have been missed far more often than they have been met for WTP, so we should not expect anything different from the new TPA package. Commenting on due dates therefore is a waste

of time. However, the order in which milestones are scheduled could still be important, to avoid fundamentally bad decisions.

- 2. For example, DOE flowsheets have been creating more and more secondary effluent, with plans to transfer it and its risk to Perma-Fix Northwest (PFNW) inside the Richland City Limits, just 1 O feet above the water table, and upstream of groundwater beneath many homes and businesses, including mine. My greatest concern is in Attachment "O". Attachment O changes the due date for completing the work to manage secondary waste (tank waste treatment facility liquid effluents) from WTP. The original date would have been before the startup of the integrated LAW/HLW facilities. The new due date is not until the completion of commissioning of the HLW facility (at present, 12/31/2033). The year 2033 is long after the DFLAW facility has started. I think this is way too late! Effluent facility capabilities should be available ONSITE, now, in advance of DFLAW startup. Offsite is an unacceptable risk for both public exposures and Hanford Site operability bottleneck prevention. Startup without any knowledge of future combined effluent volumes is a recipe for continued fraud.
- 3. Ecology can help by asking DOE for an annual integrated effluent flow sheet. ETF was originally supposed to service all WTP needs on a capacity of 150 gallons a minute (see the history of Interface Control Documents). How much effluent per minute will be produced now among all the new, planned, and existing effluent facilities? How much of that effluent plus other wastes (government and non- 1 government) will be sent to PFNW? How much will be vitrified in the "Geomelt" process for which the Benton Clean Air Agency is assisting?
- 4. It would also help a lot if Ecology can explain the timing and permitting plans for Perma-Fix Northwest, considering the "all roads lead to Perma-Fix" approach adopted by DOE in flow sheets, plans, and in the HLW AOA. What is the schedule for updating the expired PFNW EIS document in support of renewal of the PFNW OW Permit? When can the public comment on the consequences of the settlement agreement to Richland citizens in the SEPA draft? Why has the PFNW SEPA/EIS analysis been delayed 5 years from the planned 2019 public review?
- 5. Another exam..ole of an out-of-logical-order Milestone is M-062-21, which formerly required, per an integrated flow sheet, proof that WTP with supplemental treatment has the capacity to treat 100% of the waste. This proof was formerly required annually. The back-room negotiations now show that the capacity "proof" will not be assembled until three years after 18 months after the hot start of the HLW facility. That's 4 ½ years. How silly. WTP was supposed to be designed to treat ALL HLW tank waste and to pretreat ALL LAW waste feed. That's what the public and Congress were sold. Now we are to wait for years to find out that the capacity isn't there. This is just more bait and switch. The plant does not meet its contractual definition, so DOE simply re-writes everything to avoid requiring a refund . Richland should not accept the dumping of effluent risks inside the city limits arising from DOE's out-of-control plant designs.
- 6. Of note is that PFNW is very excited about receiving of lots of new waste from DOE. The most recent PFNW Quarterly Earnings Call transcript* (May 13, 2024) claims a current PFNW capacity to grout waste of 300,000 gallons per year. PFNW further expects to expand that capacity by a factor of 10 to 3 million gallons per year-for grouting low activity tank waste for supplemental treatment (apparently not including effluents and brines). This is three million unpermitted gallons of waste. PFNW also claims to be the apparent sole source to grout up to 8,000 cubic

meters of DFLAW effluent per year. That's an additional 2.1 million gallons per year. How has this been analyzed? Will the City of Richland have a voice on this risk to our water table? DO E's System Plan Revision 10 (ORP-11242, Rev 10) assumes tank supernatant waste is sent to PFNW in Tank Truck Volumes to be grouted. The recent LOR Report DOE/RL-2024-15, Rev 0, calls for multiple shipments of remote handled TRU Mixed waste and Contact Handled TRU Mixed waste to Perma-Fix. The transfer of risk to the City of Richland is more than unreasonable. DOE should treat all its waste on-site.

* Perma-Fix Environmental Services, Inc. (NASDAQ:PESI) Q1 2024 Earnings Call Transcript, https://finance.yahoo.co.ml.news/perm.a-fix-environmental-services-inc-151533294. html.

I-6: Ann Dorsey

Comment I-6-1

Washington Ecology, USDOE and EPA should hold public meetings in Seattle, Portland and Spokane.

- o The agencies had 4 years to negotiate and had an "agreement in principle" for a year. That was ample time to plan for meaningful public review and comment which should include the region's largest cities.
- o A meeting in Spokane is particularly important because the agreement could result in thousands of truck shipments of liquid radioactive waste going through the city without any risk, impact or alternatives disclosed in an EIS.
- The agencies need to honor the public's right to have an environmental impact statement (EIS) disclosing impacts and alternatives. This is especially important since there is a great likelihood of many more
- tanks leaking under the agreement timelines and because there will be liquid radioactive waste transported through Spokane. An EIS should be available during the comment period. No agreement should be signed without understanding the impacts and alternatives or mitigation available.
- Ecology needs to require USDOE to remove liquid wastes from the leaking tanks starting next year. Years of more studies are not needed before meeting the legal requirements to remove as much waste from leaking tanks as needed to stop the leak "as soon as practicable."
- o A regulatory report has already found saltwell pumping should be used to remove leakable liquids when tanks leak. The In-Tank Pretreatment System (ITPS) is available to remove liquids from leaking tanks quickly with the waste trucked nearby for treatment.
- o Federal and state laws require removal of leakable liquids as soon as practicable.
- Treated tank waste should be removed from Hanford and disposed at sites where there is no risk that leaching will contaminate groundwater and rivers.

 I support the landmark portion of the agreement to remove low radioactive liquids from tanks in 200West to be treated and disposed at offsite licensed facilities where there is no risk to groundwater or rivers.
- o All LAW tank waste cannot be disposed in Hanford landfills without contaminating groundwater and the Columbia River. Vitrification is only required for waste disposed

at Hanford. Vitrification makes no sense for disposal where there is no groundwater. Vitrifying all the LAW waste would take so long that dozens of tanks would leak before they are emptied.

• The agreement needs a "Plan B" addressing what will happen if the High Activity Waste Vitrification Plant does not startup by the end of 2033 and to set new schedules if it becomes apparent in the next

five years that the HAW vitrification plant will be delayed or may not be completed.

I-7: Brandon Bowersox-Johnson

Comment I-7-1

Dear Ecology and Hanford site clean-up team,

Thanks for your work on plans to clean up this dangerous mess. I want my son and future generations to inherit a livable planet including a safe, health Columbia River ecosystem.

Based on my review of the new proposed amendments, I implore you to do more to act on the leaking tanks by taking urgent action. It's my understanding that two tanks (B-109 and T-111) are known to be leaking and there are already identified solutions including saltwell pumping and the in-tank pretreatment system. It is also my understanding that federal and state laws require removal of leakable liquids as soon as practicable. I see that the proposed amendments call for further studies such as a technology evaluation and expert advisory panel. Please move beyond studies and start taking ACTION. Please address the leaks "as soon as practicable".

The other major issue I see is the safety challenge of trucking liquid radioactive waste through Spokane. I urge you to hold a public hearing in Spokane so the community there is able to understand the risks, the alternatives, and the risk mitigations available.

Separately: this Ecology public comment form may have incorrect information. At the top it says 'Commenting open: May 30, 2024 - September 01, 2024' but at the bottom it says 'Comments must be submitted by Aug. 2 2024.' Which is right? I urge you to correct that.

Thanks for your time and efforts on protecting our environment and cleaning up this mess from past generations so we can protect our children and future generations.

I-8: Tu Tran

Comment I-8-1

Stop the leak! Our kids and grandkids and our soils and waters must be protected from hazardous wastes. Solidify what must be transferred. Please! We're all counting on you.

I-9: Rene Murry

Comment I-9-1

I am writing with deep concern about the current clean up plans for nuclear waste at the Hanford project in Washington state. 1)The public has not had adequate time to be informed or

comment; 2)The plans to transport liquid waste across populated areas is reckless and must be addressed; 3) There is deep concern about the waste that leaks from the tanks, ends up in the water and leeches into planting and animals that are consumed by humans in the Yakima area. I have been an advocate and citizen of Washington state for over 30 years and the Dept of Energy has not provided appropriate action to protect the citizens of Washington state. This waste must be addressed, it is leaking into the ground water and into our major Columbia river. Where is the oversight? Where is the concern for citizens in the region or those who consume food grown there? Please take action and allow appropriate time for people to respond. Rene Murry

I-10: Richard Honour

Comment I-10-1

Heart of America Northwest's concerns & suggestions for comments at public meetings July 9-11 and to submit:

- Washington Ecology, USDOE and EPA should hold public meetings in Seattle, Portland and Spokane.
- o The agencies had 4 years to negotiate and had an "agreement in principle" for a year. That was ample time to plan for meaningful public review and comment. Denying concerned publics a voice in the region's largest cities appears to be a political choice one which WA Ecology should not support.
- o A meeting in Spokane is particularly important because the agreement could result in thousands of truck shipments of liquid radioactive waste through the city without any risk, impact or alternatives disclosed in an EIS.
- The agencies need to honor the public's rights to have an environmental impact statement (EIS) disclosing impacts, especially from the likelihood of many more tanks leaking under the agreement timelines and from trucking liquid radioactive waste through Spokane; and alternatives. An EIS should be available during the comment period. No agreement should be signed without understanding the impacts and alternatives or mitigation available.
- Ecology needs to require USDOE to remove leakable liquid wastes from the leaking tanks starting next year. Years of more studies are not needed before meeting the legal requirements to remove as much waste from leaking tanks as needed to stop the leak "as soon as practicable."
- o A regulatory report has already found saltwell pumping should be used to remove leakable liquids when tanks leak. The In-Tank Pretreatment System (ITPS) is available to remove liquids from leaking tanks quickly with the waste trucked nearby for treatment.
 - o Federal and state laws require removal of leakable liquids as soon as practicable.
- Treated tank waste should be removed from Hanford and disposed at sites where there is no risk that leaching will contaminate groundwater and rivers. We support the landmark portion of the agreement to remove low radioactive liquids from tanks in 200West to be treated and disposed at offsite licensed facilities where there is no risk to groundwater or rivers.

o All LAW tank waste cannot be disposed in Hanford landfills without contaminating groundwater and the Columbia River. Vitrification is only required for waste disposed at Hanford. Vitrification makes no sense for disposal where there is no groundwater. Vitrifying all the LAW waste would take so long that dozens of tanks would leak before they are emptied.

• The agreement needs a "Plan B" addressing what will happen if the High Activity Waste Vitrification Plant does not startup by the end of 2033. The agreement is based on a questionable presumption that HAW vitrification will begin by the end of 2033. There should be a "Plan B" to set new schedules if it becomes apparent in the next five years that the HAW vitrification plant will be delayed or may not be completed.

I-11: Ally Harris

Comment I-11-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

We are calling on the TPA agencies to undertake the most protective cleanup possible, given the enormously high stakes for the Columbia River and everyone who depends on it. In developing changes to the Tri-Party Agreement and the Consent Decree, we demand that:

The federal government treats tank waste as the law requires. The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste, Energy should permanently abandon plans to apply this definition at Hanford;

The TPA agencies provide adequate information and opportunities for the public to comment on major proposed changes to cleanup, such as the adequacy of proposed new tank capacity and the proposal to ship large volumes of tank waste through communities in liquid or solid form;

Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere. Environmental reviews are available to the public to review while commenting on the proposed changes. The agencies seem to be putting the cart before the horse, making sweeping changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions. The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them. Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going

public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them.

Sincerely, Ally Harris ally@ojta.org

I-12: Theodora Tsongas

Comment I-12-1

I am Dr. Theodora Tsongas, an environmental health scientist/epidemiologist with a career in public health. I am concerned that the public input on these very important proposed amendments to the Tri-Party Agreement and Consent Decree on the Nuclear Waste Program must be given adequate time and attention to do a thorough review. Thus, I am asking that you extend the comment period for public input beyond September 1, 2024, to give people time to make thoughtful suggestions and comments on decisions that are so vital to their health and well being and that of their families, now and in the future. Summer time is really not a fair time to ask for the public's due consideration as other time, energy, and health constraints, as well as excess heat and wildfires, must take precedence. Second, I request that people in Portland and Spokane be given more fair consideration in the location of these most important public hearings, and that there be additional hearings scheduled in these urban areas. What happens in Washington affects the lives and health of people in Oregon and the entire NW region. We really need a fair chance to weigh in on decisions that affect us, our lives and health, and our air, water, and supporting ecosystems. Furthermore, our input can be quite valuable in that we can look at these decisions with less of a "jaundiced" eye and we can make valuable contributions to the work of the Tri-Party Agencies. Thank you for your time and consideration.

I-13: Sandy Polishuk

Comment I-13-1

We need public meetings with comments taken in Seattle, Portland and Spokane. You had an "agreement in principle" a year ago. That left you the time to plan more meetings, especially ones in population centers in the NW, i.e. Seattle, Portland and Spokane. Please do that now. There are so many people who want to comment in person but won't be able to attend is the smaller communities you have hearings scheduled.

A serious argument I have with the plan is trucking liquid radioactive waste through Spokane when solid would be SO much safer. Solidify first!!!

I support your commitment that none of the waste removed from Hanford's tanks and "grouted" can be disposed at Hanford as grouted waste. These treated solidified wastes should only be disposed at licensed facilities with no risk of leaching to contaminate drinkable groundwater.

I-14: Dan Solitz

Comment I-14-1

I attended all three meetings in July. Two by Zoom and one by video. The audio was so inadequate as to require a do over.

The statement on transparency is needed but has not been met. One area of particular concern is the redesign of the High Level Waste Treatment Plant. The in corporation of lesson learned is admirable but would be even more so if DOE would publish what they have learned so far. The forming of feedstock and process additives difficulties experienced by the Direct Feed Low Activity Waste Melter will pail in comparison to the challenges that will be encountered by the Direct Feed High Activity Waste Melter because of the variety of components the forming process needs to blend and feed into the High Level Waste Melter. Delay is costly to both budget and schedule as it has been to the start up of DFLAW. Pease avail yourselves of expertise in the public by being more transparent during the design and startup operation phases unlike now, with DFLAW.

Respectfully Submitted

Dan Solitz

I-15: Brent Rocks

Comment I-15-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

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Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere. Environmental reviews are available to the public to review while commenting on the proposed changes. The agencies seem to be

putting the cart before the horse, making sweeping changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions. The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them. Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them.

Sincerely, Brent Rocks brent_rocks@comcast.net

I-16: Dana Weintraub

Comment I-16-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

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Sincerely, Dana Weintraub evergreensustainabilityllc@protonmail.com

I-17: Ian Shelley

Comment I-17-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

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Sincerely, Ian Shelley ianjs@comcast.net

I-18: Joseph Breazeale

Comment I-18-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

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people most impacted by these decisions will navigate the hazards and harms imposed on them.

Sincerely, Joseph Breazeale brezebra@yahoo.com

I-19: Marie Wakefield

Comment I-19-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

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Sincerely, Marie Wakefield wakefieldm 2000@yahoo.com

I-20: Julia Hurd

Comment I-20-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

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Sincerely, Julia Hurd hurdjulia@gmail.com

I-21: Scott Crockett

Comment I-21-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

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Sincerely, Scott Crockett smc320@msn.com

I-22: Sharon Fasnacht

Comment I-22-1

Thank you for allowing me **to comment on Hanford cleanup** after attending the July 10 2024 presentation in Olympia at the DoubleTree Hotel, 415 Capitol Way North. It was excellent! Materials shared by Presenters, and attendees were much appreciated. The U.S.Dept. of Energy, & State of Washington Dept. of Ecology, distributed a 6 page document that was very helpful. Columbia River Keeper offered a 5 pager that also was well done. Heart of America distributed a 6 pager that I found invaluable in preparing my response.

FYI: My family lived in the tri-cities in the 70's. We experienced the waters of the Columbia River warming significantly during that time, and I've tracked the progress of cleanup – or lack thereof - ever since. We now live in Olympia.

Why did I track the cleanup? At some point Hanford began to be referred to as the most contaminated nuclear waste site in the U.S.. Since we'd lived there, I had to track the cleanup in the event it had affected our health. In addition, Hanford is surrounded by the invaluable Columbia River, which must be protected in order to save the humans and animals that depend on the Columbia for water, the farmers who need the water for crops, and the Salmon & Orca, who will go extinct without the Columbia. Our Indian Tribes will lose sacred sites along the river, and so, much of their cultures. And then there's our fishing industry.

MY BIGGEST CONCERN: <u>An EARTHQUAKE</u>!! In the late 1990's or early 2000's, USGS data predicted a possible earthquake underneath Hanford. And just recently, that possibility was mentioned again in the local news as a real disaster that could happen! But of course, there's no good way to predict exactly when it might happen. The USGS says we just know it will happen.

We need to develop a statement of what the environmental impact on Hanford will be. USDOE wrote that a catastrophic release affecting the entire region will happen if the earthquake happens before waste is removed.

Part of the environmental impact could be the destruction of the LAW (Low Activity Waste) processing plants at Hanford, and other structures. But more alarming would be the destruction of those sites where nuclear waste, treated and untreated, is now stored.

It would be necessary to move low and high level waste "tanks". It would also be necessary to remove liquids & cesium and Strontium being stored in a water filled pool in the 200 area, called the Waste Encapsulation Storage Facility (WESF). We have to remove the poisons in our ground water also.

BASED ON USDOE'S STATEMENT THAT "A CATASTROPHIC RELEASE AFFECTING THE ENTIRE REGION WILL HAPPEN IF THE EARTHQUAKE HAPPENS BEFORE WASTE IS REMOVED;" MY PROPOSALS.......

PROPOSAL #1

STEP # 1: I would like the members of the tri-party Agreement to GATHER INFORMATION ABOUT A POSSIBLE EARTHQUAKE UNDER HANFORD, and meet again. Assuming that an earthquake is on its way, agree to set aside their current plan, and develop a new plan for the removal of waste from the Hanford site to a safe storage place of their choosing ASAP, outside the earthquake zone.

Step # 2: Investigate possible waste storage sites, including West Texas, and Utah.

I encourage the Tri-Parties to look at possible sites in Washington & its border states, since transport would be less of an issue than West Texas or Utah. Of course, this must be done with the cooperation and agreement of Washington State Officials, or those from the States of their choosing. Given the dangers of the earthquake to our northwest States, I can't imagine not being given approval — and help! Have the search for a site be done ASAP.

If resistance is inevitable, contact a National Authority that could authorize this work NOW. Request permission to seek a new site for Hanford waste and permission to transport the waste from Hanford to the new site ASAP.

OUR LAST BIG MISTAKE: Choosing a place on a massive river like the Columbia for a Nuclear site was the BIGGEST MISTAKE. We cannot survive if we allow our most plentiful supplies of water – that in our rivers – to be poisoned / destroyed. WE CANNOT SURVIVE WITHOUT WATER. IT IS LIFEBLOOD.

Step # 2 a. Take every opportunity while looking for a site to begin determining what the best "corridor" from Hanford to the site would be. Consider that any nuclear waste transported, by rail or truck, MUST BE TREATED FIRST. We will need to ask for support from Law Enforcement, and possibly the military, when transporting.

Step # 3: Choose the site. Ideally, the site would be larger than Hanford.

MOVE ALL NUCLEAR WASTE AT HANFORD TO A SAFER LOCATION – OUTSIDE THE EARTHQUAKE ZONE ASAP.

Hanford has become the most contaminated nuclear waste site in the U.S.. Contractors have had no choice but to build processing plants, and do the remedial processing on site, and store the waste, processed and unprocessed, at Hanford. Because of lack of space, Contractors have been limited in building processing plants for LAW (Lower active waste), AND HAW (Higher active waste). We do not have the number of LAW plants needed, and the design of the HAW plant isn't developed yet.

OPINION: I feel it is partially because of a lack of adequate space to build processing plants or store treated waste that Contractors are so far behind in tackling the HAW plants' design and building one for Hanford. Even if we do not suffer an earthquake at Hanford in the next 9 years, we dare not wait until 2033 to design a High Activity Waste plant or learn that it's not going to be designed. The Earthquake under Hanford might happen in 2033 or after!

PROPOSAL # 2

PLAN "C"

PLAN B ?? OR A PLAN C ?? The Tri-Party Agreement members have updated the plan, but we needed a Plan B, in case that revised plan ran into problems. Rather than a Plan B, I'd like to propose a PLAN C.

CONSIDER CREATION OF MORE NUCLEAR WASTE STORAGE SITES IN THE NATION FYI: The Bush Administration granted, I believe, 17 permits for new Nuclear Power Plants. New power plants would produce MORE nuclear waste, but I am not aware of any existing plans regarding treatment or storage of that waste. We need to monitor!

We also have sites where nuclear weapons are either developed or stored. Do those sites have adequate, safe, storage for their nuclear waste?

STEP # 1: With the cooperation and support of Nationwide leadership; (all states, Governors, EPAs, U.S. Congress, the President, etc..) Pursue the creation of a Department within an existing National Organization, or a new Organization. Have this "Department" do the following:

STEP # 1 a.: Determine the National need for safe processing and storage of nuclear waste.

<u>STEP # 1 b.:</u> Identify sites: Determine if there are sites that belong to ALL citizens, yes, like Closed Military sites, etc., where this poisonous nuclear waste, that's been treated for shipment, might be treated for storage, and stored safely. These would be sites without the ground water geography, in addition to the sites in West Texas/Utah. <u>STEP # 2:</u> Set the needed amount of land <u>aside for processing plants & storage THAT WOULD SERVE THE NATION!</u>

Push for Legislation that makes it clear that these sites will be made available to all states who have nuclear power plants, (or Nuclear weapons sites) and who can process waste for shipment, and need processing plants and permanent storage for their waste.

STEP # 3: Ask for National Legislation permitting Dedicated travel corridors, where needed, to use to transport treated waste, perhaps even using train routes.

STEP # 4: Develop a work group, within the Department (see Step 2: that schedules shipments of treated waste, informs the public, and Coordinates with other Departments/Organizations to have Police or possibly National Guard to assist with scheduled shipments.

STEP # 5: Take responsibility for staffing these sites to build necessary Low & High Activity treatment plants, and safe storage facilities for treated waste.

Cordially,

Sharon Fasnacht

I-23: Jim Alzheimer

Comment I-23-1

This Settlement Agreement is like past Settlement Agreements because it is mostly slipping Consent Decree and Tri-Party Agreement Milestones. The Holistic Negotiations should have an all-inclusive look at options to do tank waste retrievals and waste processing better than we have been so far. A part of this should have been evaluating if the decisions made in the past were the right ones based on new information. I think there can be improvements in waste retrieval and waste processing if we continually keep trying to do better with the available resources to cleanup Hanford while focusing on the most important near-term risks.

Tank Retrievals

The revisions to the Single-Shell Tank retrieval Milestones are just an ongoing slippage of the existing Milestones. The original Tri-Party Agreement Milestones for finishing all Single-Shell Tank retrievals was by the end of 2019. Only 21 of the 149 Single-Shell Tanks have been retrieved to date. Part of this delay is probably due to the retrievals being much more difficult to do than was originally thought. However, there are two other factors that must also be considered. One is the original end-of-retrieval criterion of 360 cubic feet or less in Tri-Party Agreement Appendix H was supposed to be evaluated based on the results of the first few Single-Shell Tank retrievals. This has not happened. Tri-Party Agreement Appendix I also requires a Performance Assessment to be done for both the tank residuals and past leaks in each tank farm. The initial Performance Assessments for C-farm, A-farm, and AX-farm all indicate that more waste residuals could remain at Closure and the Closure Performance

Standards would still be met with significant factors of safety. The end-of-retrieval criteria needs to be revised to be risk informed instead of just a volume value. By doing several fresh water rinses at the end-of-retrieval, most of the highly mobile contaminates are being removed. Also, the degradation of the concrete structure of the tanks and the grout filling is predicted to be a very slow process. Revising the end-of-retrieval criteria should be given a priority. A very large fraction of the retrieval time and resources is used to reach the existing end-of-retrieval criteria and this is probably not needed. Another reason Single-Shell Tank retrievals have slowed recently is there is almost no remaining storage capacity in the Double-Shell Tanks to support Single-Shell Tank retrievals. Once Low-Activity Waste processing begins, some Double-Shell Tank space will be freed up to support future Single-Shell Tank retrievals. However, Low-Activity Waste processing will only be removing liquids from the tanks. Sludge waste processing cannot start until the High-Level Waste processing begins and this is not scheduled for a long time and there are concerns this could be even further delayed. We should not be putting very much more sludge into the Double-Shell Tanks until there is active processing of the sludge waste. We should be delaying retrieval of A-104, A-105, and A106 until sludge waste can be processed. These three tanks are all dry tank with no drainable liquids. A104 and A-105 are known leakers. However, they present no near-term increased risk of further leaks. As we move to S-farm, SX-farm, and U-farm, we should be selecting near-term retrievals to be those with larger amounts of liquids and saltcake and minimal amounts of sludges. We should also consider possibly only retrieving the liquids and saltcake for now and retrieving the sludges at a future date. The retrieval of the liquids and saltcake will require much less complicated retrieval equipment that might be repurposed from tank to tank. Another reason to not put sludge into the Double-Shell Tanks in the nearterm is this will require another difficult retrieval activity. The last three System Plans have modeled the sludge wastes being transferred to the Tank Waste Characterization and Staging Facility where the physical properties of the waste will be modified to meet the Waste Treatment Plant tank waste feed criteria. That includes reducing the median particle size and hardness of the waste. The Tank Waste Characterization and Staging Facility will need to have new tank designs that will allow the waste to be remove much easier than from the flat bottomed Single-Shell and Double-Shell Tanks. Another concept to consider regarding Single-Shell Tank Retrievals is to remove more drainable liquids from them similar to what was done in the Interim Stabilization Program. Waste is going to remain in these tanks much longer than originally planned. We have also two actively leaking Single-Shell Tanks and more leaks are possible. The response to future tank leaks could be make better if we had equipment in place to remove the liquids, procedures in place, and staff trained to use the equipment used to remove liquids from any tank. Pumping of tank liquids was used in the Interim Stabilization Program and as the response to leaking Single-Shell Tanks before T-111 and B-109. Not being able to respond to the known leaking tanks in a timely manner is a clear indication that not all scenarios have been adequately considered in planning.

Tank Farms to Waste Treatment Plant Interface

The interface between tank farms and the Waste Treatment Plant is not being adequately addressed in this Settlement Agreement or other activities. The current plan is to send sludge waste from the tank farms to the Tank Waste Characterization and Staging Facility. Even though

the name of this facility implies it will be characterizing the waste and then staging it to be sent to the Waste Treatment Plant, this facility is where it is currently planned to modify the physical properties of the waste to meet the waste feed criteria for the Waste Treatment Plant. 24950-WTP-ICD-MG-019, ICD 19 - Interface Control Document for Waste Feed lists multiple properties of the waste feed sent to the Waste Treatment Plant. Two examples are the median particle size and the median particle hardness of the waste. The median particle size requirement is like the size of talcum powder, which is very small. The size and hardness of the particles in the waste are part of the erosion process for moving the waste through pipelines and other components. However, these requirements were added to ICD-19 much later than most of the pipe lines and mixing vessels were designed. There is limited data on the actual distribution of particle sizes available. There is some data from 10 different tanks in the TWINS Database. Over 80 percent of the volume of particles in this data has sizes greater than the median size limit. This mean essentially all the sludge will need to be sent though a process to reduce it size. The description of the Tank Waste Characterization and Staging Facility in the last three System Plans did not describe what processes would be used. The description of this facility only described the number and size of storage tank and no other useful information. This is on example of why the System Plan as being implemented is more of a modeling activity with many unsupported assumptions rather than an actual planning document. I also have a concern with the limit on median particle hardness. Simply making the particles smaller by grinding it will not change the particles hardness. Smaller particles will present less erosion concerns. However, adding these limits along with other physical properties long after most of the Waste Treatment Plant was designed implies they were added to protect those building the plant if the plant is not able to operate as envisioned. An additional concern is the requirement that the waste feed be sampled and then stored for at least 140 days before being sent to the Waste Treatment Plant. Particles that small sitting in a liquid environment for that long may agglomerate and result in median particles sizes larger than the criteria. The interface between tank farm waste and the Waste Treatment Plant does not appear to be given enough attention.

Waste Treatment Plant

While Single-Shell Tank Retrievals have been occurring at a much slower rate than originally anticipated, the Waste Treatment Plant is much farther behind schedule and still has several unresolved technical issues. Instead of starting with a small-scale prototype to evaluate the basic concept, the Waste Treatment Plant design started with a full-scale facility. When the original contractor determined the plant was going to cost much more to build and operate, a different contractor was picked. However, instead of considering a different overall approach, the original design was retained and many of the associated technical challenges remain. I have serious concerns that the technical issues cannot be easily resolved. It is time to seriously consider if a different approach to processing of the tank waste would be better. I am mostly concerned about the vitrification process. While this has been done successfully at small scale, I am not sure is the best option especially for the waste with solids. I have heard that any alternative to vitrification must be "as good as glass." If we consider both the stability of the final waste form and the cost of the overall process, other options may not be as good as glass. They may be better than glass. We also need to look at the actual composition of the tank waste. DOE is storing all the tank waste as if it is High-Level Waste. High-Level Waste is the

highly radioactive materials produced as a byproduct of the reactions that occur inside nuclear reactors. High-level wastes take one of two forms: Spent (used) reactor fuel when it is accepted for disposal and waste materials remaining after spent fuel is reprocessed. However, what is highly radioactive is not defined. I downloaded the radionuclide inventory for the Single-Shell and Double-Shell Tanks from the PNNL PHOENIX website. When compared to the Classification of Low-Activity Waste, less than 0.3% of the waste phase volumes in the Single-Shell and Double-Shell Tank are currently greater than Class C Waste. In about 70 years, all the tank waste will decay to levels less than the upper Class C limit if it were to remain in the tanks. In 100 years, less than 4% would be greater than Class B Waste. When tank waste is put into a stable waste form such as glass or grout, the concentrations is also significantly reduced. If the tank waste had not been from the processing of spent fuel, it could be disposed of using the Low-Activity Waste requirements. From a common-sense perspective, it does not make sense to consider most of the tank waste as High-Level Waste and require it to be vitrified and stored in a deep geological repository just because of its source. Even if we were to vitrify most of the tank waste, it is not likely to go to a deep geological repository for a long time, if ever, given Congress's unwillingness to fund such a repository. We should be taking a risk informed approach to determining what is the best disposal pathway. The recent concept of doing some small-scale grouting of waste with the intent of having this processing potentially done far from Hanford does not make common-sense. We are already disposing of significant amounts of Low-Activity Waste on the Hanford Site. The most significant contamination issue on the Central Plateau is the groundwater contaminated by past planned and unplanned releases. Much of this was to the cribs and trenches. While progress is being made with groundwater cleanup, much remains to be done and we should be spending adequate funding on that part of cleanup. It is time to use a risk informed approach to determining how to dispose of the Hanford tank waste. While finishing the Waste Treatment Plant and using it as currently planned may be the best option, we do need to consider other alternatives that could be just as protective of human health and the environment but cost less and could be implemented sooner. Since we are already planning to grout fill the Single-Shell and Double-Shell Tanks as part of the Closure process to provide long-term structural integrity, it might even be practical to mix some of the tank waste with that grout. To provide the public with some sense of how radioactive the vitrified waste would be, it would be good for DOE to provide the information probably available on the concentrations of radionuclides in the Low-Activity and High-Level canisters as predicted by the System Plan. We also need to make sure that the non-radioactive contaminates are properly disposed.

It should be noted that to the best of my knowledge, since there are not yet any approved Closure Plans for the Single-Shell Tanks, we do not have a formal agreement of the grouting requirements. In addition, the Tri-Party Agreement Appendix I defines the groundwater contaminated from the Single-Shell Tanks as part of the Single-Shell Tank System. However, the draft Closure Plans do not specify what the groundwater contamination levels will need to be to formally Close a tank farm.

Central Plateau Infrastructure

One of the problems that needs to be addressed is there is no way to adequately transfer waste from the remote Single-Shell Tanks to Double-Shell Tanks. None of the transfer lines that were

used for transfers in the past are now fit for service. There are two existing cross-site transfer lines between the 200 West SY Double-Shell Tanks and the 200 East Double-Shell Tanks but neither is currently approved for use. It is possible the cross-site supernatant only line may be modified to make it useable. There are more significant issues with the cross-site slurry line that need to be resolve. There should be a program to determine the status of these two lines, determine what needs to be done to make them useable, and get a good cost estimate for these improvements. This should happen soon. Right now, if there were to be a tank leak in one of the SY Double-Shell Tanks, there may not be enough storage capacity in the other two nearby tanks. A lack of no useable transfer line to T-farm and B-farm has caused there to be no timely response to two tanks declared to be actively leaking. There should be a plan in place for installing new transfer capabilities between the remote tank farms and the Double-Shell Tank System as well as between the SY tank and 200 East. In addition to new waste transfer pipe lines, the use of tanker trucks and railroad cars should also be evaluated.

Conclusions

This current Settlement Agreement is like the past ones in that it is mostly about slipping Consent Decree and Tri-Party Agreement Milestones. Based on the better information we have now, we can make better informed decisions. It appears we are currently reluctant to revise the end-of-retrieval criteria in the TriParty Agreement because it might appear we are not being as "conservative" if we leave more waste in the tanks. We also need to revaluate the definition of High-Level Waste and develop risk informed disposal approaches that are adequately protective of human health and the environment while using our resources more effectively. I would like us to be able to completely cleanup the whole Hanford site. However, given the past releases to the vadose zone, it is not practicable to clean up it up to the point that we will no longer need to keep monitoring to assure we have not missed some contamination sources. Some contamination will remain but we need to be sure that the regulatory requirements for closure are met. We also need to remind ourselves that at some point, Congress could decide to stop funding Hanford cleanup. We need to do the best job we can with the funding we have as soon as we can. We need to be continually rethinking the best ways to make progress. We need to start using the best science we can and stop using too much political science.

I-24: Jim Bryne

Comment I-24-1

I am a long time WA resident. We need NEPA and SEPA in this decision. We need an EIS as well to protect the Columbia River from toxic groundwater. Fix the leaking tanks now! We also need a plan B. Changing the waste into "safe" glass logs doesn't begin until 2033. What is the contingency plan until then? What if it doesn't work? Nuclear half life is very long. I want to be sure my kids and grandkids will be safe. Thank you.

I-25: Anna Cowen

Comment I-25-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better. For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Anna Cowen

I-26: Anna Cowen

Comment I-26-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste,

grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement. 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment. Sincerely,
Anna Cowen

I-27: Callie Ridolfi

Comment I-27-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the

Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.

- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment. Better solutions are possible if public involvement happens effectively.

Sincerely, Callie Ridolfi

I-28: Callie Ridolfi

Comment I-28-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen

years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.

5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

This are reasonable requests and should be seriously considered by DOE and the Tri-Parties. Thank you.

Sincerely, Callie Ridolfi

I-29: Nancy Arbuckle

Comment I-29-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Why isn't USDOE waiting for grout test results before making a big, expensive decision about grouting millions of gallons of tank waste?

How are the agencies planning to assess transportation risks and impacts? Is there a plan to gather input from potentially impacted communities?

Sincerely,

Nancy Arbuckle

I-30: Nancy Arbuckle

Comment I-30-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Why did the agencies neglect to get input from groups, agencies, and Tribes about its public involvement plan (materials, presentations, meeting location, timing of comment period) and rollout of the Holistic Settlement Agreement prior to the public comment period after four years of closed-door meetings?

What is the big picture plan for Hanford tank waste? Sincerely, Nancy Arbuckle

I-31: John Alder

Comment I-31-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for your comment No more nuclear Sincerely, John Alder

I-32: John Alder

Comment I-32-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.
We need absolutely no nuclear projects
Concentrate on cleaning the messes already created
Sincerely,
John Alder

I-33: Kevin Gallagher

Comment I-33-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with

input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better. For all major comment periods in the future:

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment. Sincerely, Kevin Gallagher

I-34: Kevin Gallagher

Comment I-34-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial

treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment. Sincerely, Kevin Gallagher

I-35: Ainsley Mayo

Comment I-35-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

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Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.

- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment. Sincerely, Ainsley Mayo

I-36: Karin Engstrom

Comment I-36-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.
- 6. Include the Tribal governments in all deision making by recognizing and making them a full member of the Tri-Party Agreement. This would include them in all the decision making processes.
- 7. It is obvious that any removal from the tanks may release radioactive waste into the air, soil and water. What are the ways that this will be monitored in order to protect the communities that are "down wind"? What kind of precaustions for the workers who deal with the waste?

Please hold further public heaings to include the people of Spokane and Portland. As someone who no longer drives - I would appreciate a meeting in Seattle that was bus friendly. What is being proposed is big. We need to move forward to stop the leaking tanks affecting the ground water and river - but the whole Hanford project cannot be siloed.

Thank you for considering my comment. Sincerely, Karin Engstrom

I-37: Karin Engstrom

Comment I-37-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.

- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

THAT MEANS: Listening to the tribes, the down winders, those who will be affected by any transport of the nuclear waste in the future.

You have the opportunity to access groups that work with students and young adults. This is their world - not ours any longer. They must be included.

I an 83. The bomb has been a story in my whole life. I met women who lived through the Hiroshima and Nagasaki bombs when I attended meetings on nuclear issues with Helen Caldicott, MD - I wrote letters and demonstrated that the nuclea age come to an end - but it hasn't. Upon moving to Seattle in the early 1990's, I became interested in the issues of the Hanford nuclear waste issues. I've taken tours and visited with people who worked at Hanford. I heard their stories. I've participated in your presentations. As stated in your public hearings - we have heard the same story over and over. I do not deny you have been given an impossible task - but time is running out.

It is all about the framing. You think in bureaucratize - I understand your story must be promising - but in all, what I hear in public comments is that more reality would be better. Like Gerry says, "Where is Plan B?" None of us have the real answers except we are contributing to the death of our planet with the threat of nuclear waste dripping into our ground water and into the river. The initial team in 1943 already knew that.

So spend some of your money in meeting with community members, young people, students and retired folks who may have good ideas on how you deal with this set of problems.

One of the best experiences I've had was in group meetings to determine what we, as citizens, thought the most important issues facing Seatle. We met in small groups with a facilitator and everyone spoke up about their issues and then we itemized beginning with the most important. The Mayor used that information to develop his plan.

Thank you for considering my comment.

Sincerely,

Karin Engstrom

I-38: Katy McFaddenComment I-38-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment. Sincerely, Katy McFaDDEN

I-39: Brad Yazzolino

Comment I-39-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment!
Sincerely,
Brad Yazzolino

I-40: Brad Yazzolino

Comment I-40-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.

- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

I agree with all of the above, and I have been watching the awful failed Hanford cleanup for decades.

#1. Wait for grout tests! yes! and yes to all the concepts in #1. They are are very critical! Please follow all of the advice in #1 through #5!

Thank you for considering my comment.
Sincerely,
Brad Yazzolino
Portland, OR (Tri-city resident in the 1950s!)

I-41: Laura Feldman

Comment I-41-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen

years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.

5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Grouting the waste is of great concern to me. When waste is removed from tanks to be grouted, the tank itself still has waste residue (maybe to be grouted) and will be left where it is rather than removed. Also I worry about tanks being grouted off-site, given the Perma-fix accidents, for example, in Richland some years ago. All wastes should be vitrified as originally planned.

Waste movement through Central Oregon, along the Deschutes River, a "Wild and Scenic River," as well as other western states to deposit these wastes in Clive, Utah and Andrews Texas is too risky. I have spoken with and learned from other activists presenting online from New Mexico and Texas that they do not want these wastes. As we work to protect the Columbia River, these communities have their own water sources such as the Ogallala Aquifer that provides Andrews, Texas with its drinking water.

From the Nuclear Guardianship Ethic: We need to take responsibility for the wastes we are bequeathing to the future by immobilizing, safely containing and stewarding these wastes until future generations figure out how to transmute this contamination in some way. We need to focus our resources on this work rather than creating more waste. (Energy Northwest signed a joint development agreement with X-energy to build up to 12 such small modular reactors on the Hanford reservation by 2030.)

Thank you for considering my comment. Sincerely,
Laura Feldman

I-42: Catalina de Onis

Comment I-42-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

I urge you to change the Holistic Settlement Agreement to receive and analyze grout test results prior to any kind of disposal. I also ask that a full, mandated environmental analysis be conducted and that findings be communicated to the public. No action should be taken prior to this important step, which also must include deep engagement with the public (i.e., impacted and interested community members), not just an info session that feigns public participation. I also ask that transportation impacts on local communities that are in the potential grout shipment routes be centered in conversations to avoid any environmental injustices and to mitigate and prevent health hazards.

I appreciate your work on this important matter and thank you for considering my comment.

Sincerely, Catalina de Onis

I-43: Darise Weller

Comment I-43-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Darise Weller

I-44: Darise Weller

Comment I-44-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Darise Weller

I-45: Kelly OHanley

Comment I-45-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Kelly OHanley

I-46: Kelly OHanley

Comment I-46-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system,

transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Kelly OHanley

I-47: Cass Martinez

Comment I-47-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

My community, St Helens, Oregon, derives its drinking water from Ranney wells located hard by the Columbia River and downstream from the Hanford Reservation. Those of us who are aware of the outsize problem at Hanford do not wish to share its risks and dangers with anyone or anyplace else. Both of my brothers suffered from oral cancers, the first cancers in our families. I am waiting for the announcement that our water can't be used due to a return of historic Hanford leaks. It concerns me that contractors have failed at vitrifying the waste there. It is dismaying that government planners would consider sharing our Hanford problem with other communities, including exposing communities to the risks of transporting radioactive materials through. The grouting-to-save-money plan as announced is incomplete, and while we may wonder about where and how, the why is transparent: to give the impression of movement and progress on Hanford waste. That part of the plan has already failed. I ask that you review and rethink the current plan.

Sincerely, Cass Martinez

I-48: Cass Martinez

Comment I-48-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to

understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

The holistic settlement agreement isn't whole, or settled, or a full agreement. It is partial as to Hanford's problems, it leaves important details up in the air, and it lacks the agreement of all parties (civilians of several states, and Indian nations).

Sincerely, Cass Martinez

I-49: Diane Meisenhelter

Comment I-49-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to

understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Do not transport hazardous, radioactive waste through communities on public roadways without getting consent from those communities.

Do no lessen the existing standards for safely transforming and storing radioactive wastes. Thank you for considering my comment.

Sincerely,
Diane Meisenhelter

I-50: Diane Meisenhelter

Comment I-50-1

Dear To Whom It May Concern,

following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Do not transfer any hazardous radioactive wastes on public roadways through communities without first getting their informed consent.

Do not lessen the existing, agreed upon standards for processing and storing radioactive waste including tank waste. Thank you for considering my comment.

Sincerely,
Diane Meisenhelter

I-51: Marianne Mauldin

Comment I-51-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement.

Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Marianne Mauldin

I-52: Marianne Mauldin

Comment I-52-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at

public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely,
Marianne Mauldin

I-53: Diane Burke

Comment I-53-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

To ensure promised public involvement, in future, please provide -in a timely fashion - clearly expressed material to the public and concerned organizations regarding plans for the timeline, processing, handling and disposal of Hanford's nuclear waste. This has been lacking regarding the Holistic Settlement Agreement. Thank you for considering my comment.

Sincerely, Diane Burke

I-54: Diane Burke

Comment I-54-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

I endorse the above requests and emphasize the importance of timely notification of the public and concerned organizations regarding the Holistic Settlement Agreement. In order to enlist better public awareness and participation, why aren't public meetings held in more-populated areas - such as Seattle and Portland?

Sincerely, Diane Burke

I-55: Rachel DiNitto

Comment I-55-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at

public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

As a resident of Oregon, I feel strongly that there is a clear need for meetings about the settlement in major metropolitan centers like Seattle, Portland, and Spokane. The citizens of Washington and Oregon need to be informed about the changes to the Hanford cleanup. I attended the public meeting in Olympia on July 10th via Zoom. As you heard at the meeting, the quality of the audio was extremely poor, and it was almost impossible for those of us on Zoom to hear the panelists. The agencies need to do better.

What I could hear was said in such specialized language, that it was very difficult to understand. I research the Fukushima nuclear disaster in Japan and the Olympia meeting reminded me of meetings in Japan where specialists failed to provide clear, easy-to-understand information to affected communities. The potential risks of things like transporting radioactive waste through populated communities need to be communicated in language that the average person can understand. Public meetings are especially needed for issues like this.

Sincerely, Rachel DiNitto

I-56: Rachel DiNitto

Comment I-56-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

As a resident of Oregon and scholar who works on the Fukushima disaster in Japan, I feel strongly that the public needs access to environmental impact analyses. We need to know what the impact is, and we also need to know where this waste will be shipped. What routes will be used and what is the risk to those communities? I am also very concerned about the plan to ship the waste to Utah or Texas. We are being told that these sites have no possibility of

contaminating groundwater, but according to the documentary film SOS – The San Onofre Syndrome: Nuclear Power's Legacy about the shutdown and waste from the San Onofre nuclear plant, the waste site in NM/TX is adjacent to the Ogallala aquifer that goes beneath 8 states and that it is used for drinking water and 30% of irrigation throughout the US. Additionally, there is not a good track record on disposing of this waste. We were told that the Yucca Mountain site was dry, which turned out to be false information.

I share the concerns about storing waste at Hanford given the danger to groundwater and the Columbia River. But I am also very troubled by the idea of off-loading our toxic waste onto another community. Do communities in these states have an understanding and voice in these decisions? The government has a responsibility to safely steward this waste and not dump it onto others.

Sincerely, Rachel DiNitto

I-57: Mary Ann Petersen

Comment I-57-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much

liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.

- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Mary Ann Petersen

I-58: Mary Ann Petersen

Comment I-58-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen

years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.

5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Mary Ann Petersen

I-59: Dwayne Hedstrom

Comment I-59-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

The form letter does a really good job of summarizing the information as i have been able to digest it and therefore i urge you to carefully consider the recommendations. thank you for considering my comment.

Sincerely,
Dwayne Hedstrom

I-60: Dwayne Hedstrom

Comment I-60-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.

5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely,
Dwayne Hedstrom

I-61: Cigdem Capan

Comment I-61-1

I wholeheartedly support the proposed changes, especially the grouting option for low activity waste. I would like to see the grouting done on-site to save money and prevent carbon emissions from shipment of millions of gallons of waste, and avoid the risk of spill during transportation.

I-62: Anonymous

Comment I-62-1

- 1 This proposal reads as though the parties are kicking the proverbial high-level waste can down the road again, which leads one to question when the parties will make a realistic agreement regarding high-level waste. Wouldn't it be more responsible to look for ways to more safely store the waste while developing a permanent disposal solution?
- 2. Over the past several decades, chemical make-up of the waste has been such a big hurdle in the waste treatment design/re-designs. How can you be sure that the direct feed configurations will not have an impact on the chemistry of the waste that will remain for future treatment? In other words, is treating portions of the tank waste without having a complete design for the entire chemical makeup the best plan?
- 3. Section IV.A.4 describes an approach for developing new permitting plans. What is the intent of not including all aspects of the consent decree in the permitting plans? This piecemeal approach to permitting plans seems inconsistent with the "holistic" negotiations concept.
- 4. Over the past 30 years, grouting tank waste has been considered numerous times with no success. What has changed to make grout a viable treatment method for tank waste now?
- 5. M-045-139, is there sufficient tank capacity available to wait until 2040 to initiate operation of the new tank storage capacity?

I-63: Sharon and Ace Hoffman

Comment I-63-1

To whom it may concern:

Sharon and Ace Hoffman

Please consider this document as a public comment on the "Proposed amendments to Tri-Party Agreement and Consent Decree". We would expect the response to public comments to address the questions raised, including where more complete and accurate data about the Hanford tanks can be found, why the timetable for tank cleanup remains subject to revision, and how the parties can agree to something that relies on technology that doesn't exist and may never work.

Hanford Tank degradation information is not easily accessible to the public	c:

Hanford in the state of Washington is an Environmental Protection Agency (EPA) Superfund site, and is widely recognized to be among the most contaminated places on Earth. The witch's brew at Hanford includes 177 enormous tanks filled with more than 1,800 different chemicals. 68 of the tanks (nearly 40%) "are assumed to have leaked." (See link 1 below) There is a 90-Day Comment Period on the Future of Tank Waste Cleanup at the Hanford Site which ends September 1, 2024. (See link 2 below)

The first tanks at Hanford were built during World War II to hold highly radioactive liquid waste from plutonium production during the Manhattan Project. (The Trinity and Nagasaki bombs both used plutonium and uranium, while the Hiroshima bomb was made with just uranium.)

To produce plutonium for nuclear weapons, uranium fuel rods were bombarded with neutrons in Hanford's reactors. For every two tons of uranium, about one pound of plutonium was created. After the fuel rods were removed from the reactor, they were left in a pool of water to cool (thermally and radioactively) for 2-3 months. Finally, the plutonium was chemically separated using an extremely toxic process. According to the National Park Service, "Once the plutonium was extracted, the chemically separated uranium, unwanted radionuclides, and chemicals used in the process became liquid waste and were put into underground waste storage tanks...".

There are 149 single-shell tanks at Hanford, constructed between 1943 and 1964 and designed to be used for about 20 years. In addition, there are 28 double-shell tanks built between 1968 and 1986. At least one of the double-shell tanks is assumed to be leaking, and the leak has been characterized as "contained" between the inner and outer shell. The word "contained" is not very reassuring, considering how many single-wall tanks have already leaked!

Plutonium extraction at Hanford continued through the late 1980s with several interruptions.

Like much of the information about Hanford, the exact dates and changes to the process are unclear. However, according to the Department of Energy, "The Plutonium Uranium Extraction Plant (PUREX) was the fifth and final chemical processing facility built at Hanford. The plant operated from 1956 to 1972, and again from 1983 to 1988." (See link 3 below)

In addition to waste from plutonium production, Hanford tanks contain waste from other activities at the site and waste created by the ongoing Hanford clean-up. According to contractor Washington River Protection Solutions (WRPS), "Hanford's tanks contain 56 million gallons [about 7.5 million cubic feet] of high-level radioactive and chemical wastes." (See link 4 below)

Officials have acknowledged tank leaks since at least 2012, but most likely some tanks began leaking much earlier. For example, according to the Washington State Department of Ecology: "Single-shell Tank T-111 was most recently declared leaking in 2013, after earlier leak concerns in the 1970s." As of July 2024, none of the 177 tanks have been dismantled, 57 are "assumed leakers," and "retrieval" has been completed for 21 tanks. After retrieval, the tanks still contain some waste (usually in the form of heavy sludge), and the tanks themselves are also highly toxic waste (like many structures at Hanford).

There is plenty of general information about the tanks, including several official sources. What is missing is a comprehensive official site that provides readily accessible information about each tank, its contents, and how much waste is presumed or known to be leaking from each tank. The official government site with the most detailed information about the Hanford tanks is called Phoenix. (See link 5 below)

Overall, the Phoenix site and its access tool have a wealth of information. For example, it's possible to see how full each tank is, and the portions of liquid, solid, and sludge waste. It's even possible to find some information about the isotopes in each tank. Unfortunately, there doesn't seem to be any data concerning what has already leaked from each tank or how much is leaking each year. (If this data is available, the government should make it accessible for researchers using modern data-analysis tools.)

In addition, Phoenix is difficult to use, data is inconsistent, and many referenced documents are not available online. Even when a document is available, it's not clear exactly what's in the waste. For example, a pdf of the 2015 report for Tank 241-C-101 describes a cleanup operation that began in December 2012 and took approximately 9 months. The cleanup included "modified sluicing and high-pressure water technologies." Tank 241-C-101 was cleaned to the point where: "A practicability evaluation determined that further waste retrieval action was impractical." After cleanup, 241-C-101 still contained 5,620 gallons (752 cubic feet) of waste.

The report states that "The C-101 waste that was retrieved was transferred to double-shell tank 241-AN-101." It is obvious that none of the contents of tank 241-C-101 had a "permanent" home as of 2013, but it's not clear how much additional waste was created during cleanup. How many tanks at Hanford only exist to hold the waste extracted from older tanks?

Despite the dearth of readily accessible data, it's abundantly clear that the Hanford tanks are an ongoing hazard to workers at Hanford, surrounding communities, and the Columbia River. Waste from the tanks is dispersed through air, water, soil, fish, mammals, reptiles, birds, insects, and plants. Perhaps the most frightening thing about the Hanford tanks is that the dangers have been known for more than half a century, and yet the solutions are still completely speculative.

The latest attempt to push tank waste cleanup even further into the indefinite future is an outrage.

The "Tri-Party Settlement Agreement" (the subject of the current public-comment period) leaves the door wide open for continued tank leaks and missed deadlines. (The three parties are: Washington State Department of Ecology (Ecology), US Department of Energy (DOE), and US Environmental Protection Agency (EPA).)

The settlement agreement frankly admits that the deadlines, which now extend to 2047, will need to be adjusted again, once more information has been obtained. This is because many of the waste cleanup processes for the Hanford tanks don't exist yet. For example, some tank waste will be incorporated into grout (nobody knows how) and the grout will be moved to someplace outside of Hanford (nobody knows where). According to the presentation at the public hearing, this unknown place must be outside Washington State, but the settlement agreement only specifies that the grout must be disposed of outside of the Hanford Nuclear Reservation.

Similarly, processes for separating and vitrifying high-level waste are not clearly defined, but are supposed to begin in 2033. Nobody knows if the planned facilities will be built by that deadline, or whether they will work, or how they will work. The presentation used during public meetings on the settlement agreement also includes a hint about future storage of tank waste: "Designing and constructing 1 million gallons of capacity for multipurpose storage of tank waste operating by 2040 in 200 West Area."

Does "multipurpose storage" imply a third generation of "temporary tank storage" at Hanford designed to hold less than 2% of the existing tank waste? Despite all the plans to turn tank waste into glass (vitrification) and grout, what are the chances that 1 million gallons will be sufficient for whatever is left?

The presentation also anticipates "Revising milestones for pretreatment and full operation of plant after starting treatment of high-level waste." High-level waste treatment is currently expected to BEGIN in 2033. Yet, the public is supposed to pretend that the deadline for closing the single-shell tank system (2043) will be met – 100 years after the the first single-shell tank was built with an anticipated lifetime of 20 years! (The fine print in the settlement document makes it clear that the 2043 deadline for closing the single-shell tank system is fiction, just like the 2047 deadline for completion of Hanford Tank cleanup.)

The public does not even have an opportunity to comment on the content of the settlement agreement itself. Public comments only apply to the underlying "Consent Decree" and the Hanford Federal Facility Agreement and Consent Order (HFFACO, or Tri-Party Agreement). In addition, the settlement agreement assumes that all the proposed changes are already in force, even while public comments are collected and discussed.

During the Q&A at one of the recent public hearings on Hanford tank cleanup, somebody asked why leaking tanks are not being dealt with more quickly. The answer was that funding determines the pace of cleanup -- if we prioritize cleaning up leaking tanks, we have to defer something else (perhaps an investment in new cleanup technologies that will never work).

By voting for the ADVANCE Act (passed 88-2 in the Senate and 365-36 in the House), Congress just gave billions of dollars to the nuclear industry to create more nuclear waste (and for a fleeting moment, some electricity that other methods could produce more reliably and cheaply). All that money needs to be used for cleaning up the enormous messes that the nuclear industry (military and so-called civilian) has created at Hanford and elsewhere.

Instead of funding new nuclear projects and "requiring" the NRC to promote nuclear power, Congress should fund nuclear waste remediation (don't call it cleanup because it will never be clean)!

The link at the beginning of this newsletter includes links to recordings of the public meetings about the settlement agreement, a link to the pdf of the agreement text, and information about how to submit comments.

Hanford's rivals for the title of most-contaminated place on Earth include Chernobyl in Ukraine, Fukushima in Japan, Windscale (aka Sellafield) in Great Britain, and Maiak in Russia (aka Mayak, Kyshtym, or Ozyorsk). Windscale was the site of Great Britain's plutonium production reactor, and Maiak was the Soviet Union's equivalent of Hanford. Both Windscale and Maiak had major accidents in 1957. (Kate Brown's book "Plutopia" offers a compelling discussion of the parallel histories of Hanford and Maiak.)

Chalk River in Canada also deserves a place in this list. Beginning in September 1945, Chalk River produced some of the plutonium for US and British nuclear weapons. Plutonium production at Chalk River continued intermittently until 1964. In 1952, Chalk River experienced the world's first nuclear reactor meltdown. The waste at Chalk River continues to contaminate the surrounding area and anything that lives there.

This article is the result of a public hearing concerning Hanford Cleanup Priorities that took place on March 6, 2024. (See link 6 below) During that hearing, one of the authors asked how the public could find data about the contents of the Hanford tanks. No answer was forthcoming either during the hearing or in response to a follow-up written comment which was submitted as requested (see below).

In researching this article, the authors found answers to some (but not all) of the questions we had asked in our previous public comment. It's worth noting that the DOE, which asked for those comments, did not reply to our request for data resources. We will continue to ask.

Sharon and Ace Hoffman Carlsbad, California USA

- (1) Source: Washington State Department of Ecology: https://ecology.wa.gov/waste-toxics/nuclear-waste/hanford-cleanup/tank-waste-management/tank-monitoring-closure
- (2) https://www.hanford.gov/pageAction.cfm/calendar/rl?&IndEventID=17119
- (3) Source: https://www.hanford.gov/files.cfm/PUREX Fact Sheet.pdf
- (4) Source: https://hanfordvapors.com/
- (5) https://phoenix.pnnl.gov/phoenix/apps/gallery/index.html
- (6) https://www.youtube.com/watch?v=5l kDxhXOLg
- (7) This document will be posted online at Ace Hoffman's blogspot

Previous comment as submitted April 5, 2024:

US Dept of Energy, Richland, WA

Attn: Jennifer Colborn
Dear Ms Colborn:

During the public hearing on March 6, 2024 I asked a question that the presenter did not have sufficient information to answer, and she requested that the question be submitted as a public comment so that she could research the question and provide a response. The specific question I asked during the public hearing was:

Part one: How much new contamination of groundwater, soil, and/or buildings has been found in the previous year?

Part two: In a typical year is the contamination getting worse, and if so, is it due to new leaks or new discoveries of already-occurring leaks?

I have several additional related questions:

- 1. On a yearly basis, how much "new" contamination of soil, groundwater, and structures is discovered at Hanford? How is the contamination measured? For example, for radioactivity is there a record of the number of Curies (or Becquerels) that are discovered each year? Are there measurements of the volume of "newly contaminated" soil, groundwater, and structures?
- 2. For each category (soil, groundwater, structures) how does the amount of "new" contamination compare to the amount of contamination cleaned up each year? (In other words, is the volume and/or radioactivity of known contaminated areas growing or not?)
- 3. Is there a URL where I can find historical records and current data indicating which radioactive isotopes are found in each tank, what type of waste (e.g., sludge versus liquid) contains the radioactive material, and the number of Curies of each isotope in each tank?
- 4. Is there a URL where I can find historical records and current data for the amount of different types of waste in each tank (e.g. sludge versus liquid)?
- 5. Is there a URL where I can find historical records of radioactivity released by each tank on a yearly basis? I am specifically looking for the isotopes released (in both Curies and volume), and the type of each release (e.g., vapor, liquid, sludge).
- 6. Is there a URL where I can find historical records concerning the materials (e.g., contaminated water, contaminated dirt, contaminated clothing, etc.) that were put into each tank at Hanford and when additional materials were added to existing tanks?
- 7. Is there a URL where I can find historical records and current data concerning non-radioactive chemicals stored in and/or released from each tank? For example, heavy metals, PFAs (Per- and Polyfluorinated Substances), DDT (Dichlorodiphenyltrichloroethane), and plastics would all be part of this data set.
- 8. What proportion of the total waste (in Curies and by volume) is expected to be vitrified eventually?
- 9. As vitrification begins, what URL will allow citizens to track the vitrification process including Curies and volume of waste that have been successfully vitrified?
- 10. What types of waste streams are not eligible for vitrification and why is certain waste ineligible? For example, is some waste ineligible due to the isotopic concentrations in the waste and/or is some waste ineligible due to being liquid?
- --- end of comments submitted in response to March 6, 2024 public hearing ---

I-64: Carol Van Strum

Comment I-64-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

We are calling on the TPA agencies to undertake the most protective cleanup possible, given the enormously high stakes for the Columbia River and everyone who depends on it.

In developing changes to the Tri-Party Agreement and the Consent Decree, we demand that:

The federal government treats tank waste as the law requires. The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste, Energy should permanently abandon plans to apply this definition at Hanford;

The TPA agencies provide adequate information and opportunities for the public to comment on major proposed changes to cleanup, such as the adequacy of proposed new tank capacity and the proposal to ship large volumes of tank waste through communities in liquid or solid form;

Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere.

Environmental reviews are available to the public to review while commenting on the proposed changes. The agencies seem to be putting the cart before the horse, making sweeping changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions.

The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them.

Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them.

I-65: Nancy Morris

Comment I-65-1

Dear U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA The Columbia River is the lifeblood of the Northwest.

The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site.

This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River. We are calling on the TPA agencies to undertake the most protective cleanup possible, given the enormously high stakes for the Columbia River and everyone who depends on it. In developing changes to the Tri-Party Agreement and the Consent Decree, we demand that: The federal government treats tank waste as the law requires. The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste, Energy should permanently abandon plans to apply this definition at Hanford; The TPA agencies provide adequate information and opportunities for the public to comment on major proposed changes to cleanup, such as the adequacy of proposed new tank capacity and the proposal to ship large volumes of tank waste through communities in liquid or solid form; Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere. Environmental reviews are available to the public to review while commenting on the proposed changes. The agencies seem to be putting the cart before the horse, making sweeping changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions. The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them. Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them.

I-66: Cheryl Roach

Comment I-66-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment. Your decisions and actions have a great effect me and the people I love. I spent the early 1/3 of my life living just north of Hanford and have had thyroid and other issues that hang over me. My daughter and grandchildren live downstream from Hanford, and many relatives live in the Trinities. Please use your position to watch out for and protect the people who trust and rely on you.

Sincerely, Cheryl Roach

I-67: Steve Royal

Comment I-67-1

Dear To Whom It May Concern,

following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

With all due respect, the current comment period is lacking basic technical knowledge regarding what ingredients the grout contains, and its efficacy to contain long half life nuclear isotope contaminated liquids rendering said current comment period, in my view, worthless.

Thank you for considering my comment.

Sincerely, Steve Royal

I-68: Steve Royal

Comment I-68-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Steve Royal

I-69: Anneka Reiter

Comment I-69-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Anneka Reiter

I-70: Anneka Reiter

Comment I-70-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Anneka Reiter

I-71: Micheal Mintz

Comment I-71-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Michael Mintz

I-72: John Ruhland

Comment I-72-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, John Ruhland

I-73: John Ruhland

Comment I-73-1

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, John Ruhland

I-74: Jonelle Kemmerling

Comment I-74-1

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Jonelle Kemmerling

I-75: Carol Van Strum

Comment I-75-1

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Thank you for considering my comment.

Sincerely, Carol Van Strum

I-76: Carol Van Strum

Comment I-76-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Carol Van Strum

I-77: Leslee Engler

Comment I-77-1

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.STOP LYING TO PEOPLE ABOUT HOW YOU ARE POISONING THEM

Sincerely, Leslee Engler

I-78: Howard Sharpiro

Comment I-78-1

My comment concerns grouting vs vitrification: My experience as a ceramic artist has informed me that grouting has a limited life and eventually begins to decompose allowing the elements to re-enter the environment. Grouting could be used as a temporary fix but considering the very long half life of radioactive components it is obvious that a more permanent solution is required. Therefore, I urge you to vitrify the material into glass which will prevent leaks and further contamination in the long run. I am concerned with the out-gassing of toxic materials during the vitrification process so that is an issue to be considered. However, for long term safety and cost effectiveness, vitrification, I believe is the best and safest course of action.

I-79: Alice Sharpiro

Comment I-79-1

When the Atomic Energy Commission wanted a bomb, they pulled out all the stops, took over land, displaced indigenous tribes, and created a virtual wasteland in healthy desert terrain and on the shores of our precious Columbia River and its resources. There was no expense too great for this effort.

Now it is way past time to clean up their mistakes and yet, even after 80 years, the danger still remains to the river and land very close to where I and my grandchildren live, as well as countless other species of life. The land belonging to the displaced indigenous people is virtually ruined with very little, if any, effort to mitigate the situation.

I am a biologist and could supply more technical comments. However, you know the science, you know the best practices. There are numerous scientists, just as intelligent and skilled as those you so strongly supported during the Manhattan project, who can help you find viable solutions if you don't already have them.

STOP THE DELAY! TAKE ACTION NOW! CLEAN UP THE HANFORD NUCLEAR SITE!

I-80: Rhonda Armbrust

Comment I-80-1

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Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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Thank you for considering my comment.

Sincerely, Rhonda Armbrust

I-81: Rhonda Armbrust

Comment I-81-1

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Thank you for considering my comment.

Sincerely, Rhonda Armbrust

I-82: Nancy Arbuckle

Comment I-82-1

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Thank you for considering my comment.

Sincerely, Nancy Arbuckle

I-83: Nancy Arbuckle

Comment I-83-1

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Thank you for considering my comment.

Sincerely, Nancy Arbuckle

I-84: Thomas Gordon

Comment I-84-1

The "holistic" agreement looks more like Swiss cheese than a reliable document.

To begin with, the nearby Indian tribes should have been included.

Also, hearings should have been included where transported LAW waste is proposed to pass through and by which means.

The waste tanks are leaking now and the waste needs to be treated as soon as possible. Enough studies have been done.

Also, this agreement needs to have a provision if the High Activity Waste Vitrification Plant is not operational by 2033.

This waste should not be allowed to sit indefinitely.

Thank You, Thomas Gordon

I-85: Pedro de la Torre III

Comment I-85-1

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Thank you for considering my comment.

Sincerely, Pedro de la Torre III

I-86: Pedro de la Torre III

Comment I-86-1

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Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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Thank you for considering my comment.

Sincerely, Pedro de la Torre III

I-87: Tonya Enger

Comment I-87-1

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Thank you for considering my comment.

Sincerely, Tonya Enger

I-88: Tonya Enger

Comment I-88-1

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Thank you for considering my comment.

Sincerely, Tonya Enger

I-89: Ian Freeman

Comment I-89-1

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Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Ian Freeman

I-90: Aliah O'Neill

Comment I-90-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.

- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Aliah O'Neill

I-91: Aliah O'Neill

Comment I-91-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.

- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Aliah O'Neill

I-92: Patrick Henry

Comment I-92-1

Stop the leaks.
Protect our waters.
Solve this problem now.

I-93: Carol Van Strum

Comment I-93-1

I strongly support accelerating removal of waste from tanks in the 200 West Area. This is where 2 of the 3 tanks that are currently leaking are located. Acceleration is only possible if this waste can be treated and solidified into a grout and disposed offsite – in licensed facilities that have no groundwater. However, the waste must be treated and solidified before it is shipped up to 1,900 miles for disposal.

• Washington State and Ecology need to adopt conditions that ensure the wastes will be treated and solidified before shipment through Spokane or Oregon. Treatment and solidification before shipment is available and a necessary mitigation measure for inherently greater risks from shipping liquid wastes. Under SEPA, Ecology has a duty to adopt such a mitigation measure before it can adopt any USDOE NEPA finding of no significant impact or that

impacts were discussed in an outdated EIS 25 years ago.

- If shipping liquids is not ruled out, then an EIS is needed before the agreement adopts this program. I want public hearings on an EIS with discussion of potential impacts and alternatives in my community.

 o An EIS needs to consider route specific risks, including through Spokane, Oregon communities, Tribal reservations and "highly impacted communities" identified under Washington's environmental justice law.

 o An EIS needs to include the cumulative risks from USDOE's related decision to ship liquid "secondary wastes" from Hanford tanks to the same potential disposal sites.
- Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval. o The priority for which tank farms have waste removed on an accelerated schedule should be based on preventing more tank leakage. T-Farm, with 2 leaking tanks, should be prioritized to have waste removed. Otherwise, tanks T-101 and T-111 are likely to keep leaking for decades.
- USDOE should be required to continue to retrieve waste from tanks in the 200 East Area after 2028 while also starting to retrieve waste from tanks in

Heart of America Northwest Comment Guide to Hanford Tank Waste Holistic Agreement August 2024

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200 West. Enforceable milestones need to be added for removal of leakable liquids from 200 West tanks using in-tank pretreatment followed by treatment to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.

- Pursuant to federal and state hazardous waste laws, removal of leakable liquids is required "as soon as practicable." The Agreement fails to include any commitment to meet this fundamental environmental protection standard. If removal of liquids from a leaking tank is documented as not being practical, then that tank should be prioritized for early retrieval.
- The agencies must explain the rationale for why they did not include the tank farm with leaking tanks (T Farm) to be amongst the 3 tank farms they chose to be retrieved by 2040 in the Agreement.
- An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.
- Under the Agreement, milestones would be revised within a few years after the startup of the vitrification plant for High-Level Nuclear Waste. This does

not take into account the likelihood that the High-Level Vitrification Plant will not get completed on time or will have significant safety and engineering obstacles. The agencies should adopt an earlier alternative trigger to start negotiating a "Plan B".

I-94: Lynne Ashton

Comment I-94-1

I'm deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks. Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

I want an EIS before the agencies adopt this program – with public meetings along the shipment routes - or a binding condition that liquids will not be shipped through Oregon or Spokane.

I-95: Dwight Rousu

Comment I-95-1

Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval. The priority for which tank farms have waste removed on an accelerated schedule should be based on preventing more tank leakage. T-Farm, with 2 leaking tanks, should be prioritized to have waste removed. Otherwise, tanks T-101 and T-111 are likely to keep leakingfor d ecades.

I-96: Elena Rumiantseva

Comment I-96-1

I'm deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks. Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

I strongly support accelerating removal of waste from tanks in the 200 West Area. This is where 2 of the 3 tanks that are currently leaking are located. Acceleration is only possible if this waste

can be treated and solidified into a grout and disposed offsite – in licensed facilities that have no groundwater. However, the waste must be treated and solidified before it is shipped up to 1,900 miles for disposal. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval.

It's surprising that an Environmental Impact Statement was not initiated. An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.

I-97: Derek Dexheimer

Comment I-97-1

Appropriate, vigorous action must be taken NOW to empty leaking tanks and remediate their waste into a safe form before shipping, not in 2040.

Hanford's single-shell radioactive waste tanks are leaking NOW, and no adequate action is being taken to stop the leaks. This contamination is endangering the Columbia River.

Leaking tanks must be prioritized for removal of all liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval.

USDOE should be required to continue to retrieve waste from tanks in the 200 East Area after 2028 while also starting to retrieve waste from tanks in 200 West. Enforceable milestones need to be added for removal of leakable liquids from 200 West tanks using in-tank pretreatment followed by treatment

to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.

An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.

Hanford's radioactive contamination is an existential threat to life on the West Coast. Solidifying and removing tank waste must be a higher priority.

I-98: Richard Ellison

Comment I-98-1

August 28, 2024

Commenting on Hanford's Proposed amendments to Tri-Party Agreement and Consent Decree

Hello,

I visited the Hanford site with a congressional aide tour in 1985. At that time if became obvious that Hanford officials were deliberately misleading the public about the amount and severity of the leaks from single walled high level nuclear waste tanks to the environment.

I have commented at your public forums over the years in Seattle, to encourage the responsible cleanup of these tanks and other wastes. Repeatedly USDOE has tried to delay cleanup and cleanup goals, and this is new proposal is not acceptable. Repeatedly USDOE has promised to accelerate cleanups but then delays and finds other risky alternatives. There must be a new EIS if wastes are to be transported offsite, especially untreated wastes.

The government continues to act highly irresponsibly by not stopping the leaking of high level nuclear wastes from its single walled tanks. These tanks have been known to be prone to leakage, and have repeatedly failed. The risk of leaks reaching the groundwater, which likely already has, are significant. Trucking nuclear wastes through populated areas before being properly treated is also extremely dangerous to the public and environment. All of these issues must be evaluated in a new EIS.

I request public hearings for a new EIS – with discussion of potential impacts and alternatives – in my community, and other communities throughout Washington and Oregon. Any EIS needs to consider transport route individual risks, including communities like Spokane and others in Oregon or any along the travel corridor. This should include Tribal reservations and other "highly impacted communities" identified under Washington's environmental justice law. Any EIS needs to include the cumulative risks from USDOE's related decision to ship liquid "secondary wastes" from Hanford tanks to out of state potential disposal sites.

Why isn't Washington State extremely concerned about USDOE's proposed trucking millions of gallons of liquid waste through heavily populated areas and across important waterways? What are the risks of impacts if there is an accident or terrorist attack that results in the spilling of these highly toxic, long lasting nuclear wastes to citizens and the natural environment?

Why isn't Washington joining Oregon in urging that the wastes are treated and solidified before being shipped 1,575 to nearly 1,900 miles to be disposed in Texas? Why isn't Washington Ecology at least insisting that an environmental impact statement (EUIS) be prepared to consider the risks and alternatives before the agreement adopts this program?

LEAKING HIGH LEVEL WASTE TANKS CLEANUP

USDOE should remove liquids from the High Level Waste tanks that are currently leaking regardless of alternatives. This waste can be treated and solidified into a grout and disposed offsite – in licensed facilities that have no groundwater. But, the waste must be treated and solidified if it is shipped offsite, possibly up to 1,900 miles, for disposal. It is necessary to "do no further harm."

EPA and Ecology have repeatedly found "serious" leaks from single walled High Level Waste Tanks, and promises were made to the public in the past to remove all wastes from single

walled tanks and move them to double walled tank. But still this has not been accomplished. On August 15, USDOE announced that a third High-Level Nuclear Waste tank is actively leaking (Tank T-101). High levels of contamination from the Tank B-109 leak had already traveled about a third of the way through the soil towards the groundwater that flows to the Columbia River, when that leak was announced in April 2021.

By postponing cleanup deadlines, USDOE avoids accountability and safety risks grow. Do not allow the past TPA deadlines to be denied.

The priority for which tank farms have waste removed on an accelerated schedule should be based on preventing more tank leakage. T-Farm, with 2 leaking tanks, should be prioritized to have waste

removed. Otherwise, tanks T-101 and T-111 are likely to keep leaking for decades.

USDOE must be required to continue to remove waste from tanks in the 200 East Area after 2028, while also starting to retrieve waste from tanks in 200 West. Enforceable deadlines need to be added for removal of all leakable liquids from 200 West tanks, using in-tank pretreatment followed by treatment

to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.

Government proposals for the adoption of less protective cleanup standards and to either leave contamination in place – where it will exceed standards for thousands of years, or transport highly toxic and dangerous untreated wastes through populated areas, over a thousand miles is highly irresponsible.

COLUMBIA SHORELINE AREA CLEANUP

To honor Treaty rights and federal environmental justice commitments, USDOE should be required to accelerate cleanup along the Columbia River. USDOE should be required to cleanup to levels that will protect Native Americans exercising Treaty rights along the River in the next decade rather than leaving contamination in place at levels that will greatly exceed standards for hundreds of years.

Thank you,

Richard Ellison, MS Botany 8003 28th Ave NE Seattle, WA 98115 climbwall@msn.com

I-99: Anonymous

Comment I-99-1

Hello and thank you for the opportunity to comment. Over thirty years ago I worked on a documentary about Hanford's toxic legacy, and am stunned (but sadly not surprised) that the dangers have not been meaningfully addressed in the intervening decades.

Now it's 2024 and once again efforts to meaningfully address the ongoing crises fall short. I'm deeply concerned that Hanford's tanks continue to leak without any action to stop the leaks. The Agreement must include enforceable requirements to remove leakable liquids from leaking tanks starting next year, and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. Is this so much to ask? It is not acceptable to let those tanks keep leaking until sometime after 2040. How is it that we continue subsidizing pollution all over the nation yet lag so hard on cleaning up messes dating back to the mid 20th century?

Additionally, Washington State and Ecology need to adopt conditions that ensure the wastes will be treated and solidified before shipment through Spokane or Oregon. Treatment and solidification before shipment is available and a necessary mitigation measure for inherently greater risks from shipping liquid wastes. This is a no-brainer--it would be grossly negligent to do otherwise. And under SEPA, Ecology has a duty to adopt such a mitigation measure before it can adopt any USDOE NEPA finding of no significant impact or that impacts were discussed in an outdated EIS 25 years ago.

Pursuant to federal and state hazardous waste laws--and proper care for the health of one's neighbors, the general public and the wildlife of the Pacific Northwest--removal of leakable liquids is required "as soon as practicable." The Agreement fails to include any commitment to meet this fundamental environmental protection standard. If removal of liquids from a leaking tank is documented as not being practical, then that tank should be prioritized for early retrieval.

The agencies must also explain the rationale for why they did not include the tank farm with leaking tanks (T Farm) to be amongst the 3 tank farms they chose to be retrieved by 2040 in the Agreement. Not only is 2024 a grossly slow timeline that keep sour communities in danger--it doens't even include all of the leaking tanks!

Lastly, an EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.

Thank you again for the opportunity to comment and for considering our comments.

I-100: David McCracken

Comment I-100-1

I'm writing to request that nuclear waste from Hanford not be shipped by truck through Spokane, Oregon or over mountain passes when an alternative exists to solidify the waste before disposing of it. This is dangerous stuff: we do not want it contaminating the Columbia River or any other place. Shouldn't an EIS be filed before the waste is moved? I don't want to slow down the process of safely disposing this waste, but the disposing certainly does need to be done safely.

I am also concerned that two leaking tanks are still leaking and that a third has been found to be leaking as well. Surely there should be quick action to empty these leaking tanks, Easier said than done, no doubt, but nonetheless it must be done. Allowing these to leak towards the Columbia is...well, couldn't we call it "crazy"?

Please:

- 1. Take action to stop or reduce leaks in all the tanks.
- 2. Treat and solifidy waste is currently leaking tank ASAP.
- 3. Ship the solid waste safely to the permanent disposal site.

Thank you,
David McCracken
6565 4th Ave NE #306
Seattle 98115

I-101: John and Polly Wood

Comment I-101-1

You all know the reasons that the general population resists and rejects your plan to ship liquid radioactive waste through the state. Our family is one of those. We know it is important to do something about the waste, but we also recognize (as do you as evidenced by your resistance to acting on the clean-up) that there is more at risk by shipping now than by acting to vitrify the waste and ship it when it is relatively safer to do so. Vitrify, then ship, if it must be moved. Geez, the money you go through to do nothing at all, until you "must" put us all at greater risk all of a sudden. The difference between the storage of liquid waste and a dirty bomb is the simply the time it takes for the radiation to spread everywhere. We see trains and trucks lose their cargo all the time. Don't ship liquid waste at all.

I-102: David Turnoy

Comment I-102-1

I'm deeply concerned that

Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks. Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

I-103: Karen Mensinger

Comment I-103-1

Above all else, the people of Washington and Oregon, and the Columbia River must be protected from any further possible leaks of radioactive waste! The leaking tanks must be sealed and transporting any waste out of the Hanford Project forbidden!

I-104: Ellen Rumel

Comment I-104-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Ellen Rumel

I-105: Jonathan Betz-Zall

Comment I-105-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Jonathan Betz-Zall

I-106: Kevin Gallagher

Comment I-106-1

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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you.

Sincerely, Kevin Gallagher

I-107: Patricia Morton

Comment I-107-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Members of my family were made sick by leaks at Hanford. A proper cleanup at Hanford matters to me a great deal.

Thank you for considering my comment.

Sincerely, Patricia Morton

I-108: Carolyn Croom

Comment I-108-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Carolyn Croom

I-109: Carolyn Croom

Comment I-109-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Carolyn Croom

I-110: Robert Richard

Comment I-110-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment. This must be prioritized like the Manhattan Project was for World War, but without the haste for our Earth.

Sincerely, Robert Richard

I-111: Robert Richard

Comment I-111-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Robert Richard

I-112: Carolyn Treadway

Comment I-112-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment. Hanford has been far too lethal for far too long.

Sincerely, Carolyn Treadway

I-113: Eric Adman

Comment I-113-1

I support removing waste from Hanford for disposal offsite where there is no risk to contaminate groundwater or a river. I live in Kenmore, WA. I expect my Washington State agencies and Governor to use every power they have to ensure that liquid radioactive wastes are not shipped through downtown Spokane when there is a far safer alternative to treat and solidify Hanford's tank wastes before they are shipped for disposal. I want an EIS before the agencies adopt this program.

I strongly support accelerating removal of waste from tanks in the 200 West Area. This is where 2 of the 3 tanks that are currently leaking are located. Acceleration is only possible if this waste can be treated and solidified into a grout and disposed offsite – in licensed facilities that have no groundwater. However, the waste must be treated and solidified before it is shipped up to 1,900 miles for disposal.

Washington State and Ecology need to adopt conditions that ensure the wastes will be treated and solidified before shipment through Spokane or Oregon. Treatment and solidification before shipment is available and a necessary mitigation measure for inherently greater risks from shipping liquid wastes. Under SEPA, Ecology has a duty to adopt such a mitigation measure before it can adopt any USDOE NEPA finding of no significant impact or that impacts were discussed in an outdated EIS 25 years ago.

If shipping liquids is not ruled out, then an EIS is needed before the agreement adopts this program. I want public hearings on an EIS – with discussion of potential impacts and alternatives – in my community.

An EIS needs to consider route specific risks, including through Spokane, Oregon communities, Tribal reservations and "highly impacted communities" identified under Washington's environmental justice law.

An EIS needs to include the cumulative risks from USDOE's related decision to ship liquid "secondary wastes" from Hanford tanks to the same potential disposal sites.

Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval.

The priority for which tank farms have waste removed on an

accelerated schedule should be based on preventing more tank leakage. T-Farm, with 2 leaking tanks, should be prioritized to have waste removed. Otherwise, tanks T-101 and T-111 are likely to keep leaking for decades.

USDOE should be required to continue to retrieve waste from tanks in the 200 East Area after 2028 while also starting to retrieve waste from tanks in 200 West. Enforceable milestones need to be added for removal of leakable liquids from 200 West tanks using in-tank pretreatment followed by treatment to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.

Pursuant to federal and state hazardous waste laws, removal of leakable liquids is required "as soon as practicable." The Agreement fails to include any commitment to meet this fundamental environmental protection standard. If removal of liquids from a leaking tank is documented as not being practical, then that tank should be prioritized for early retrieval.

The agencies must explain the rationale for why they did not include the tank farm with leaking tanks (T Farm) to be amongst the 3 tank farms they chose to be retrieved by 2040 in the Agreement.

An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.

Under the Agreement, milestones would be revised within a few years after the startup of the vitrification plant for High-Level Nuclear Waste. This does not take into account the likelihood that the High-Level Vitrification Plant will not get completed on time or will have significant safety and engineering obstacles. The agencies should adopt an earlier alternative trigger to start negotiating a "Plan B".

I-114: Mrs. Susan & Mr. Peter Risser

Comment I-114-1

The dangerous radioactive liquid must never be transported by any by publicly exposed methods

but the leaking tanks cannot be left as they are to continue polluting the river. Find a way to dehydrate the liquid before transporting it !! And STOP MAKING MORE !!!

I-115: Sharon Fasnacht

Comment I-115-1

I am a former resident of the Tri-Cities and I'm deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action, or very little, to stop the leaks.

Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove liquids from leaking tanks AS SOON AS POSSIBLE and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

It is also not acceptable not to consider the earthquake that has been predicted under Hanford, and not to pursue current information on when that earthquake might take place. It is not acceptable not to include the possible outcome of that predicted earthquake, and what must be done to ALL TANKS, AS SOON AS POSSIBLE, including those that are already leaking.

It is my considered opinion that the tri-parties managing Hanford cleanup need to include information regarding this "pending" earthquake in every plan they develop. There are those agencies and personnel who can predict when an earthquake will happen and their severity quite accurately

If there is an earthquake pending at any time in the future under Hanford, then a plan must be considered to solidify ALL waste so that it can be transported more safely, and "move all that waste ASAP to a safe storage area with no rivers or ground water, like those in Texas, etc.. Our Government should be investigating additional safe storage sites to reduce the distance solidified waste must be transported to be stored.

Thank you, Sharon Fasnacht

I-116: Shelley Cimon

Comment I-116-1

To: Tri-Party Agencies for the Public Comment period concerning the Proposed Holistic Settlement Agreement

Thank you for this opportunity to weigh-in on the Proposed Holistic Settlement Agreement. Many of us have been waiting a long time for this chance to share our perspectives on potential changes in Hanford clean-up through these newly agreed paths. Hopefully and successfully, this Agreement will lead this site to further risk reduction through identification of wastes and their volumes and put forward sustainable treatment options and permanent disposition pathways we can all support.

My mind is focused on the issue of grout. As I cut through the zealotry that we ALL have for reducing the radiological and chemical burden at the Hanford site, I have to say that I don't believe that it is morally responsible to burden another community with untreated waste for which there is no technically successful solution in place (built and tested), at the receiving site for processing.

There should be no need for DOE to block waste that is bound for other sites from coming back to Hanford. DOE can prevent the need for it to come back if DOE has done due diligence. By this I mean take cradle to grave responsibility, site-by-site. This, to me, means that DOE should not agree to the transport of any waste if there is a potential for waste to become orphaned. We

need only to look at the 2,100 metric tonnes of plutonium that was shipped to Savannah from Hanford for processing that never occurred, or, to continue on, part of that plutonium that was then shipped on, in the dead of night and now resides in Nevada. All of this material awaits permanent disposition. Scattering of any radionuclide forms around out country is not the answer.

This negotiation was done behind completely closed doors. It is a shame. I was a participant in the Tank Waste Task Force, which helped the chief negotiators for USEPA, USDOE and WDOE bring the Single-Shelled Tanks into Tri-Party Agreement Milestones. The diversity and wealth of perspectives, lay and technical folks, drove the negotiators, when they were at loggerheads, to search successfully for solutions.

So, now we find ourselves as observers to this negotiation peeling back the layers and seeing disconnects between data deliver timelines and timelines outlined for cleanup decisions that would greatly benefit from needed data. The data gaps, data we are all dependent on to understand the scope and scale and timeline of the grout campaign, for example, do not exist. We don't see anticipated volumes, or the risks identified and the technical analysis needed to determine viable solutions for shipment of solid vs liquid forms of waste. The public should laud the analysis of the National Academy of Sciences which states that a solid waste form is more resilient than liquid.

There are Milestone dates that make me question the achievability of not just this project, but the critical start-up of the Waste Treatment Plant and all of it's needed facilities. There are Milestone dates that are questionable. Specifically I have been thinking about the miles of cross-site transfer lines which are imperative (a single point failure) to the success of managing and moving, for processing, literally millions of gallons of tank waste. I believe that use/reuse of these lines is an assumption right now. It's incumbent to "get on with it" right now and assess and characterize the extent of conditions of both the 3160 line (sludge) and the 3150 line for liquids. The assessment, alone will take considerable time. The public and Ecology need to know the extent of conditions and the projected scope of a project to get them into working condition and permitted. This seems, to me, to be critical path. Additionally, since covid, materials are potentially more difficult to procure.

We have another leaking tank at Hanford. I think I can safely say that a proposed 1,000,000 gallon new tank will not be enough contingency. Ask for what you need.

It is time for DOE to layout a "Roadmap" for the public, literally a map with the Milestone dates and all permitting and new building facilities and retrofitting of infrastructure needed in order to bring the WTP on line. This needs to happen now, in order to clearly identify the integration of all new facilities and infrastructure and permitting needed to bring the WTP on line.

I was pleased to see agreement on the ability for Ecology to further access all data and documents. This will support agreements furthering more informed, sustainable and implementable decisions for cleanup of the Hanford site. I would like to understand how that will occur for them.

Recommendations specific to the grout issue:

<u>Environmental Impact Statement:</u> Conduct a full supplemental EIS or, in lieu of that, meet all NEPA requirements.

a)It should describe/define the grouting campaign, cradle to grave. (scale, volume of campaign, transport, off-site permanent disposition).

b) Everyone should understand the legal benchmarks that define when a tank can be declared successfully retrieved.

Treatment:

- 1) Begin with a commitment to fully process all ear-marked liquid waste at the Hanford site into a grouted form prior to off-site disposition. The MASF facility being used for Mock-ups of remediation projects is a brilliant success and one sign that the site knows how to successfully and safely address risk reduction in projects managing liquid waste. Keep the work and jobs at Hanford.
- 2) Define the technical course needed to stabilize liquid waste in grout, (volumes and ratios of contaminant to grout), including, especially, the total anticipated campaign volumes. The public can accept and even champion a campaign of this sort when seeking budgets if it is well defined, associated transport risk is clearly analyzed and DOE seeks to educate the public and initiate a dialogue. The more comprehensive, the better.
- 3) Wait for the needed data: Defer decisions determining treatment on or off-site, (M-062-24-04), until delivery and analysis of the Test Bed Initiative results. The budget was spent to have a data platform that supports a decision based in logic. Wait.

Transport:

The State of Oregon held well attended informationals in cities all along the transportation routes for TRU material leaving Hanford and bound for permanent disposition in the WIPP site in New Mexico. Including safe havens when dealing with inclement weather. I believe that grouted material transport will be more readily accepted by the public and assuredly IS a lower risk than the transport of liquid waste. I live in Eastern Oregon, in a mountain valley. Our winters are fierce and mountain passes and canyons the most talked about, by truckers, in the nation. We have had a radioactive shipment crash on I-84, just as it was leaving my valley. Don't ship liquids. Hold informational meetings and include the public in discussions.

Quantify the duration of the campaign and volumes to be transported. Is is by truck, or train?

Other questions:

- 1)I can't speak to the technical components of the negotiations with any authority but I concur with what Oregon Department of Energy has submitted and hope that you will heed their observations and concerns.
- 2) What happens ""if?" There is no Plan B.
- 3) Thank you for the forbearance on the interpretation of HLW.

- 4) I'm not thrilled with the holding place of 2043. We need an operational plant. It would seem that negotiations should be ongoing from now on. Every three years look at sequencing seems too long as does the six year date for talking about all topics.
- 5) With A-104 and A-105 needing additional treatment technologies, it's important for this type of project to be included in a Roadmap for everyone. Add this to the proposed Roadmap. Get on with bench-scale studies. I wonder how DOE can successfully integrate these kind of tank anomalies/intricacies into treatment at the WTP?
- 6) How do you three agencies decide what the scale (boundary and type) of information is needed to inform a change in project? Are you using a FEPS model? Where does public input play a role?

Thank you, Shelley Cimo

I-117: Sean Edmison

Comment I-117-1

I write in support of the removal of waste from Hanford for disposal offsite, in a location clear of rivers, lakes, and groundwater. As a Washington resident, I expect our governor to use every possible means and power to prevent radioactive wastes from being shipped through major metropolitan areas like Spokane, particularly when such waste products could be rendered solid prior to transport. At a bare minimum, a full and robust environmental impact statement should be developed, taking into consideration both the likely and the possible effects of the transport of radioactive liquid waste products and any spill of such products along the route.

Furthermore, I am extremely dismayed that Hanford's High-Level Nuclear Waste tanks continue to leak, and that no action seems to have been undertaken to stop these leaks. Even in the brief period since public meetings on the Agreement were held in July, the Department of Energy has announced that a third tank is now leaking. It is impossible for me to believe that DOE did not know about this leak prior to the July meetings, and it is unconscionable that such information not be disclosed promptly, in particular given that multiple people raised concerns that the Agreement provides no specific actions to address and remediate the tank leaks. The Agreement must be updated to include specific, measurable, and enforceable requirements to remove liquids from leaking tanks starting no later than next year, and to prioritize full retrieval of wastes from the tank farms that have known leaks. It is absolutely unacceptable to allow tanks in the B and T Farms to continue leaking for another decade and a half.

I-118: Doris Cellarius

Comment I-118-1

I live in Oregon near the Columbia River. People in Oregon and elsewhere are threatened by this plan - which must change!

DOE must accelerating removal of waste from tanks in the 200 West Area. This is where 2 of the 3 tanks that are currently leaking are located. Acceleration is only possible if this waste can be treated and solidified into a grout and disposed offsite – in licensed

facilities that have no groundwater. Those facilities are in West Texas and Utah. The West Texas facility (WCS) is the likelier facility to dispose of most of the lower radiation waste removed from tanks in 200 West based on its license conditions. The distance to truck the waste from Hanford to WCS in West Texas is approximately 1,575 miles if the most direct route through Oregon is taken. That route would require trucking waste over the dangerous Emigrant Pass and through the reservation of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

If trucked (or rail) through Spokane, the shipments would go through downtown Spokane and through some of the most "highly impacted" / "overburdened" communities in Washington as identified under our environmental justice law (the HEAL Act). This route adds 300 miles to the truck route and has several dangerous mountain passes.

Fortunately, there is a far safer, and readily available, alternative to trucking or rail shipping untreated liquid radioactive chemical waste from Hanford to Texas (or UT) for disposal: Immediately adjacent to the Hanford site is a licensed commercial radioactive hazardous waste treatment facility, "Perma-Fix NW". This facility already treats large amounts of more radioactive hazardous waste every year, which is returned to Hanford for disposal. Perma-Fix NW was the facility that did the first successful test as part of USDOE's "Test Bed Initiative" solidifying and treating low radiation Hanford tank waste which met the standards for disposal at WCS in Texas.

I-119: Janna Rolland

Comment I-119-1

Dear Department of Ecology:

I'm deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks.

Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval.

Washington State and Ecology need to adopt conditions that ensure the wastes will be treated and solidified before shipment through Spokane or Oregon. Treatment and solidification before

shipment is available and a necessary mitigation measure for inherently greater risks from shipping liquid wastes. Under SEPA, Ecology has a duty to adopt such a mitigation measure before it can adopt any USDOE NEPA finding of no significant impact or that impacts were discussed in an outdated EIS 25 years ago.

Thank you.

I-120: Faye Vlieger

Comment I-120-1

Both Federal and Washington State law require notification of leaking tanks. The US Dept. of Energy has historically ignored and delayed reporting tank leaks. Their reporting on the kind and quantity of tank leaks always lags the spill to the determent of the environment and community.

While the Agreement calls for the waste from 22 Single Shell Tanks in three "tank farms" in the 200 West Area to be retrieved by 2040, T-Tank Farm is not one of the three tank farms that would have waste removed.

USDOE and Washington Ecology did not even agree to prioritize retrieving waste before 2040 from the "T Tank Farm" where two of the leaking tanks are.

Given DOE's past performance it is not surprising that they are not prioritizing the cleanup of the leaking tanks.

I oppose this latest smoke screen of a proposal unless all of the leaking tanks are included in the plan.

Faye Vlieger

I-121: Linda Andersson

Comment I-121-1

I support removing the waste from Hanford to a place where there is no chance of harming life of any form. I honestly don't see why we continue to use nuclear power. The cancer rates of people living near these plants is much higher than the national average, which is also much higher than any other first-world country on the planet. We Americans are being poisoned by so many toxins in our air, water and soil that our lifespan has dropped by 2 years since 2018, while the lifespans of other countries has increased by at least a few months. What are our regulatory agencies doing to us and to our planet? It's not enough.

I-122: Richard Honour

Comment I-122-1

Richard C. Honour, PhD 19211 64th Place NE, Kenmore, WA 98028

425.772.1473 rhono@precautionarygroup.org August 30. 2024

Re: Proposed amendments to Tri-Party Agreement and Consent Decree.

"The U.S. Department of Energy, Washington State Department of Ecology and the U.S. Environmental Protection Agency recently announced a landmark agreement that lays out a realistic and achievable course for cleaning up millions of gallons of radioactive and chemical waste from large, underground tanks at the Hanford Site. Following mediated negotiations that began in 2020, also known as Holistic Negotiations, the agencies have signed a settlement agreement with proposed new and revised cleanup deadlines in the Tri-Party Agreement and Washington v. Energy consent decree. The proposed changes uphold a commitment to the safe and effective cleanup of tank waste."

For the record, and as my submission of comments hereto:

- 1. I support removing waste from Hanford for disposal offsite where there is no risk to contaminate surface or groundwaters.
- 2. I expect my Washington State agencies and Governor to use all powers they have to ensure that liquid radioactive wastes are not shipped through any densely inhabited regions when there is a far safer alternative to treat and solidify Hanford's tank wastes before they are shipped for disposal.
- 3. I want an EIS, specific for the proposed Hanford waste materials to be transported before the agencies adopt this or any other similar program.
- 4. I am deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks.
- 5. The Agreement must be changed to include enforceable requirements to remove leakable liquids from leaking tanks starting in 2025 and to prioritize full retrieval of wastes from the tank farms that have leaking tanks.
- 6. I strongly support accelerating removal of waste from tanks in the 200 West Area, noting well that the waste must be treated and solidified before it is shipped anywhere for disposal.
- 7. The Washington State Department of Ecology must adopt requirements that ensure the wastes will be treated and solidified before shipment through Spokane or Oregon.
- 8. Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Leaking tanks cannot be allowed to keep leaking until 2040 or later.
- 9. An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks, and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.
- 10. The leak from tank T-101, which is now the third tank admitted to be actively leaking, must be addressed with urgency.
- 11. Liquid radioactive wastes from Hanford's tanks must not be transported through Spokane or Oregon when an option to solidify and treat the waste before shipping it is available.
- 12. Priority Concerns:
- a. Where is Washington State's concern about USDOE trucking millions of gallons of liquid waste?
- b. Why isn't Washington joining Oregon in urging that the wastes are treated and solidified

before being shipped 1,575 to nearly 1,900 miles to be disposed in Texas?

- c. Why isn't Washington State department of Ecology insisting that an environmental impact statement (EIS) be prepared to consider the risks and alternatives before the agreement adopts this program?
- d. I'm deeply concerned that Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks.
- e. I want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks.

Richard C. Honour, PhD

https://nw.ecology.commentinput.com/?id=dA7gsJ8ZM office@hoanw.org

I-123: Kimberly Sims

Comment I-123-1

I am opposed to the transporting of liquid radioactive waste across Washington and Oregon. Please consider solidifying this waste into a group and disposing of it offsite. At a minimum, an EIS should be done to consider the different options. Thank you for your consideration.

I-124: William Engels

Comment I-124-1

I am a resident of eastern Washington and am strongly opposed to transporting liquid radioactive waste by truck or rail from Hanford through Oregon or Spokane. The waste must be solidified and treated before being transported. This treatment can be done at the Perma-Fix NW treatment facility that lies adjacent to the Hanford site. The State of Washington and Governor Inslee must do all that they can to prevent the waste from being transported before treatment.

I-125: Lois Barnett

Comment I-125-1

Liquid radioactive wastes from Hanford's tanks should not be transported through Spokane or Oregon when an option to solidify and treat the waste before shipping it is available:

There must be an Environmental Impact Statement(EIS).

I strongly support accelerating removal of waste from tanks in the 200 West Area. Acceleration is only possible if this waste can be treated and solidified into a grout and disposed offsite – in licensed facilities that have no groundwater. Those facilities are in West Texas and Utah. The West Texas facility (WCS) is the likelier facility to dispose of most of the lower

radiation waste removed from tanks in 200 West based on its license conditions.

Thank You for protecting Water ~ for protecting Life. Lois Barnett

I-126: Hallie Appel

Comment I-126-1

I am surprised and horrified that it has taken until now to achieve an Agreement to clean up millions of gallons of radioactive and chemical waste from leaking tanks at Hanford. However I am relieved and pleased that there will now be deadlines for their safe and effective cleanup, and hope to learn soon that that has taken place.

I-127: Bonnie McKinlay

Comment I-127-1

Thank you for the opportunity to comment on the Hanford Tri-Party Agencies Holistic Settlement Agreement.

I have concerns about the process of developing the Agreement.

Above all, the lack of consultation from Washington State Dept of Ecology, EPA, USDOE with the directly impacted Native People: the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation and the Nez Perce Tribe (The Nimiipuu) is unconscionable. I urge the Tri-Parties to correct this serious oversight by apologizing to the Tribes and suspending the Settlement process long enough to listen and work towards their demands.

Direct quotes from Ecology's page on "Environmental Justice at Hanford":

"Missed cleanup milestones and consistent underfunding at the U.S. Department of Energy's Hanford Site in southeastern Washington exponentially increase overall costs, delay cleanup completion, and exposes surrounding populations to environmental and health risks. Those most vulnerable to harmful impacts are overburdened and underserved communities, including people of color, low-income populations, Tribes, and indigenous people.

We must ensure that the rights of sovereign nations are upheld through cleanup, and that we align with federal and state environmental justice obligations to address and eliminate environmental and health disparities around Hanford. We need to demonstrate, through adequate funding and aggressive deadlines, our commitment to protect the Tribes, area residents, and communities who face the highest risks from Hanford contamination and persistent delays.

Communities At Risk

Hanford's plutonium production contaminated the area for 40 years before cleanup began in 1989. Consistent underfunding of the cleanup mission has caused legal deadlines to be missed, increased overall cleanup costs, and extended projected completion into the 2080s. Currently, there are two leaking underground tanks on site. Each additional year of cleanup means improperly stored waste or accidental releases could further contaminate the soil, air, aquifers, and Columbia River impacting communities in the surrounding area and down river. Cleanup

delays mean prolonged threats to habitat and wildlife, and risks to the physical, cultural, and economic wellbeing of local Tribes and communities.

Tribal Impacts

There are three Tribal Governments in the area that the state partners with on environmental issues attributed to nuclear waste. These indigenous populations have reserved rights per their 1855 Treaty of Yakama and the Treaty of Walla Walla: the Confederate Tribes and Bands of the Yakama Nation, Confederated Tribes of Umatilla Indian Reservation and the Nez Perce Tribe. The Wanapum Tribe is one of the Bands of the Yakama Nation. They once inhabited year-round villages where Hanford is now before being forced off their ancestral territory. The Wanapum have not received any compensation for their loss of lands and Treaty territory. All of these indigenous populations have expressed significant interest in the oversight and thorough cleanup of polluted areas that once provided hunting, gathering and cultural resources for multiple sovereign Tribes and Nations.

Our Responsibility

We must ensure that the rights of sovereign nations are upheld through cleanup, and that we align with federal and state environmental justice obligations to address and eliminate environmental and health disparities around Hanford. We need to demonstrate, through adequate funding and aggressive deadlines, our commitment to protect the Tribes, area residents, and communities who face the highest risks from Hanford contamination and persistent delays."

I share Oregon Governor Tina Kotek's concern about the transport of liquid high waste through our state. She commented, "The ongoing process for receiving and accounting for input from the State of Oregon, Tribal governments, and the public on substantive issues relating to the solidification and transport of liquid tank waste is insufficient and risks undercutting support for the accelerated reduction of radioactive waste at the Hanford site that is in everyone's interest."

I zoomed into the Richland and Olympia public hearings. I found the audio almost unintelligible. It was disturbing to see the public hearings limited to these three sites. The Hanford Holistic Settlement Agreement affects people throughout the region. Why were hearings not also held in Spokane, Portland and Bend?

Sincerely, Bonnie McKinlay

I-128: Don Williams

Comment I-128-1

The proposal to remove contaminated high level radioactive liquid waste from the Hanford Nuclear Reservation is one I support. But shipping such liquid waste is not safe until it is converted to a solid form. The technology exists to do that. I expect Washington State and Federal agencies to mandate this safer method of shipping nuclear waste.

I-129: Pamela Gross

Comment I-129-1

My family and I have strong concerns and objections to transporting millions of gallons of tainted nuclear liquid wastes – especially when transporting treated waste as a solid is a readily available,

and much safer, alternative that would still allow disposal of waste offsite where it will not threaten ground or surface waters.

Transport the waste as a solid. Thank you.

I-130: Nancy Morris

Comment I-130-1

To Tri-Party Agencies:

I have commented on Hanford nuclear waste cleanup since the late 1980's onward to present – around 35 years. Cleanup should be much further along than it is now. Truly the 177 underground leak-prone tanks holding 56 million gallons of high-level waste are a serious threat to human health now and generations to come, the entire environment at Hanford and all its surrounds, and the Columbia River. The First Nations people of the 'Confederated Tribes and Bands of the Yakama Nation' and the 'Confederated Tribes of the Umatilla Indian Reservation' should have had more involvement and need to be involved to ensure a better schedule and prognosis than has been offered by the Tri-Party Agreement Agencies that are comprised of the Dept of Ecology, EPA Region 10, and the USDOE.

I agree with Governor Kotek who stated to the USDOE that . . . "three critical issues that are left open for future decisions by Energy, without any commitment for public comment or consultation with Tribes or Oregon. These issues include, what form tank waste will take if shipped off site, how communities along shipping routes will be engaged, and clarity around the environmental review for these major decisions".

I urgently demand that:

The federal government treats tank waste as the law requires. The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste, Energy should permanently abandon plans to apply this definition at Hanford;

The TPA agencies provide adequate information and opportunities for the public to comment on major proposed changes to cleanup, such as the adequacy of proposed new tank capacity and the proposal to ship large volumes of tank waste through communities in liquid or solid form;

Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere.

Environmental reviews are available to the public to review while commenting on the proposed

changes. The agencies seem to be putting the cart before the horse, making sweeping changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions.

The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64. Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pre-treatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. YOU MUST PROVIDE A PUBLIC COMMENT PERIOD ON YOUR PROPOSED GROUT DECISION PRIOR TO FINALIZING.

Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them. Generations are at risk beyond our and the Tri-Party Agency representatives' lifetimes. Time to stop passing this horrific toxic nuclear waste legacy to your children and grandchildren and focus needed funding, research, and political will to cleanup the most toxic area in North America. Stop the continued delays.

I-131: Kristen Bruner

Comment I-131-1

I agree with the plan to remediate and address the high-level radioactive liquid waste at the Hanford Nuclear Reservation, but transporting it in liquid form poses significant risks. Before any shipment, the waste should be solidified using available technology. I strongly urge state and federal authorities to enforce this safer approach for moving nuclear materials.

I-132: Tika Bordelon

Comment I-132-1

No nuclear!

I-133: Ann Dorsey

Comment I-133-1

I am concerned about the three leaking tanks at the Hanford site since the liquids put the water supply, local communities, the environment and wildlife at risk. As such, I support and

encourage plans to accelerate the leaks being stopped and site cleaned up. Transporting the radioactive waste as an untreated liquid, though, would only extend the risks, exposing waterways, communities and the environment along the approximately 1,575 - 1,875 mile route to West Texas or Utah where the nearest facilities with no ground water are located.

This would not be acceptable.

I therefore urge you to instead have Perma-Fix NW, a nearby radioactive hazardous waste treatment facility that already treats radioactive wastes at Hanford, solidify and treat the wastes so that they meet the standards for disposal at the facility in West Texas BEFORE they are transported.

Given the severity of long-term harms a spill would cause, the long distance traveled and treacherousness of some of the passages (e.g. Emigrant Pass), number of communities/people that could be harmed (in downtown Spokane, Confederated Tribes of the Umatilla Indian Reservation, etc.), if untreated radioactive waste is going to be transported, there MUST be an EIS, before the agencies adopt this program, so the potential damage can be documented and evaluated and measures taken to minimize them.

The EIS needs to consider route specific risks, including through Spokane, Oregon communities, Tribal reservations and "highly impacted communities" identified under Washington's environmental justice law and include the cumulative risks from USDOE's related decision to ship liquid "secondary wastes" from Hanford tanks to the same potential disposal sites. Additionally, there must be public meetings, with discussions of the potential impacts and alternatives, along the shipment routes.

Please do what is best for people and the environment by having the liquid radioactive wastes solidified and treated locally by Perma-Fix NW before it is transported over 1,500 miles to West Texas or Utah where there are facilities with no ground water.

Thank you!

I-134: Theodora Tsongas

Comment I-134-1

Thank you for this opportunity to provide comments. I am writing to express my concerns regarding the transportation of Hanford waste through communities and states, not limited to but including central Oregon.

Regarding the plan to transport Hanford tank waste through central Oregon, it must be considered that our region's closest Hazmat Regional Response Team is in Salem Oregon, making central Oregon particularly vulnerable to transportation incidents involving hazardous materials. The plan for transporting the so-called low-activity waste has not been specified and

the commitment for additional public engagement once specified is unclear. This is problematic as it requires transport by either truck or rail through populated corridors, no matter which route is selected, and it is clear that waste in a liquid form poses significantly more risks to our communities, environment and health than waste in a solid form.

There are three critical issues still unresolved: treatment of waste prior to transport, means of transport, and NEPA. These issues have been left open for future decisions by the Department of Energy without assurance of further consultation and notification of the public, Tribes, or the state of Oregon or other states and communities through which the waste would be transported.

Specifically, the terms of the current agreement do not specify whether liquid tank waste will be solidified into a cake form and/or grouted or vitrified before transport or after transport to a final disposal site. The transport of liquid tank wastes is unacceptable because of the extreme danger of mishaps during rail or truck transport that would only exacerbate the long term dangers to the public and our lands and waters, and defeat the purpose of transporting the waste from Hanford. Only solidified tank waste, preferably vitrified in glass, should be considered for transport from Hanford.

Offsite tank waste disposal requires close cooperation between several levels of government, some of whom have never previously been impacted by Hanford issues and must be consulted prior to decision-making. The current draft agreement leaves critical issues open for decision by the U.S. Department of Energy without assurance of further notice, engagement, or comment. We simply cannot accept this lack of transparency and participation.

Furthermore, the plan for transport is not finalized and will be left up to the Department of Energy to make decisions without consultation or notification or public comment. This is unacceptable! It is NECESSARY that the public, Tribes, states and potentially impacted communities be consulted prior to any such plan being put into place. It is our right to have input into these decisions that will surely impact our lives!

It is not clear how the federal agencies intend to address NEPA requirements for assessing the risks of the alternatives for transport of the waste to the final destination for disposal. A roadmap for incorporating input and consultation is missing and must be developed before any action is taken to transport the wastes. At the very least, a complete environmental impact assessment of the risks of this proposed activity must we conducted with necessary public involvement and transparency in the process.

Finally, this agreement seems to have given little to no consideration to equity or environmental justice in its decision making process. Low income and rural communities will reap the brunt of long and short term adverse effects on health, home, and livelihood of any miscalculations or errors in this process or in the implementation of this plan.

The agreement represents an important step toward risk reduction at the Hanford site but it

requires innovative solutions and careful consideration of the long-term environmental and public health impacts. It is absolutely incumbent upon the agencies involved to ensure the Hanford tank waste mission can progress more effectively and safely, while minimizing long-term environmental and public health risks, and with the full involvement of the public who stand to be most impacted by missteps, errors, and accidents.

Thank you for your attention to these concerns.

I-135: Ted Grudiwski

Comment I-135-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Ted Grudowski

I-136: Nancy Morris

Comment I-136-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

To Tri-Party Agencies:

I have been involved in commenting on Hanford nuclear waste cleanup since the late 1980's onward to present. Cleanup should be much further along than it is now. Truly the 177 underground leak-prone tanks holding 56 million gallons of high-level waste are a serious threat

to human health now and generations to come, the entire environment at Hanford and all its surrounds, and the Columbia River. The First Nations people of the 'Confederated Tribes and Bands of the Yakama Nation' and the 'Confederated Tribes of the Umatilla Indian Reservation' should have had more involvement and need to be involved to insure a better schedule and prognosis than has been offered by the Tri-Party Agreement Agenices of the Dept of Ecology, EPA Region 10, and the USDOE. Generations are at risk beyond your lifetimes. Time to stop passing this horrific toxic legacy to your children and grandchildren and focus needed funding, research, and political will to cleanup the most toxic area in North America. Stop the continued delays.

Sincerely, Nancy Morris

I-137: Nancy Morris

Comment I-137-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions

are anticipated as well as what the public process will look like that accompanies those decisions.

- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment. To Tri-Party Agencies:

I have been involved in commenting on Hanford nuclear waste cleanup since the late 1980's onward to present. Cleanup should be much further along than it is now. Truly the 177 underground leak-prone tanks holding 56 million gallons of high-level waste are a serious threat to human health now and generations to come, the entire environment at Hanford and all its surrounds, and the Columbia River. The First Nations people of the 'Confederated Tribes and Bands of the Yakama Nation' and the 'Confederated Tribes of the Umatilla Indian Reservation' should have had more involvement and need to be involved to insure a better schedule and prognosis than has been offered by the Tri-Party Agreement Agenices of the Dept of Ecology, EPA Region 10, and the USDOE. Generations are at risk beyond your lifetimes. Time to stop passing this horrific toxic legacy to your children and grandchildren and focus needed funding, research, and political will to cleanup the most toxic area in North America. Stop the continued delays.

Sincerely, Nancy Morris

I-138: Tony Cochran

Comment I-138-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

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meetings in the fall and spring for maximum participation.

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- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Tony Cochran

I-139: Tony Cochran

Comment I-139-1

Dear To Whom It May Concern,

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Tony Cochran

I-140: karen Varrill

Comment I-140-1

I am deeply concerned that there is any proposal to transport nuclear waste anywhere before it is treated and solidified. Why risk contaminating any land or waterway by transporting this waste in tanks that do or could be leaking. Why is it ok to takes this untreated waste to another state instead of taking responsibility for cleaning up our own mess?

What is the reason WA Dept. of Ecology is not stepping up like Oregon has?

Please do everything possible to prevent further contamination of our lands and water!!!!

I-141: Carolyn Treadway

Comment I-141-1

Cleanup of radioactive waste in Hanford is imperative. But please do not ship liquid highly radioactive waste through inhabited areas, as it is very dangerous and could be lethal.

I-142: William Corr

Comment I-142-1

Liquid nuclear waste should not be shipped. The danger of accidental leakage is too great with liquid shipping by truck or rail. Liquid waste needs to be solidified before shipping to a safe location.

I-143: Nancy Morris

Comment I-143-1

To the Tri-Party Agencies:

A final comment before the deadline tonight. I am asking why the USDOE and Washington State Ecology did not agree to prioritize retrieving waste before 2040 from the "T Tank Farm" where two of the leaking tanks are currently located. There are now 3 verified leaking tanks. In 2040, 97 tanks of the 149 Single Shell Tanks will still not have been emptied under this agreement and so we all are asking how many more will leak between now and 2040? Please Ecology, put the need for "urgency" in responding to leaking tanks into this agreement on tank waste. Sincerely, Nancy Morris

I-144: Thomas Gordon

Comment I-144-1

More than 60 square miles of Hanford sit above groundwater too contaminated for use. Radionuclides reach the Columbia River now. Also, tritium in the ground water is under the Columbia Generating Station.

The new plan should concentrate on getting these dangerous materials immobilized as soon as possible. To do this, the Indian tribes should be included in the planning, at the very least to reduce the chance the Indians will sue and tie the plan up in the courts for years to come. All will benefit.

I-145: Cathryn Chudy

Comment I-145-1

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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

I am not sure if my comment got through so am re-submitting my support for these recommendations made by Hanford Challenge.

Sincerely, Cathryn Chudy

I-146: Becca Hall

Comment I-146-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Please do everything you can to clean up Hanford's waste!

Sincerely, Becca Hall

I-147: Sylvia Haven

Comment I-147-1

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- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan

to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.

- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Why don't you pay attention to the watch dogs that are trying to keep you honest?

It shouldn't be this difficult for you to do the right thing to protect our citizens, our environment and indeed our national security for generations to come.

Funding for cleanup should come before funding our military adventurism which does not enhance our national security at all. Spend your time lobbying congress to fully fund a real cleanup and get on with your work to finally vitrify all that harmful waste.

Thank you for considering my comment.

Sincerely, Sylvia B Haven

I-148: David Parrish

Comment I-148-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)

- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely,
DAVID PARRISH

I-149: Karin Engstrom

Comment I-149-1

I've read a long list of books on Hanford, but not as thorough as Steve Olson's The Apocalypse Factory that gave me meaningful insights from the discovery of fission, the coming together of scientists to explore the phenomena, through the establishment of the Manhattan Project, building of Hanford, the bombs and a story of Nagasaki. The last third of the book describes what was left behind! The book reads almost as good as a detective story! I gained a great deal of appreciation for what you have been dealing with all these years.

I am glad that the K Reactor Basin has been cleaned up. I've read the article on your website but have the following questions:

- After the water is treated, it says it will be disposed of but where and how?
- What happens to the soils surrounding the area?

If I had one wish it would be that any development being considered affecting the planet would have to take full responsibility for clean up – mitigation aside! The scientists knew how dangerous this process was and they tested the river waters, fish and areas surrounding the reactors. What they didn't figure out in all their scientific pursuits was how to reverse the process or permanently store the waste that would be radioactive for thousands of years.

Why weren't the corporations that made money off the processing of plutonium, after WW II, held responsible for cleaning up this waste?

I've read articles on the plans that Finland developed with Sweden and that storage effort seems reasonable, but they are still playing with thousands of years for future generations and the planet's environment.

Thanks to Heart of America Northwest, Hanford Challenge and the Columbia Riverkeeper for their long-term knowledge and insights on the many issues surrounding the clean up of Hanford.

I agree with their lists of talking points and would encourage the agencies to truly consider the insights.

- With the changes in your Holistic Agreement, the public needed more outreach and time to organize meetings to go through the document.
- I attended their online meetings and yours.
- I wrote an article for my 34th Dems newsletter to ask for their participation, but it would have been better if we were able to do a presentation prior to our monthly meeting.
- ② I sent my article with its web links to friends and family who live in other states, hoping to spread awareness of the critical need to keep following and funding the clean up process.
- ② Agencies live and work with these issues, and your unique wordsmithing every day. The public literally needs translation to understand terminology and meaning. These organizations and individuals like me would have appreciated more time to meet in our communities.
- ② You need to include more meetings in Eastern Washington, like Yakima, Spokane and the communities who have our universities.
- Some of the comments I heard during your public meetings were that those who participated in meetings and written comments were not listened to or that there was no response.
- ☑ From the 1970's through the early 1990's I followed the Forest Service Land Management Planning process, revisions and regulatory changes throughout California, but mostly for Southern California. One thing they made available was to list comments and their responses. We were able to have meetings with them and use an appeal process.
- ② Public meetings over such an important issue of cleaning up nuclear waste where your decisions affect thousands of years must be taken seriously in order to carry this forward after we have departed for the Great Beyond.
- ☑ I researched the OSPI website for curriculum on Hanford and most is related to Hanford's relationship with our Tribes and not the issues of nuclear waste and its timeline. Our Department of Ecology offers a curriculum and will go out into schools to make presentations, but there is no requirement through the State Board of Education to really study the story and science of nuclear energy and its waste. In reality, that should be a national concern in our educational system.
- As I understand, the Agreement does not include doing Environmental Impact Studies specifically covering the transport of this waste to another site. I believe that is required by law. Certainly, in transporting this radioactive waste, no matter how it is stabilized with glass or

other means, needs serious study and the public's knowledge of what is going through their community. There have been too many "accidents" with nuclear waste and our planet and its living beings are paying a price.

- As I understand and remember, studies have been completed on the removal of the waste from the tanks, particularly those that are leaking. From what I've read, enough radioactive waste has been sent to our river and affected groundwater. Due to timelines, building other double walled tanks to transfer the waste can answer the issue of the leaking tanks and threat it poses to the groundwater and river. That is what the Finish plan addresses.
- I believe that the tribes who are represented on the Advisory Committee need to be included in the Tri-Party Agreement. Their understanding of the land is valuable and they should be integral in your planning process. Does that take action by our State legislature or Governor?

So my final question! The story of Seeborg through the building of the graphite reactor in Chicago (close to my home town and I was alive then) through to the Manhattan Project. the building of Hanford and dropping the bombs is amazing, but they left behind a dangerous mess that far exceeds the initial cost.

Have you thought that it might be possible to have a team of scientists design a reversal process to radioactivity? I've been wondering this for a long time. Wondering is at the heart of science.

Submitted for good or bad! Thank you for reading my thoughts, comments and suggestions. I would appreciate a response. I will learn from you.

I-150: Thomas & Diana Gordon

Comment I-150-1

Oregon Department of Energy wrote in April 2024, "A proposal to implement large-scale transportation of liquid tank waste still containing long-lived mobile key radionuclides introduces potentially additional and unnecessary risk of contaminant spread along the entire transportation corridor, increased cost and complexity of accident cleanup, and additional concern to communities along transportation routes."

Portions of the "Holistic" agreement seem to indicate the transported materials would be liquid and portions seem to indicate the transported materials would be grouted, solid materials. Which is it or is it both?

The hazards for liquid transport through towns and cities such as Spokane are extreme. This agreement should not be enacted until this point is clarified and public comment allowed.

I-151: Louisa Hamacheck

Comment I-151-1

Prevent nuclear waste from entering the Columbia River

Sacrifice the area of Hanford snd its huge mistakes

Reroute the Columbia River with a bipass canal that would cut across the bend in the river which wraps around Hanford

Cover over from rain all areas with leaks, roof over Hanford

Dig under the leaking tanks and create a leakproof pool to catch all contaminants

Close immediately the aging underbuilt Columbia Generating Station which will not hold up to the now expected earthquake of the South Whidbey Island Fault

The CGS is creating illegally more rad waste adding to Hanfords

2 branches of the earthquake fault go thru Hanford and numerous small earthquakes happen annually which increases the leakage from rad waste tanks

See article by Gar Smith in Earth Island Journal, May 2014

"The Columbia Generating Station is a Seismic Timebomb"

I-152: Louisa Hamacheck

Comment I-152-1

I have a right to protect the whole Columbia River System from the irresponsible military Hanford rad waste, even though i live up the Willamette River tributary.

Fund all projects that immediately and by set deadlines prevent the Hanford Radioactive Pollution from entering my childrens bodies

Downriver from Hanford

Has been and will be polluted with radioactive materials that go into the mud caught behind the dams and down to the estuary in Astoria Oregon.

All Columbia Watershed salmon migrate down to the sea and eat smaller creatures in it especially during their year in common eating to be ocean strong at the estuary.

Then out to the ocean they go for 3 years and return on up to my local salmon rivers, the pristine Mckenzie, the Santiam, Yamhill and Calapooia to name a few.

Then they spawn mate and die, their bodies to be eaten by small creatures Who are eaten by bigger fish and salmon.

le. Hanfords radioactive waste must not go into the Columbia for i snd my children who catch snd eat the fish can get Cancer and and birth deformed babies.

I-153: Linda Devlaeminck

Comment I-153-1

I support removing waste from Hanford for disposal offsite where there is no risk to contaminate groundwater or a river. I live in Vancouver. I expect my Washington State agencies and Governor to use every power they have to ensure that liquid radioactive wastes are not shipped through downtown Spokane when there is a far safer alternative to treat and solidify Hanford's tank wastes before they are shipped for disposal. I want an EIS before the agencies adopt this program.

I-154: Thomas & Diana Gordon

Comment I-154-1

A report titled, "Radiation Flowed 200 Miles to Sea, Study Finds", in The New York Times, July 17, 1992, included:

A Government contractor's preliminary study of radiation released over the years from the Hanford Nuclear Reservation into the Columbia River has found that the radiation reached the Pacific Ocean 200 miles away, contaminating fish and drinking water along the river and exposing as many as 2,000 people to potentially dangerous doses.

Also in the report:

The laboratory's study said radiation levels in the Columbia River rose above currently acceptable levels from the mid-1950's to the late 1960's. Most of the radiation came from water that was used to cool the reactors and then dumped back into the river. Other radiation resulted from accidents.

The Holistic Agreement does not adequately address the current leaking tanks and the previous leaks, including the millions of gallons of waste under the Columbia Generating Station. This radioactive waste and chemicals is moving nearer to the Columbia River now.

More pumping of waste from underground, with proper treatment in new facilities needs to be done now. Instead of cutting the operating budget, more needs to be spent or much more will be needed to be spent later when the problem becomes bigger.

I-155: Stephanie Shanderaa

Comment I-155-1

I support removing waste from Hanford for disposal offsite where there is no risk to contaminate groundwater or a river. I live in Seattle but grew up in Yakima. This issue has been ongoing my whole life and it is incredibly confounding that we are still dealing with leakage into the Columbia River and ground as well.

Leakage of radioactive waste that will harm not only those currently living in the area, but generations in the future! We must take action now and I urge my Washington State agencies and Governor Inslee to use EVERY power they have to ensure that liquid radioactive wastes are not shipped through the city of Spokane. There is a far safer alternative to treat and solidify Hanford's tank wastes before they are shipped for disposal. program.

An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks; and to present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak. We need public hearings on an EIS – with discussion of potential impacts and alternatives – in my community and others across the state.

Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. It is the height of neglect and poor judgment to keep tanks that are now leaking until 2040 or later. USDOE needs to commit to immediate action to stop or reduce the leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval.

As an elder and lifelong inhabitant of both Oregon and Washington I it is clear and apparent....this danger to all people and wildlife now and in the future must be taken away and there IS a way to do that.

Stephanie Shanderaa

I-156: Joyce Follingstad

Comment I-156-1

I strongly support removal of waste from the tanks in the Hanford 200 West Area. Of immediate concern are the three tanks that are leaking. As an Oregonian, I appreciate that our Govenor Kotek has strongly objected to shipping liquid radioactive wastes under the proposed agreement. I want the USDOE to adopt the far safer alternative to treat and solidify Hanford's tank wastes before they are shipped for disposal. Immediately adjacent to Hanford is the licensed commercial radioactive hazardous waste treatment facility, "Perma-Fix NW". This facility already treats large amounts of more radioactive waste every year, which is then returned to Hanford for disposal. This would eliminate the serious risk of transporting liquid waste through Oregon, Washington or other states. There must either be an EIS with public meetings along the shipment routes regarding shipping liquids, or a binding condition that liquids will not be shipped through Oregon or Spokane. In addition, I want the Agreement to include enforceable requirements to remove leakable liquids from leaking tanks, starting in 2025, and prioritizing full retrieval of wastes from the tank farms that have leaking tanks.

I-157: Glenna Cole Allee

Comment I-157-1

Glenna Cole Allee

Dear U.S. Department of Energy, U.S. Environmental Protection Agency, and Washington Department of Ecology,

Thank you for inviting public commentary on the Holistic Settlement Agreement. As an artist who has researched the Hanford site for many years, I'm extremely concerned about the toxic waste at the site and the danger it poses to the entire northwest. I feel it is imperative that the cleanup be expedited, safely. Please add my concerns, below, to the public record.

1. The USDOE must commit to immediate action to stop the leaks from single shell tanks, and dramatically increase the pace of waste retrieval. They need to construct new tank space much faster than the proposed date in the current agreement, listed as 2040, and they must provide

much more tank space than the current proposed amount of one million gallons.

- 2. The removal of waste from tanks in the 200 West Area (where tanks are currently known to be leaking) needs to be accelerated, but the waste must be treated and solidified into a grout before being transported. If disposed offsite, it needs to be placed in licensed facilities that have no groundwater.
- 3. Before finalizing any decisions about the grouting processes, all Test Bed Initiative results and any other relevant information need to assessed and considered, and made available for public review. A public comment period must be provided. The date mentioned for New Interim Milestone M-062-64 must be changed. The current date is Dec 2024: this is before the results from the Test Bed Initiative can be considered. Please see that the date in the agreement is changed to read: "Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative."
- 4. Before any decisions are finalized about shipping grouted waste, communities along potential transportation routes who might be impacted must be provided with transparent plans and options for the shipment. There needs to be ample public input to finalize any plan.
- 5. Please strengthen the language re the re-classification of waste. It needs to state a clear commitment, in binding language, that high-level waste will not be re-classified.
- 6. Before the Holistic Settlement Agreement is finalized, all environmental impact analyses and all projected cleanup costs must be made available for public review. There must be a transparent process, with ample time for public commentary and input, particularly for local Tribal Councils to offer input.

Thanks for entering my comments into the record, Glenna Cole Allee

I-158: James Plunkett

Comment I-158-1

Thank you for letting me express myself here.

I attended the recent online meetings in Olympia and Hood River. I know that we all feel the same daunting responsibility to the future.

The Tribes at Hanford should be made whole as near as possible after their great sacrifice and the profound damage to their environment. It will be very expensive and there can be no escape. We'll all be proud.

I'm willing to let others decide technical issues of grout vs vitrification, transportation, tanks.

The correct solutions can be determined with clear information from DoE, EPA and Washington Department of Ecology and open public participation. Direct clarity is required not public relations. The long duration of cleanup argument has produced many interested individuals and groups with real expertise. They won't be ignored and won't be satisfied with plans that hide or discount risk.

Imagine presenting at a town meeting in East Palestine OH or even Bend to explain a plan for trains to carry radio active waste through their city.

I-159: Mary Hansen

Comment I-159-1

Dear To Whom It May Concern,

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
- 2. PROVIDE ENVIRONMENTAL IMPACT ANALYSES FOR PUBLIC REVIEW PRIOR TO FINALIZING HOLISTIC SETTLEMENT AGREEMENT CHANGES: The agencies need to provide all analyses of environmental impact through NEPA and SEPA documentation and provide this information to the public for review, PRIOR to finalizing changes to the Holistic Settlement Agreement.
- 3. ASSESS GROUT SHIPMENT TRANSPORTATION IMPACTS: Create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan. Consult with communities along potential routes and get public input before making your decision.
- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a

part of the public comment period.

Thank you for considering my comment. I appreciate your understanding that we get this right. Doing things wrong in haste is what got us into this mess, and we cannot afford to compound it.

Sincerely, Mary Hanson

I-160: Mary Hanson

Comment I-160-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from

their feedback.

Thank you for considering my comment. I appreciate how difficult your job is, and I hope you will take these suggestions as constructive. We can look back on a better result if we improve the process.

Sincerely, Mary Hanson

I-161: Randi Fitch

Comment I-161-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 4. BUILD NEW TANK SPACE FASTER AND BUILD MORE THAN 1M GALLONS: Move up the date in Milestone M-045-139 to have new tank storage and staging space sooner than 2040. Sixteen years is too long to wait for new tank space, build it faster and increase the volume beyond the one million gallons in the proposed agreement.
- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a

part of the public comment period.

Please, please do what is right, not what is expedient. We need to take care of this nuclear waste and not just truck it to another community to share devastating health implications.

Sincerely, Randi Fitch

I-162: Randi Fitch

Comment I-162-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

- GET INPUT EARLY AND OFTEN: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan.
- DESIGN FOR MEANINGFUL INVOLVEMENT: Design regional public meetings with an open house where all interested parties can table, provide information and chat with attendees, incorporate time for a local perspective to provide an alternate viewpoint, and schedule meetings in the fall and spring for maximum participation.
- USE PLAIN LANGUAGE, PLEASE: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself.
- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from

their feedback.

Thank you for considering my comment.

Sincerely, Randi Fitch

I-163: Shannon Cram

Comment I-163-1

Dear To Whom It May Concern,

Thank you for providing an opportunity to comment on the Holistic Settlement Agreement. Please update the Consent Decree Changes and New/Changed TPA Milestones to reflect the following comments:

- 1. WAIT FOR GROUT TEST RESULTS BEFORE ANY GROUT DECISION, DELAY NEW INTERIM MILESTONE M-062-64: Change the date for this milestone from Dec 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah. (P.S.- Please require a public comment period on your proposed grout decision prior to finalizing.)
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- 5. SHARE COST IMPLICATIONS: Be transparent about the budget implications of your proposed changes to Hanford tank waste work scope and deadlines. Please provide this information as a part of the public comment period.

Thank you for considering my comment.

Sincerely, Shannon Cram

I-164: Shannon Cram

Comment I-164-1

Dear To Whom It May Concern,

Thank you for accepting my comments on the Holistic Settlement Agreement. After four years of closed-door negotiations, I expected a robust public involvement plan that was created with input from groups and entities working on Hanford, materials that are transparent and easy to understand, enough time to review documents, and an opportunity to comment and table at public meetings in major cities. I am incredibly disappointed. You need to do better.

For all major comment periods in the future:

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- BE TRANSPARENT: If there is important information buried in your materials and presentations, bring it forward and make it transparent. For example, plainly state how much liquid tank waste you are planning to grout and plainly state that instead of delaying cleanup now, cleanup milestones will be delayed in the future. Plainly state when those delay decisions are anticipated as well as what the public process will look like that accompanies those decisions.
- STOP PUSHING YOUR CRITICS AWAY: Instead of running from critical feedback and responding with defensive/avoidant behavior, invite your critics to the table and make time to learn from their feedback.

Thank you for considering my comment.

Sincerely, Shannon Cram

I-165: Diana Gordon

Comment I-165-1

HOLISTIC AGREEMENT ON CLEANUP OF HANFORD TANK WASTE due 9/1/24

RE: Leaking Tanks

We live downstream from Hanford and have a major concern about tanks that are leaking radioactive liquid into the soil which is then moving toward the Columbia River in the groundwater.

In Washougal, people fish, canoe, kayak, paddle board, swim and picnic at the lovely Clark Park Beach and engage in countless other activities in and near the Columbia. We even have a marina with a restaurant located on a pier. No one wants to have the worry of tanks leaking radioactive chemicals into 'our' stretch of the River.

Tank T-111 is leaking and so is Tank B-109. These are not new leaks. Now the Tri-City Herald reports a possible leak in T-101. As I understand it, we have the technology to remove the liquid from these tanks. We can do it with existing technology using the 'In-Tank Pretreatment System' combined with salt-well pumping. We can move the waste nearby to be treated as soon as possible. Both Federal and State law support and indeed require the expedient removal of leaking waste as soon as practicable. We should do that and get started ASAP.

Possibly, if we study this problem to death, we could come up with something cheaper or easier. But this is an urgent problem to us. It can affect the health and well-being of the nearby tribes, communities both nearby and downstream, river users, wildlife and flora, and the environment. It is not as though anyone asked us if putting this off indefinitely is all right with us - this agreement was finalized without the involvement of any of those parties. It can have an impact on us eventually, and we feel an urgency to get it done. It is especially egregious for the tribes and communities near Hanford who have had to tolerate the terrifying pollution and attendant problems for over 80 years.

It is time to get this done.

Diana and Tom Gordon

I-166: Diana Gordon

Comment I-166-1

HOLISTIC AGREEMENT ON CLEANUP OF HANFORD TANK WASTE due 9/1/24

RE:LAW Disposal

I am wondering what is happening with the low level waste vitrification plant. It sounds as though it is just about ready for use and I would like to know if the TPA agencies are going ahead and planning to get it on line by the 2025 timeline. Is it really completed and does it really work?

I like the idea of vitrification much more than grouting because it sounds safer for longer. However, the Test Bed Initiative is showing positive results so far and I do like the idea of removing low activity grouted waste from Hanford and shipping it for storage in a place where groundwater is not a problem. (Needless to say, liquid waste should never be shipped.)

Both licensed low level waste repositories where the waste is headed are many miles from Hanford - in Texas and in Utah. It sounds as though shipping grouted waste is pretty safe though I have been unable to find out very much about how the grouted waste will be shipped. I am assuming that the cylinders of grouted waste will be in metal containers so that, in case of accident, the waste would have an added layer of protection. (The picture on Energy's Test Bed Initiative page isn't very clear.) However, even in the best case scenario, the danger to the public in communities the grout is shipped through is not negligible. Those communities are entitled to know about the routes the waste will take and examine an EIS detailing the planned route, the form the waste is in, especially the safety issues, etc. Oregon does not seem thrilled with the prospect of waste traveling through and I doubt Spokane and other cities will be either.

But what about the low level waste vitrification plant? Surely it should be used for as much of the waste as possible. I am sure that such a plant cost millions (at least) and I hope we are not losing that investment. I'm sure it shows my ignorance to say that I think they should use both methods and finish the job more quickly! Faster is better for us downstream communities.

Dian Gordon

I-167: Diana Gordon

Comment I-167-1

HOLISTIC AGREEMENT ON CLEANUP OF HANFORD TANK WASTE Comments due 9/1/24

This agreement is very confusing for the layman and there seem to several changes to understandings I have had over the years. However, we live in a downstream community and fishing is the local religion so I'm doing what I can to get a glimpse of what this 'Holistic' Agreement means for us.

I had thought that the High Level Waste was on a much faster track to vitrification than it apparently is. Now I learn that it will first have to be separated from the Low Level Waste and then vitrified in a plant that is not yet completed. Construction of the High Level Vitrification Plant has been paused due to cost and safety concerns. Construction is now scheduled to resume with the adoption of this Agreement and I feel it is vital to do all we can to accelerate the completion of this plant and get it into use at least by the current deadline of 2033.

Completion of this plant has been paused before and that absolutely should not happen again no matter the cost. We cannot afford to miss this 2033 target. But what if an unforeseen accident or earthquake or new safety issue, etc., comes along and they decide to halt it again. Other decisions, like the one setting new deadlines for extracting and treating the rest of the waste, hinge on the completion of that plant. Now what? Are we just going to push it off into the future with escalating costs and an accepted continuation of leaking tanks? This should never be an option. How about telling us what will happen in that scenario?

Another option that should also never be on the table is the one that the Trump Administration floated of simply re-classifying the waste into something less dangerous-sounding than High Level Nuclear Waste. Although the Agreement bans this kind of re-classification, I am not sure a future administration or cost-cutting schemer couldn't figure out how to get it done. This definition should be bomb-proof. Period.

I have a few other concerns as well, but I want to get this on its way to you. This Agreement does not bolster my confidence that the folks up at Hanford are moving Heaven and Earth to get things moving quickly. Future generations are going to have enough trouble dealing with aging vitrified glass and grout. Let's at least get the waste to that stage.

Diana Gordon

I-168: Barbara LaMorticella

Comment I-168-1

From a Concerned NW Citizen:

US nuclear production at Hanford has created 55 million gallons of high-level nuclear waste that is stored in underground tanks. It has released radiation into the diet of the Yakima people, who are heavy eaters of fish and harvester of plants grown in contaminated soil. More than half of the Yakima diet consists of 70 plant species harvested locally. Nuclear production at Hanford has released a timebomb: tanks that are leaking irrecoverable radiation into the soil and river. These will eventually affect all life along the Columbia. Just minutes of direct contact with contaminated soil is enough to trigger cancer. All of areas 100, 200 West and East and 300 on the Hanford site are contaminated need to be cleaned up.

To all appearances, the government has written the NW off as a sacrifice zone. Some waste will be stored onsite permanently.

The 324 building, 1000 feet from the river, is leaking underground. Tanks B-109 and T-111 are leaking. Liquid from B-209 will reach groundwater in 25 years, and will be radioactive for thousands of years.

The USDOE has a pattern of requesting less funding for Hanford Clean-Up than the federal government allocates, and the amount requested for clean-up grows smaller as the threat grows bigger. Meeting the clean-up milestones set forth in the Hanford Cleanup Agreement (TPA) would require \$4.56 billion in FY '25. But the USDOE is requesting only \$3.1 million. It is also is requesting \$2.4 billion in new nuclear production and modernization, and \$500 million for "deployment and support of reactors." All waste from these "safe" reactors will then be shipped for storage to Hanford.

Liquid waste from Hanford will be shipped over highways through Spokane and Oregon, as will liquid to Hanford from distant reactors. This, though a functional vitrification plant is located right next to the site.

Legislators who make these decisions know nothing about the Northwest's earthquake prone geology, care little about the Columbia River and its importance to all living creatures in the NW, and know little about nuclear energy itself. At best their ignorance makes it possible, at worst it makes it simply expedient, to designate the Northwest as sacrifice zone.

Please do not let the USDOE do its own cost estimates of nuclear clean-up plans, and please realize it is an urgent necessity and moral responsibility to spend and do whatever necessary to ameliorate this threat to life in the Northwest.

Sincerely,

Barbara LaMorticella

O-1: XRPDX

Comment O-1-1

I work with XRPDX action team representing over 1500 members in Oregon and SW Washington and we are deeply concerned about the proposed changes in the Holistic settlement for the cleanup of radioactive waste at Hanford. Given that radioactive wastes are likely to reach the Columbia River prior to the 2040 deadline (there is some indication that may already be happening), these changes are even more disconcerting. We call on the State of Washington and the Federal Government to ensure safe, efficient, durable and effective plans for protecting both the river, groundwaters, communities and the rights of Tribes in this cleanup process. We are concerned that Tribes did not have a full opportunity to exercise their treaty rights prior to the public announcement of proposed changes and believe that these changes should not take place without full consultation of the Tribes with TPA agencies. We believe the proposed grouting plan is premature, in conflict with current law and the "good as glass principle" for vitrifying and deep contained burial of high level radioactive waste and that tank waste may very likely contain high level waste. Adequate environmental review results should be made available to the public and decisions should not be made without fully understanding the potential harm that grouting might be caused. We are definitely not in favor of the shipment of radioactive waste through communities in Washington or Oregon or shallow storing within Texas or Utah. Affected communities should be fully informed of any transport or storage plans and given time to weigh in and consent to such risks. How does this plan ensure that grouted wastes will not get stranded or stored at Hanford while awaiting shipment in ways that could harm the surrounding communities.

Have different climate change scenarios been modeled in terms of ground water dynamics and what if there are unanticipated changes in levels of radioactivity or mobility? How do you ensure long-term protection of the groundwater, River, and surrounding communities as well as those downstream? How much contamination is likely to reach the river over various timespans (decades, centuries,etc.)? The processes being proposed are likely to involve the production of transuric wastes and what guarantees are in place on how those will be adequately handled. Until these and other questions can be answered, we ask that action not be taken on the proposed changes laid out in the signed settlement but that action continue quickly with reliable methods for long-term River, groundwater, and community protection.

O-2: Hanford Challenge

Comment O-2-1

RE: Public Comment Period for Proposed Holistic Settlement Agreement

Dear Tri-Party Agencies, Thank you for the opportunity to submit comments on the 2024 Holistic Settlement Agreement.

Hanford Challenge is a non-profit, public interest, environmental, and worker advocacy organization headquartered in Seattle, WA. We are an independent 501(c)(3) organization incorporated in the State of Washington since 2008 and registered in Oregon. Our mission is to create a future for the Hanford Nuclear Site that secures human health and safety, advances accountability, and promotes a sustainable environmental legacy.

Hanford Challenge has members who work at the Hanford Site. Other members of Hanford Challenge work and/or recreate near Hanford, where they may also be affected by hazardous materials emitted into the environment by Hanford. All members have a strong interest in ensuring the safe and effective cleanup of the nation's most toxic nuclear site for current and future generations, and who are therefore affected by conditions that endanger human health and the environment.

The story of Hanford's tank waste cleanup has been decades of delays and cost overruns. Hanford Challenge appreciates the effort to change this story through the Holistic Negotiations. However, we hope it is becoming clear that you, the Tri-Party Agencies, can't do this work alone. You need all of the players involved in the complex multigenerational task of Hanford cleanup and not just in a check-thebox sort of way. We believe it was a grave mistake to ignore the early and frequent requests to seek input and guidance from the broader Hanford community and Tribal Nations as you were hashing out a renewed path forward for tank waste cleanup during the four years of closed-door Holistic Negotiations. We all have a role to play in getting the Hanford cleanup story back on track and it is going to have a better ending if the Tri-Party Agencies embrace a more collaborative mentality.

Please sit with the comments that come to you during this public comment period and resist the pull to quickly finalize the settlement agreement. Let the comments shape the final agreement even if it takes longer, even if you have to come back out for another round of public engagement and comment. After four years of negotiations, continue to take your time and fully consider the feedback and comments on your proposed changes to the scope and timeline of tank waste cleanup. When cleanup plans change in response to public, agency and Tribal Nation recommendations, there is often broader acceptance and willingness to actively support cleanup decisions.

Comments on Public Involvement

Hanford Challenge is extremely disappointed that after four years of closed-door negotiations, the TriParty Agencies did not develop a robust public involvement plan with input from groups and entities working on Hanford. The legal agreements that map out the scope and timeline of Hanford cleanup are not written in a way that is easy to understand. Great care and effort

should always be made to develop materials related to TPA and Consent Decree proposed changes that are transparent and easy to understand and reflect input from groups like Hanford Challenge, other public interest organizations, and the Hanford Advisory Board, all of which have repeatedly offered to review draft public involvement related documents and provide input to increase accessibility.

We appreciate that the documents were released prior to the official public comment period start date and we greatly appreciate the Washington State Department of Ecology's willingness and patience in meetings to discuss the documents and answer questions. However, there are many things that could have been handled differently that would have resulted in a better informed public and more effective public comment period.

Going forward, please:

Get Input Early and Often:

- Hold Listening Sessions During Negotiations: During milestone related negotiations, take time to step out of the negotiations and hold listening sessions as a way to bring public concerns back to the closed door sessions.
- Hold Document "Walk Through" Sessions: Gather interested groups and individuals to walk them through the milestone-related documents page-by-page and answer questions along the way. Although it will take additional time, it will greatly benefit the public engagement process and could have an accelerating power as those who would participate in sessions like that are also the ones who are sharing the information with their members and networks.
- Get Input on Public Involvement: Consult with groups, organizations, and Tribal Nations on your public involvement plans for materials, public meeting design/timing/location, and presentations. Use that input to improve the plan and increase public engagement.

Design for Meaningful Involvement

- Schedule Major Comment Periods in the Spring and Fall: The timing of the comment period was a mistake. The summer is a notoriously terrible time to solicit engagement on Hanford cleanup, as the low attendance at Settlement Agreement public meetings shows. Major comment periods need to be scheduled in the spring and fall.
- Allow Tabling at Agency-Led Public Meetings: Create space for information-sharing by allowing various groups to table during an open house. Inviting groups involved in Hanford cleanup to the table is a way to embrace diverse perspectives and often helps the public understand the issues that will be discussed in the public meeting.
- Include a Local Perspective Presentation: Invite and coordinate with local groups to provide a local perspective at the start of major topic agency-led public meetings.
- Hold Public Meetings in Major Cities: Hold public meetings in major cities around the region to increase participation and ease of attendance. The decision to not hold Settlement Agreement public meetings in Portland or Seattle was baffling and the reasoning did not pass muster. Some of the reasoning shared at the public meetings to hold a meeting in Olympia instead of Seattle and/or Portland included: "1) Olympia is in between Portland and Seattle;

and 2) Parking is difficult in Seattle and Portland." This doesn't make any sense. Anyone who has ever been on I-5 between the hours of 4pm and 6pm knows that residents of Seattle and Portland would rather spend 5-10 minutes to find parking than spend hours in traffic on I-5. It is also important to get input from groups around the region on meeting locations and timing, which did not happen for these meetings. Groups, organizations, the State of Oregon, and Tribal Nations should have been consulted and their input used to improve the public involvement plans.

Use Plain Language Please

- Big Picture First: Start with the big picture and then move into the details. Anyone who isn't working on Hanford full time can benefit from a review of what is being discussed from a bigger picture standpoint. From that big picture baseline overview, it is much easier to create conditions for understanding the proposal.
- Focus on the Work the Administrative Tool Covers: Use plain language in your presentations and materials to provide a high-level overview of the cleanup work the administrative tool (in this case, the Consent Decree & Tri-Party Agreement) covers, instead of overly focusing on the intricacies of the administrative tool itself. Get input from public interest groups and individuals on your presentations ahead of time.

Be Transparent

- Share Important Information Up Front: If there is important information buried in your materials and presentations, then bring it forward and make it transparent. For example, a few major things that should have been plainly stated in your materials and presentations for Holistic Negotiations include:
- o The amount of liquid tank waste you are planning to grout (it took many rounds of questioning over multiple presentations to get an answer that it is tens of millions of gallons of waste);

o instead of delaying cleanup now, cleanup milestones will be delayed in the future;

o when those decisions about future delays are anticipated; o what the public process will look like that accompanies those decisions.

Stop Pushing Your Critics Away

- Learn from Critical Feedback: Instead of running from critical feedback and responding with defensive and avoidant behavior, invite your critics to the table and make time to learn from their feedback.
- Look to Past Processes like the Tank Waste Task Force: Consider embracing processes that are similar in design and scope to the Tank Waste Task Force to build trust and buy in with non-TPA entities.

Milestone Cheat Sheets of the Future

• For TPA change packages and Consent Decree changes, please create a cheat sheet that summarizes the changes in chronological order to assist with public understanding of the documents that are out for review and comment.

Share Cost Implications

• Be transparent about the budget implications of proposed changes to Hanford work scope and deadlines. Please provide this information during public comment periods.

Holistic Settlement Agreement Comments

Settlement Agreement Terms

- Forbearance Provision: Please strengthen the language regarding the use of the high-level waste reinterpretation rule so that it can never be used at the Hanford Site. Currently, the forbearance provision reads: "Energy affirms that it intends to forbear from classifying or reclassifying reprocessing wastes located at or from the Hanford Site as non-High-Level Waste...." This section should instead read: "Energy shall not classify or reclassify reprocessing wastes located at or from the Hanford Site as non-High-Level Waste....". The forbearance provision should also include a more formal notification system/plan if Energy believes changed circumstances might call for an end to this forbearance. This notification should also include notifying more than just Washington State and include Tribes, the public, etc. in a more formal method. For more information about our concerns see our press release from January 2019 titled Hanford Challenge Joins with Other National and Regional Non-profits to Submit Comments Calling on DOE to Withdraw Proposal to Re-label and Abandon High-Level Radioactive Waste here: https://www.hanfordchallenge.org/press-releases.
- Compliance with Other Laws Section Environmental Analyses:
- o **Share Analyses with the Public Prior to Finalizing Agreement:** Please add a requirement that USDOE share its Supplement NEPA Analysis and other related required environmental NEPA and SEPA analyses with the public prior to finalizing the Settlement Agreement.
- o **Require a Full Supplemental EIS:** The Tank Closure and Waste Management Environmental Impact Statement does not provide adequate NEPA coverage for the changes proposed in the Holistic Settlement Agreement. Require a full Supplemental EIS. Because of the significant scope change, previously unassessed factors, and time elapsed since the last full EIS and NEPA evaluation, Hanford Challenge echoes Oregon Department of Energy's expectation of an updated assessment with full public participation and comment, including route-specific analysis of potential transportation options.
- Future Discussion of Grouted Tank Waste Treatment and Disposal: Add a point in the paragraph about the June 2038 deadline for Ecology and Energy discussion of grouted tank waste treatment and disposal that this is a reference to the double asterisk delay negotiations in paragraph 7 of Milestone M-062-45 in Attachment K of New/Changed TPA Milestones.
- Appendix H/Appendix I Updates: Extend the date on this requirement beyond December 2024 to give the TPA Agencies more time to fully consider comments received on the Holistic Settlement Agreement, have ample time to discuss how to update the Settlement Agreement

to reflect public concerns, write and share a response to public comments document, and go back out for another round of public comments with changes to the agreement as necessary.

Consent Decree Proposed Changes

- **Update Typos in Numbering in Section IV.** A that Skips Section 8: We found a typo in the numbering in the Consent Decree. The numbering is off as referenced in A-23 Interim and A-24 Page 5 | Hanford Challenge Holistic Settlement Agreement Comments Interim. A-23 references IV.A.8, which doesn't exist in the document which jumps from IV.A.7 to IV.A.9.
- A-23 Interim Milestone: Provide Ecology with a Critical Path Schedule for the HLW Facility, due 12/31/2028: In the spirit of embracing an "early and often" approach to public involvement at Hanford, add a requirement in the Consent Decree for USDOE to share the critical path schedule for the HLW facility with Oregon DOE, the public, and Tribal Nations after sharing the schedule with Ecology. Create the space for open dialogue and discussion six months prior to negotiations that will conclude in June 2029 per A-24 Interim Milestone, so that broader input can be in the room during those negotiations as opposed to after the negotiations have concluded.
- A-24 Interim Milestone: Per Section IV.A.8, Complete Negotiations re: Revisiting/Revising Asterisked HLW Facility, due June 30, 2029: Add a requirement to consider agency, public, and Tribal Nation input that was collected per the recommended change to A-23 Interim Milestone during these negotiations. Also add a requirement for a robust and meaningful public involvement process following these negotiations that embraces the input above in the Comments on Public Involvement Section of these comments. Ensure that the public involvement process includes discussion of the bigger picture of tank waste treatment and where high-level waste vitrification fits into that bigger picture, instead of limiting discussion to the proposed changes to the consent decree.

New/Changed TPA Milestones

• Attachment C: Establish New TPA Milestones to Build One Million Gallons of Multi-Purpose Tank Waste Storage Capacity in 200 West Area, M-045-138 and M-045-139:

o Create New Milestone for Added Tank Capacity and Accelerating Schedule to Build New Tanks: Add a new milestone due prior to M-045-138 that requires an assessment of the actual tank waste capacity needed on the Hanford Site and a competitive challenge to map out a faster way to build new tanks at Hanford. Hanford Challenge believes we will need significantly more capacity than 1 million gallons and that we will need the new tank space sooner than 2040. We recommend the following processes for your assessment and competitive challenge:

□ New Tank Capacity: Task Hanford's Tank Integrity Program Group to assess and predict the amount of safe storage space that will be needed over the next 40 years to safely store, blend, and move tank waste from leaking tanks. Use the recommendations from this group to establish the amount of space needed over the next 40 years, prime locations for additional tank waste storage, and order of new tank location, and update the TPA milestones to reflect the Tank Integrity Program Group's input.

☐ Updated Deadline: Create a competitive challenge for the Hanford workforce to design a process to build tanks faster than the 16 years proposed in the New/Changed TPA Milestones, Attachment C.

o Contingency Space: Ensure that new tanks may be used for contingency space for waste from leaking tanks.

• Attachment D: Update to TPA Major Milestone M-045-00, Complete Single-Shell Tank System Closure

o More Transparency, Please: Be more transparent about the timeline for double asterisked milestones, including announcing delays to single-shell tank closure later, in 14 or so years. Even if a member of the public was able to follow the scavenger hunt ping-ponging them around the documents to figure out the meaning of the asterisks, the language is very hard to interpret. Do better!

o Is this a Typo?: We noticed that the date in the Holistic Settlement Agreement is not underlined despite being slightly different from the TPA Appendix D that is listed online here, last updated 7/30/24. Online the date says 1/31/2043, the Holistic Settlement Agreement jumps the date forward a year to 12/31/2043, but it isn't underlined. Is this a typo?

• Attachment E: Extend Due Date of TPA Milestone M-045-15 for Completion of Tank A-103 Single-Shell Tank Waste Retrieval Project

o More Time = More Retrieval: Hanford Challenge appreciates delays that allow for the use of new technologies that could result in removing more waste from Hanford's tanks. Assuming this is the intent of this milestone, we support this delay.

• Attachment F: Establish New TPA Milestones for Closure of Single-Shell Tank Waste Management Areas A-AX, B-BX-BY, C, S-SX, T, TX-TY, and U, and the 241-C-301 Catch Tank and 244-CR Vault

o M-045-62 Make it Easier to Find Dates: The date referenced for this updated milestone was very difficult to find. M-045-62 is due (we think) by 8/31/2028. We found this date in the Tier 2 Waste Management Area C Closure Plan from 2017. This date is referenced in a table on the last page of the document. The milestone in the Holistic Settlement Agreement lists a date that references a date in the M-045-83 Tier 2 Closure Plan. We couldn't find M-045-83 referenced in the Tri-Party Agreement Appendix D, we're guessing that is because USDOE gave Ecology this document in 2017, so once the document was submitted they removed the milestone. But it was a wild goose chase to find the dates referenced. Please make it easier to find dates that have a complicated reference.

o General Comment - Delay Tank Closure: Delay tank closure work and find ways to get more waste out of tanks before taking irreversible steps to fill tanks with grout, leave waste in the soil, cover the farms with a barrier, and declare the work done. According to the Tier 2 Closure Plan for C-Farm, the updated date for finishing C-Farm Closure is 8/31/2031. WMA-C still contains 62,000 gallons of high-level waste unevenly distributed between the tanks. Delay closure to allow site contractors to use recommendations from the independent panel about retrieval technologies to remove as much waste as possible from the tanks.

o Add Milestones to Delay Tank Closure: Add milestones that reference the independent panel on retrieval technologies from Attachment I and require that new technologies be implemented to remove more waste from all tank farms prior to closure, including WMA-C.

• Attachment G: Update to TPA Milestone M-045-70, Complete Retrieval of all Single Shell Tanks

o Support for Delays that Allow for More Tank Waste Removal: Hanford Challenge supports delays that allow for as much waste as possible to be removed from Hanford's tanks. We support these delays if the extra time allows the agencies to use expertise from the independent panel that will be looking at other retrieval technologies, to remove more waste from these tanks.

• Attachment H: Update TPA Milestone M-045-85 to Complete Negotiations and Establish TPA Milestones for Closure of the Remaining Single-Shell Tank Waste Management Areas

o Increase Transparency About Delays and Future Public Process: Plainly state when announcements about delays for single-shell tank waste management area closure are anticipated as well as what the public process will look like that accompanies those decisions. Include this information as a part of the record.

• Attachment I: Establish New TPA Milestones for Retrieval Technology Work Plan and Implementation of Work Plan

o Support for Additional Tank Waste Retrievals: Hanford Challenge supports having an independent team assess and provide recommendations on additional retrieval technologies.

o Include all Tank Farms: Require that recommended new technologies be used for all of Hanford's tank farms, including WMA-C, prior to closing any of Hanford's tank farms.

• Attachment J: Establish New TPA Milestone to Complete Retrieval of 22 Single-Shell Tanks in S, SX, and U Farms

o Include Estimated Amount of Waste USDOE Intends to Grout: Not stated in M-045-135 is USDOE's intention to grout tens of millions of gallons of waste as part of this retrieval plan. Please add this information to the paragraph starting "DOE's obligations under this milestone are expressly contingent on DOE having a regulatory pathway to grout and dispose of waste offsite..." Suggested language to add: It is USDOE's estimate that tens of millions of gallons of waste from these tanks could be grouted and transported offsite for disposal.

o Hanford Challenge Grout Concerns: Hanford Challenge submits for the record its concern that plans to grout Hanford tank waste are premature, cost and schedule savings are exaggerated, and that past grout program failures should be heeded and analyzed more thoroughly prior to any tank waste grout endeavors. For more information about our concerns with grout see: www.hanfordchallenge.org/grout

o Wait for Actual Data: No plans should be finalized or made prior to a robust public involvement and input process that includes all relevant information from the 2,000 gallon Test Bed Initiative, including; the time it takes to find a grout recipe that works and hardens tailored to this specific tank waste, grout-to-waste ratios, grout setting time, performance of in-tank

pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah.

o Create a New Milestone for Independent Panel Comparison of SY-101 to 22 Tanks Chosen in 200 West: Include a new milestone that requires USDOE to hire an independent panel to assess information from the 2,000 gallon Test Bed Initiative, compare the waste from SY-101 to the waste in the 22 tanks after they are selected from 200-West Area, and write a report summarizing how this information impacts any plans to grout waste from these tanks. Because the tank waste is so different between tanks, it is important that the panel assess how the difference in tank waste profiles impacts whether or not USDOE can apply any of the conclusions from the 2,000 gallon test to the waste in the 22 tanks, or if more information is needed.

o Create a New Milestone for Public Process: Create a new milestone to require a robust public process to review findings from Independent Panel report and solicit input from the public prior to making any grouting decisions related to the 22 tanks from 200 West Area.

• Attachment K: Update to TPA Major Milestone M-062-00, Complete Pretreatment Processing and Vitrification of Hanford High Level and Low Activity Tank Wastes

o Increase Transparency about Delay Timeline and Public Process: Please increase transparency about the timeline for pushing delays to the future. Plainly state when announcements about decisions related to future delays are anticipated as well as what the public process will look like that accompanies those decisions. Include this information as a part of the record.

- Attachment L: Update TPA Milestone M-062-45, Requiring System Plan Negotiations and Establish Two New Milestones o Rewrite these Milestones: We found this section to be incredibly confusing. Please rewrite these milestones in plain language to make them easier to understand.
- Attachment M: Establish New TPA Milestones to Create Alternative Treatment Capacity for Low Activity Waste for 200 West Area Single-Shell Tanks

o Change the M-062-64 Deadline to be Data-Informed: Wait to start the decision-making process for New Interim Milestone M-062-64 regarding grouting tens of millions of gallons of tank waste from 200 West Area until all relevant information is received from the 2,000 gallon Test Bed Initiative. Change the date for this milestone from December 2024 to *Within 12 months of receiving all relevant information from the 2,000 gallon Test Bed Initiative, including; grout-to-waste ratios, grout setting time, performance of in-tank pretreatment system, transportation reports, cost reports, and vendor quality of work from both commercial treatment and disposal sites in Texas and Utah.

o Push Back Other Dates: Please push back the other dates in Attachment M to reflect this slower, more thoughtful, data-informed, and deliberative process.

o Assess Grout Shipment Transportation Impacts: Going forward, please create and share a transparent plan to assess the transportation impacts and options for potentially shipping millions of gallons of tank waste through communities as part of your proposed grout plan.

Consult with communities and stakeholders along potential routes and get public input before making your decision.

Thank you for considering our comments, Nikolas Peterson, Executive Director, Hanford Challenge

O-3: Burbank Neighborhood Assoc.

Comment O-3-1

hELLO;

Hanford's High Level Nuclear Waste tanks continue to leak without any action to stop the leaks. Since the public meetings on the Agreement were held in July, USDOE has announced that a third tank is now leaking. USDOE clearly knew about this leak in July, but never disclosed it in the meetings despite numerous people raising concerns that the Agreement fails to require any meaningful action to stop leaks. I share that concern and want the Agreement changed to include enforceable requirements to remove leakable liquids from leaking tanks starting next year and to prioritize full retrieval of wastes from the tank farms that have leaking tanks. It is not acceptable to let those tanks in B and T Farms keep leaking until sometime after 2040.

O-4: EnergySolutions LLC

Comment O-4-1

See attached letter signed by Joe Heckman, EnergySolutions President, Waste Management. The body of the letter is presented in this comment section:

EnergySolutions, LLC is pleased to comment on the changes to the Holistic Agreement on Cleanup of Hanford Site Tank Waste posted on May 30, 2024. The revision provides several new and revised cleanup deadlines. Commercial processing of tank waste will greatly increase the probability of meeting the milestones and deadlines within the revised agreement. EnergySolutions is uniquely qualified to provide that service to the Hanford cleanup project. EnergySolutions comments are specific to Attachment M, Change Number M-62-24-04, Establish New TPA Milestones to Create Alternative Treatment Capacity for LAW for 200 West Area SSTs. The modifications within this change number (M-062-64, M-062-65, and M-062-66) all describe waste being grouted on-site with the grouted waste disposed outside of the Hanford Nuclear Reservation (outside the state of Washington). The modifications are also concerned with a backlog of grouted waste awaiting shipment to an approved disposal facility. An alternative that is not addressed in the revised agreement is for liquid waste to be shipped off-site for grouting and disposal at an approved facility. This alternative would be beneficial to meet milestones since proven, commercial infrastructure serving the DOE is already in place to perform this treatment and could begin immediately. It would also solve the backlog of grouted waste on-site issue, as well as the existing lack of tank space for wastes being processed out of the Tank Side Cesium Removal system, and truly begin the process of reducing waste on site.

The EnergySolutions Clive Facility in Utah has the infrastructure in place and has over 30 years of experience successfully treating contaminated liquids to meet Land Disposal Restriction standards and disposes the grouted residue in an on-site permitted mixed waste embankment. Although not to treatment capacity, the EnergySolutions Clive facility has managed (stabilized/solidified) approximately 700,000 gallons of liquid waste from 200 shipments over the last five years with radiological characteristics consistent with the intended Hanford wastes. Further, the facility has a current campaign with two DOE sites that have shipped approximately 150,000 gallons of similarly characterized water in 32 tanker shipments over the last six months. Over the course of liquid treatment at the Clive facility, there has never been a transportation incident from a liquid tanker shipment. Additionally, tankers of hazardous and radioactive liquids with similar constituencies containing upwards of 500,000 gallons annually are routinely transported into and through the state of Washington.

Liquid waste can be safely transported using existing methods and equipment and in fact is currently being done constantly. EnergySolutions feels the addition of off-site liquid shipments into the holistic agreement would allow more flexibility and efficiency and help meet or even exceed the agreement milestones and deadlines.

O-5: Columbia Riverkeeper

Comment O-5-1

To the U.S. Department of Energy, Washington Department of Ecology, and U.S. EPA:

The Columbia River is the lifeblood of the Northwest. The U.S. government must act to protect the River from highly radioactive and toxic pollution at the Hanford Nuclear Site. This includes honoring the commitments made in Treaties with Tribal Nations at Hanford, and recognizing that the nuclear waste created at Hanford has caused immeasurable harm to Tribal communities and others who depend on the Columbia River.

We are calling on the TPA agencies to undertake the most protective cleanup possible, given the enormously high stakes for the Columbia River and everyone who depends on it. In developing changes to the Tri-Party Agreement and the Consent Decree, we demand that:

- 1. The federal government treats tank waste as the law requires. The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste, Energy should permanently abandon plans to apply this definition at Hanford;
- 2. The TPA agencies provide adequate information and opportunities for the public to comment on major proposed changes to cleanup, such as the adequacy of proposed new tank capacity and the proposal to ship large volumes of tank waste through communities in liquid or solid form;
- 3. Ecology and EPA explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere.
- 4. Environmental reviews are available to the public to review while commenting on the proposed changes. The agencies seem to be putting the cart before the horse, making sweeping

changes to Hanford's cleanup plan and finalizing a settlement without having conducted a full environmental NEPA and SEPA analysis of the impacts of its decisions.

- 5. The 2024 date for selecting a grouting alternative be removed from the proposed changes. This date is inappropriate and premature, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them.
- 6. Finalization of the proposed changes be delayed until Tribal Nations have consulted with the TPA Agencies on the proposal. This should have happened prior to the settlement going public, robust consultation is not equivalent to after-the-fact "familiarization," with decisions that directly impact the lives and livelihoods of generations of Indigenous people. The settlement is astoundingly inappropriate in this regard, lacking entirely an analysis of how the people most impacted by these decisions will navigate the hazards and harms imposed on them.
- **There is a multipage attachment with the individual comments available acknowledge/thank

O-6: Columbia Riverkeeper

Comment O-6-1

Dear U.S. Department of Energy, U.S. Environmental Protection Agency, and Washington Department of Ecology,

Columbia Riverkeeper ("Riverkeeper") is a non-profit organization with a mission to restore and protect the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. Columbia Riverkeeper has over 16,000 members and supporters who live, work, and recreate throughout the Columbia River Basin, including thousands of members and supporters in Washington.

For over two decades, Riverkeeper has worked with Tribal Nations and people in communities throughout the Northwest who rely on a clean Columbia to address toxic and radioactive waste at the Hanford Nuclear Site. Based on this experience, our organization has seen firsthand and appreciates the complex challenges and unanswered questions relating to long-term management of nuclear waste. Thousands of people are employed protecting the Columbia River from 1 Hanford's toxic legacy, and we are grateful for the resources they protect and for their work. The Columbia River is the lifeblood of the Northwest.

Oregon Physicians for Social Responsibility (Oregon PSR) works to protect human life from the gravest threats to health and survival. Oregon PSR is an organization of health professionals and public health advocates working collaboratively with community partners to educate and advocate for societal and policy change that protects human health at the local, state, national, and international level. OR PSR seeks a healthy, just, and peaceful world for present and future generations.

Washington Physicians for Social Responsibility (WPSR) is a 40-year-old, health professional-led advocacy organization working to create a healthy, just, peaceful and sustainable world. WPSR

takes on the gravest current threats to human health and survival - nuclear weapons, economic inequity, and a climate crisis driven by dependence on fossil fuels. WPSR leverages the credible and trusted voice of healthcare professionals to educate the public, influence decision-makers, and promote public policies that support our mission.

Riverkeeper, Oregon PSR, and WPSR submit to the Tri-Party Agreement (TPA) agencies the following comments on the Holistic Settlement and potential proposed changes to the TPA and the Washington v. Energy Consent Decree (collectively "agreement").

1. General Comments

a. The federal government should pursue cleanup that ensures that Tribes at Hanford can exercise their Treaty rights and that all Tribes impacted by the proposed changes have a voice in Hanford cleanup decisions.

Since time immemorial, Tribes have relied on resources along the Hanford Reach, an area of incalculable cultural and religious significance for Tribes at Hanford. These natural, cultural and religious resources, including sacred sites, are now impacted, threatened, and/or inaccessible because of Hanford. The displacement of Tribes from Hanford is an ongoing harm. The agreement does not solve the problem of how the pollution at Hanford impinges on Treaty-reserved rights for Tribes at Hanford. Dr. Holly Barker, a professor of sociocultural anthropology at the University of Washington, stated, "It's like an intergenerational human rights abuse. We've already hurt human beings that we can't even begin to know or think about yet." 1

The late Dr. Russell Jim, founder of Yakama Nation's Environmental Restoration and Waste Management Program ("ERWM"), stated, "If they were to clean up Hanford to comply with the Treaty of 1855, it would protect all future generations - not just the Yakama." These words ring true, and Riverkeeper recognizes and emphasizes that the proposed changes presented in the agreement were negotiated without any meaningful input from Tribal Nations.

The federal government should pursue cleanup that ensures that Tribes at Hanford can exercise their Treaty rights safely. Where this is difficult or seemingly impossible at this time, the government should commit more time and resources to addressing the harm it has caused through the displacement of Tribes and the creation of vast toxic and radioactive pollution impacts, in a durable effort to lessen the harmful impact of Hanford's pollution. ERWM staff explain in a recent Inkstick Media article

The treaties of the Walla Walla Council of 1855 and Executive Order 13007 ensure access for Tribal Members to hunt, fish, and gather on their ancestral lands. Though the existence of the Hanford Site has significantly limited Tribal access to these lands in violation of the treaty, the practices of hunting, fishing, and digging roots for ceremonial purposes and food continue to have deep cultural significance for the Yakama Nation, according to [Trina] Sherwood and her [ERWM] colleagues Rose Ferri and Laurene Contreras. Now, these practices bring the risk of exposure to radioactive contamination. "If you are a tribal member and you are out digging roots, you have got basically three pathways of contamination," said Rose Ferri, a project tracking resource analyst for the Yakama Nation. These pathways include dermal, from skin to soil contact, inhalation, from disturbing polluted soil, and ingestion, from consuming contaminated plants and roots, Ferri explained.2

Changes to the cleanup must begin with this premise: Tribes have a legal right to resources and practices inextricably linked to the Hanford site and are at the frontlines of exposure to radioactive and toxic contamination.

As Yakama Nation has reminded the TPA agencies, repeatedly, the Comprehensive Land Use Plan is out of date and does not align with this premise or the Treaty of 1855, and it should not be used as a basis for decision-making without a major revision and update. Long-term impacts must be evaluated in a thorough supplemental environmental impact statement (EIS). Tribal people will be at Hanford forever and will interact closely with Hanford and the water, wildlife, vegetation and other resources connected to Hanford. The law maintains to protect people from the pollution present now, and in the future, to the greatest extent possible. Hanford waste requires the highest level of removal, treatment, and immobilization that technology can provide as we move forward experiencing generations of Hanford's polluting impact. These communities deserve a greater voice in the decision.

The agreement has implications for people for millennia, across the Western U.S., Tribal ceded and unceded lands, and through communities that have no idea about this agreement. Yet, the agreement and proposed changes could result in the transport of Hanford's tank waste—the legacy of making plutonium for nuclear weapons and nuclear power ("Atoms for Peace")—through many communities and watersheds.

Riverkeeper appreciates the recognition in this agreement that tank waste should be removed from Hanford because it poses a long-term risk to the people who rely on Hanford now and those who will rely on Hanford in the future. Riverkeeper also supports the commitment to construct more tank space to handle the high-level waste in Hanford's tanks.

i. Questions

- Please provide more clarity about the pace of putting new tank space into operation and the purpose of the tank space. As Oregon Department of Energy (ODOE) pointed out in its comments on these proposed changes, "Accelerating the installation schedule for a new 1,000,000-gallon tank in the SY farm would have protective benefits to the mission, and it would enhance operations of the 200W waste treatment system." ODOE also observes, "Without capacity to treat or store treated LAW all retrieved LAW would be shipped offsite in liquid form, which Oregon strongly opposes."
- Does delaying implementation of new tank space push the system towards shipping liquid waste offsite?
- When Ecology and Energy say that they are engaging Tribal Nations, and formal government-to-government consultation may be occurring, how far does this extend from Hanford?
- b. Communities impacted by this proposal are not being contacted. The agencies negotiated for years, and public interest groups are only a few weeks into understanding the breadth of what we are being asked to comment on.

During the public hearings, Riverkeeper and others, including ODOE, expressed concern that the current comment period may be the only opportunity to comment on whether to ship liquid or grouted waste through communities that are likely unaware of the proposed changes.

The implications of decisions underway could resonate for decades or longer including; whether to grout material rather than vitrify it; whether to grout material on the Hanford site or offsite; whether to ship liquid or solid material, or both; the wisdom and risks associated with selecting one route over another; the comparative risks and spill consequences of one method of shipment versus another; and the acceptability of Hanford tank waste in other communities. These questions cannot be answered until the people most impacted are involved. Yet, the public is being asked to provide final comments without any supporting environmental analysis by September 1. Fundamentally, this process is flawed and backwards, and many people who could be harmed are not being involved in the decision-making process.

Specifically, multiple commenters have raised concerns regarding the lack of effort put forward by TPA agencies to contact people along potential transportation routes and final disposal locations. The routes and potential final disposal locations would include environmental justice and Tribal communities already overburdened by toxic pollution, as well as major water resources and other natural resources. What are the agencies' specific plans to conduct outreach prior to the agreement being signed, and prior to Energy's selection of an alternative by the end of this year?

Additionally, Energy stated in public hearings that its decision regarding whether to ship grouted or liquid tank waste could rely in part on a previous environmental review conducted for the Test Bed Initiative (TBI) and other NEPA documents, cobbled together, likely with an additional business case analysis—as opposed to a supplemental or new environmental review. Previous environmental reviews had limitations and flaws pointed out by commenters, and data from the TBI have not been obtained. How will the agencies rectify these concerns? How will the previous environmental reviews interact with new laws and legislation concerning environmental justice communities?

Riverkeeper urges the TPA agencies to conduct a new environmental review through a supplemental environmental impact statement (SEIS) to analyze the impacts of proposed changes to the TPA and Consent Decree. Previous analyses do not provide adequate NEPA coverage to address the potential impacts of the new, vastly expanded, proposed grout and shipment program. We also urge TPA agencies to envision how to maximize the potential of vitrification at Hanford, which could benefit people across the region and the Western U.S. who depend on Hanford and who may become exposed to waste if it is not adequately immobilized.

i. Questions

- What are the agencies' specific plans to conduct outreach prior to the agreement being signed, and prior to Energy's selection of an alternative by the end of this year?
- If there are no plans to conduct specific outreach by the end of the year, can TPA agencies outline when, during implementation of the agreement, the agencies plan to conduct outreach and solicit public engagement?
- c. Energy, EPA and Ecology are falling short of meeting their own requirements for engagement with overburdened communities and environmental justice communities.

Executive Order 140964 sets out to "dismantle racial discrimination and institutional bias that disproportionately affect the health, environment, safety, and resiliency of communities with environmental justice concerns." Energy and EPA have fallen short in identifying and addressing concerns regarding several decisions in the agreement, including the decision to grout material rather than vitrify it and the potential of shipping liquid and/or solid waste through overburdened communities. Executive Order 14096 dictates

To ensure that the Nation's policies and investments respond to the needs of every community, all people should be afforded the opportunity to meaningfully participate in agency decision-making processes that may affect the health of their community or environment. The Federal Government must continue to remove barriers to the meaningful involvement of the public in such decision-making, particularly those barriers that affect members of communities with environmental justice concerns, including those related to disability, language access, and lack of resources. The Federal Government must also continue to respect Tribal sovereignty and support self-governance by ensuring that Tribal Nations are consulted on Federal policies that have Tribal implications. In doing so, we must recognize, honor, and respect the different cultural practices — including subsistence practices, ways of living, Indigenous Knowledge, and traditions — in communities across America. As our Nation reaffirms our commitment to environmental justice, the Federal Government must continue to be transparent about, and accountable for, its actions. 5 (emphasis added)

The agencies are falling short of this standard, and we appreciate comments from ODOE that additional public dialogue should inform major actions by the federal government that could result in radioactive and toxic pollution moving through or remaining in overburdened communities.

During the July hearings, in-person and online public meetings had significant accessibility challenges. In the Olympia meeting, online participants were unable to hear much of what was said. Most folks at the sparsely attended Olympia meeting also drove from Seattle, indicating that a public meeting in Seattle would have resulted in more participation (something public interest groups noted in our comment extension request).

In the Hood River meeting, some attendees were required to walk down two flights of stairs without the option of an elevator, to gain access to the meeting. In addition, the TPA agencies should have allowed the presentation of alternative viewpoints at the public meetings, such as allowing organizations to set up informational tables. The public hearings should have also been an opportunity for the public to submit oral testimony to the agencies. Only allowing the submission of written comments hinders participation and accessibility. Lastly and perhaps more concerning is the fact that TPA agencies choose to not hold public hearings in locations that would be on the transport route for grouted or liquid tank waste.

i. Questions

- Why did the agencies not hold public meetings in Spokane, Maupin, Bend, Klamath Falls, or other cities along potential transportation routes?
- Have the agencies identified any environmental justice or overburdened communities that could be impacted by the decision. If not, why not?

- Have the agencies identified drinking water sources that could be impacted by the Settlement? If not, why not?
- Why were there no meetings held at or near reservations impacted by Hanford or potential transportation routes? Why not meet in Toppenish and engage the local Tribal community? (The casino has a good meeting space, and it is very accessible.)
- 1 The Hanford Site's Cleanup Shows the Lingering Repercussions of American Nuclear Production at Home, Delaney Dorsey, InkStick Media (Aug. 19, 2024). Availble at https://inkstickmedia.com/the-hanford-sites-protracted-cleanup-shows-the-lingering-repercussions-of-american-nucl ear-production-at-home/.

2 *Id*

- **3** We are still learning about the harm of Hanford's pollution. In August 2024, EPA updated its IRIS database to acknowledge that hexavalent chromium poses a much greater risk for cancer through oral exposure than through the inhalation pathway, potentially impacting cleanup at Hanford. Hexavalent chromium harm is disproportionately experienced by people who would exercise Treaty-reserved rights at Hanford, and it causes multiple, serious forms of illness including cancer.
- **4** Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All (2023) availbe at https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizingour-nations-commitment-to-environmental-justice-for-all/

5 *Id*

Comment O-6-2

- 2. Comments on the agreement's proposal to ship either liquid or grouted tank waste offsite.
- a. Too many uncertainties exist to conclude that liquid tank waste shipments would be feasible or acceptable, and so we oppose liquid tank waste shipments.

Energy has been aware for months that the State of Oregon has major concerns about the shipment of liquid tank waste, expressed directly by Governor Kotek in a July letter. The agreement states that a decision to ship either liquid or grouted tank waste will happen by the end of 2024. This leaves a mere four month timeframe to work out numerous uncertainties and address impacts identified in ODOE's comments, as well as our comments above. The 2024 deadline is too soon for a decision of this magnitude.

Riverkeeper has numerous concerns around the shipping of tank waste offsite. While the intention to remove hazardous and radioactive waste away from the Columbia River to a geologically superior location is laudable, the methods to achieve this remain concerning. Namely, moving liquid nuclear waste by rail could harm water resources and unsuspecting communities.

Energy should give greater deference to the concerns raised by the State of Oregon and Oregon Governor Tina Kotek. Experts who regularly deal with hazardous materials planning should be

informed and invited to participate in the question of whether Oregon hosts shipments of Hanford tank waste, in solid or liquid form (but especially in liquid form).

Energy has not put forward enough information to confidently say how local and state agencies will carry out the proposals in the agreement safely. Furthermore, Energy has not committed to providing that information in a timely manner, underscoring the need to extend the deadline past 2024 for deciding whether liquid or solid tank waste will be shipped from Hanford.

i. Questions

- What are the potential environmental consequences of grouting the material in the U, S, and SX farms and shipping it as a solid or a liquid?
- b. A rail route along the Deschutes River provides an example of potential impacts.

One potential rail shipping route would include the BNSF tracks along the Deschutes River, a route vulnerable to track maintenance challenges, including during high water events and landslides. The rail corridor is frequently impacted by wildfires in Wasco County. In 2024, the Long Bend Fire burned thousands of acres in the Deschutes River Canyon south of Maupin, OR. The BNSF line goes through the area. Emergency response resources in the area are strained. In this area, an accident involving solid or liquid tank waste could profoundly impact resources vital to people who rely on the watershed.

Tank waste shipments could pass through Deschutes County, where, according to the County's Emergency Operations Plan, "Much of the population in the County lives in close proximity to either Highway 97/20 or the BNSF Railroad route. In the event of a large spill, a large number of residents could be affected." 6 Please consider also that BNSF may rely on local first responders to provide Hazmat response, and these first responders may not be anywhere near a derailment. According to Deschutes County's Emergency Operations Plan

Deschutes County has two state Hazardous Materials teams that respond to the jurisdiction. Eugene HazMat Team 2 responds into Southern Deschutes County and Salem HazMat Team 13 responds into the central and northern parts of Deschutes County. Other state teams may assist as needed. Response time is approximately two to three hours from time of dispatch depending on weather conditions. 7 (emphasis added)

Consider also that, for Deschutes County alone, there is no information about impacts to agencies' ability to access and/or provide information regarding monitoring transportation infrastructure in the event of an emergency; assessing damage to it; restoring it; identifying alternative routes; and identifying and coordinating transportation resources useful to others.

The proposed agreement places a tremendous potential burden on local and state governments, as well as Tribal governments and community organizations who are involved in public safety and disaster response. The reality is that this proposal would put more than 10 million gallons of highly radioactive waste on rails or roads, through watersheds and communities, where the consequences of a radiological incident could be astoundingly high.

Planning must look at difficult scenarios, such as what would occur if a toxic and radioactive release were to occur in a remote or sensitive location. In Oregon, when it comes to train accidents, Oregonians had a frightening experience in Mosier in 2016 when an oil train derailed,

spilled, burned for hours, prompted evacuations (including of a school), altered the landscape in the center of town, and caused significant pollution in the vadose zone in Mosier. As a result, Riverkeeper objects to any proposal for Hanford tank waste being shipped as a liquid in the same corridor, uprail of Mosier and upstream of many communities, such as Hood River, Washougal, Camas, Vancouver, Portland, Kalama, Longview, and Astoria. (These are communities where many people are fishing for salmon headed for Hanford, right now.) We agree with the Oregon Department of Energy's comments raising objections to liquid waste shipments.

i. Questions

- How will Energy begin to ascertain impacts to public works and the ability of a community to recover from a radiological release? What would happen if a truck or rail car released toxic and radioactive liquid or solid waste into a fishing site, a place where people lived and relied upon the area entirely for their resources for significant periods of time?
- How will the EPA assure people that their water is safe to drink if a tank waste spill impacts a drinking water aquifer, such as in the Spokane area?
- Over what time and with what frequency would TPA agencies commit to evaluating the fate and transport of all the curies of radionuclides potentially released?
- How will Energy assess and address damage assessments and restoration without an environmental analysis that offers a basic project proposal?
- Will there be a requirement to inform communities along the rail route when these shipments will occur? If not, why not?
- Are communities even aware that Hanford tank waste shipments could impact them, or involved in planning for it? The Department of Ecology ("Ecology") is legally obligated to consider the impacts to Spokane, but the risks go beyond Washington's borders. What kind of risks will Deschutes County (where Bend, Oregon's sixth largest city, is located) be facing?

The proposed changes place a burden on the Radiological Protection Regional HazMat Team for the Deschutes County area, who must, in the event of a radiological incident:

- Establish and maintain a radiological monitoring and reporting network. Secure initial and refresher training for instructors and monitors.
- Provide input to the statewide monitoring and reporting system.
- Under fallout conditions, provide city and County officials and department heads with information on fallout rates, fallout projections, and allowable doses.
- Coordinate radiological monitoring throughout the County.
- Provide monitoring services and advice at the scene of accidents involving radioactive materials.8

Who will ensure that community-level emergency response needs are met? The transportation corridors are full of activity where people could come in close proximity to the waste being

transported, including on railroad tracks, rail sidings, rail bridges—potentially even trucks carrying liquid tank waste on public roads.

c. A tank-by-tank analysis is required to assess the impact of what Energy proposes in the agreement

Waste in the S, SX, and U farms includes high-level waste from T Plant, REDOX, PUREX, and other facilities that produced toxic, radioactive, and chemically complex wastes. During public hearings, agencies suggested that the selection of these farms was based primarily on the cost and difficulty of accessing the tank waste for the purpose of vitrification, as well as the difficulty the agencies have experienced in establishing reliable cross-site transport of high-level waste. At the same time, the proposed changes include the potential for both supernatant and sludge transfers in pipelines from 200 West to 200 East. It is important for the public to understand how and if it would be possible to move tank waste from 200 West to vitrification systems in 200 East, because the alternative proposal of shipping liquid tank waste through distant, unaware communities presents problems, also.

Additionally, tank-by-tank analysis is required to assess the impact of what Energy proposes in the agreement. Riverkeeper appreciates the guidance given by EPA that it is likely that multiple Treatability Variances will be necessary for the proposed settlement to be executed as proposed, and this could be a process that will be very specific to the tanks in question. Riverkeeper hopes that the information is provided to the public with a reasonable amount of time for people to review, comment, and consider the implications of moving so much highly radioactive tank waste in a non-vitrified form to a community outside of Hanford, through communities outside of Hanford.

i. Questions

- What are the characteristics of the waste in the S, SX, and U tank farms that would be shipped through communities?
- How would Energy provide confirmation to the public that each load meets safety standards, with full disclosure to the communities impacted about what will be coming through and how?
- How would Energy demonstrate that each load meets waste acceptance criteria and disposal standards, and how will Energy demonstrate that it is handling material according to the Nuclear Waste Policy Act?
- d. EPA must exercise its authority under Executive Order 14096

The EPA has a vital role to play in ensuring that the agreement incorporates the viewpoints of all those who will be impacted by the proposals. By Executive Order 14096, EPA is responsible for decreasing barriers to participation in major decisions such as these for overburdened communities, Tribal communities, and people in areas with environmental justice concerns. Riverkeeper urges EPA to seek an amendment of the TPA changes and Consent Order that establishes meaningful public process, comment opportunities, and a National Environmental Policy Act (NEPA) analysis that supports the goals of Executive Order 14096.

i. Questions

- How large a zone of groundwater could be poisoned by a liquid tank waste railcar spill near the mouth of the Deschutes River, for example, and how would this impact the River over time?
- How persistent would radioactive and toxic pollution be in drinking water sources near Spokane, in the case of a major accident with a truck carrying liquid tank waste?
- In the case of grouted waste, how would the material perform while exposed, in fast-flowing water, potentially in flood conditions along a remote stretch of rail line before responders can isolate it?
- How would the shipment of liquid tank waste affect workers transporting that waste?
- e. Too little outreach has been done by the TPA agencies.

All of the Tribes who rely on the Columbia River could be impacted by transportation of tank waste, in either a liquid or grouted form. In the Energy-acknowledged absence of a robust public engagement effort along the routes, Energy should immediately abandon the idea of shipping liquid waste through these regions. EPA must compel Energy to contact and consult the people who could be harmed. This is a major decision, and billions of dollars are already being allocated with the expectation that this proposal can sustain public scrutiny.

Riverkeeper continues to stand for the position that any waste leaving Hanford must leave in the most stable manner possible (not the most expedient or least costly to the current generations making decisions), reducing harm to people and the environment along any proposed shipping routes and potential ultimate disposal locations.

i. Questions

- How does the Natural Resources Damages Assessment process and the Trustees Council's work interact with this settlement and agreement? Are Trustees who are also decision-makers responsible for implementing the cleanup, such as Energy, accurately balancing the costs of cleanup and mitigation of natural resource damages?
- Riverkeeper does not fully understand the implications of the proposal for Tribes impacted by Hanford, or the interests of the people of Oregon, regarding natural resource damages. We are concerned that proposed changes could impact or be impacted by the NRDA process in ways that are not factored into Energy's analysis, and this creates uncertainty regarding the reliability of Energy's Business Case Analysis.

6 Deschutes County, Oregon Emergency Operations Plan. August 2015. https://sheriff.deschutes.org/Deschutes-County-EOP-2016.pdf. p. 586

7 Deschutes County, Oregon Emergency Operations Plan. August 2015. https://sheriff.deschutes.org/Deschutes-County-EOP-2016.pdf. p. 586. Emergency Support Functions. Oil and Hazardous Materials.

8 Deschutes County, Oregon Emergency Operations Plan. August 2015. https://sheriff.deschutes.org/Deschutes-County-EOP-2016.pdf. Basic Plan. Roles and Responsibilities. Regional Protection. Regional Hazmat Team. p. 52

Comment O-6-3

3. Signature and entry of the proposed Consent Decree modifications and TPA changes would be premature without additional public involvement and environmental analysis.

Riverkeeper is deeply concerned that the agreement establishes a default path for Energy to proceed that has not been fully vetted through a detailed environmental analysis. The agreement states

Unless and until either the court does not enter the proposed Consent Decree modifications or those modifications are withdrawn from consideration for entry by the court, and subject to the provisions of Section 4 of this Agreement, Ecology and Energy will conduct their affairs in a manner consistent with the proposed Consent Decree modifications. Settlement agreement p. 5.

Because modifications to the Consent Decree could have significant unforeseen impacts, Riverkeeper encourages the agencies not to divert resources into developing grout without additional public process and analysis. Thankfully, there is room for regulators to demand more information and demand more opportunities for public engagement and understanding. As stated in the agreement

Withdrawal of consent by Ecology, Energy, or EPA to approve the proposed (TPA) change requests described in Section 3 below, either whole or in part, shall be a basis for Ecology or Energy, in their sole discretion, to withdraw consent to the proposed Consent Decree modifications, either whole or in part.

Ecology and EPA should withdraw consent unless and until Energy commits to conducting a full and robust public engagement process, a supplemental EIS under NEPA, and adequate consultation with Tribes. Additionally, Ecology should hold open the possibility of using its state authority and conducting an EIS under the State Environmental Policy Act (SEPA), at the very least until Energy indicates its intended path forward regarding additional environmental analysis.

- a. Agency Specific Comments
- i. Comment to Energy and EPA: Energy must prepare a Supplemental Environmental Impact Statement and hold additional public meetings around the region.

The agencies should conduct a NEPA analysis prior to reaching final decisions regarding the treatment, transport, and disposition of tank waste, and this NEPA analysis should consist of a Supplemental Environmental Impact Statement (SEIS), not a Supplement Analysis (SA) or Business Case Analysis, which does not fulfill the requirement for meaningful engagement of communities who will face impacts from this agreement.

The timeline offered by Energy does not allow for meaningful input. Energy stated that it intends to complete a "Supplement Analysis" and a "Business Case Analysis" to make an important decision regarding the treatment location, transport routes, and disposal location for over 10 million gallons of high-level tank waste by the end of 2024, or early 2025. Energy's commitment to informing the public is inadequate, and lack of public engagement will harm the

implementation of any agreement if communities are blind-sided by inequitable, unmitigable risks.

As stated above, the people most impacted by the proposed changes must have a meaningful opportunity to weigh in and understand the risks. As inconvenient as it may be to Energy, they must meaningfully consult with all Tribes who could have tank waste shipped through their communities as a solid or a liquid. This should occur during the development of a SEIS. Energy's assurance that they will do further "public engagement" is vague at best. And, as noted by many commenters, Energy has refused to commit to developing an SEIS.

In the case of a rail or truck accident, how would a solid or liquid tank waste release impact a small stream, a tributary of the Columbia, and/or the Columbia River and the communities that depend on them?

The Tank Closure Waste Management (TC/WM) EIS does not provide the analysis needed to draw conclusions about the environmental impacts of new proposed changes, changes which were not fully contemplated over ten years ago. We agree with Oregon Department of Energy, who commented

A full supplemental Environmental Impact Statement (EIS) should be performed for the full grouting and offsite disposal transportation campaign. The impact of a comprehensive off-site transportation and disposal campaign has not been thoroughly assessed. The scale of potential grouting at 200W, tens of millions of gallons, far exceeds scenarios assessed in prior impact evaluations. The most recent submission to the Federal Register was AR-23306,12 and the 2013 Record of Decision stated, "DOE has decided to implement Waste Management Alternative 2, which includes disposal of LLW [low-level radioactive waste] and MLLW [mixed low-level radioactive waste] at IDF [Integrated Disposal Facility]-East from tank treatment operations." and "While the TC&WM EIS did not anticipate a large increase in the amount of secondary waste sent offsite for treatment and potential disposal, it did acknowledge that it could occur." The above statements were made as justification for the lack of a supplemental EIS for at most 332 m3 of mixed low-level waste (LLW) offsite. Tens of millions of gallons of liquid would be well over 100,000 m3 grouted if as suggested by System Plan 10 approximately 71,000 m3 of LAW is generated by S, SX, SY, and U tank farm. This volume, if shipped, is more than two orders of magnitude higher than previously considered offsite shipping campaigns. Population densities and the standard of care for such evaluations including environmental justice assessments have also changed since the TC&WM EIS was completed. Because of the significant scope change, previously unassessed factors, and time elapsed since the last full EIS and NEPA evaluation, Oregon expects an updated assessment with full public participation and comment, including route-specific analysis of potential transportation options.

We agree that a full analysis is required, and Energy must fulfill its NEPA obligations by conducting a full Supplemental EIS regarding the tank waste treatment and immobilization and disposal system at Hanford.

A Supplement Analysis (SA) of the TC/WM EIS is not sufficient. Using an SA, Energy is not required to have any meaningful public notice, comment, or engagement when adopting a determination that no further NEPA documentation is required. The SA would only be available

to the public "for information," and not necessarily for comment. Energy has no obligation to provide the public with notice, opportunity to comment, or public meetings while conducting an SA. We support the comments offered by Heart of America Northwest on the issue of the inadequacy of an SA, and we share concerns raised by Oregon Governor Tina Kotek, the Oregon Department of Energy, and Tribes impacted by Hanford and the Settlement that an SA falls short of what is required for informed decision-making when it comes to the shipment of tens of millions of gallons of tank waste.

ii. Comment to Ecology.

SEPA is a necessary tool to approach the environmental analysis that should be necessary for potentially shipping waste through Washington communities. Under the HEAL Act, Ecology must consider the impacts of the proposed actions before approving Energy's plans.

Prior to finalizing any proposed changes, we urge Ecology to require Energy to do an adequate NEPA analysis (not an SA). Ecology should also commit to fulfilling its own obligations under SEPA before committing to support Energy's preferred approach for alternative treatment. The agreement clearly leaves Ecology room to consider these issues and to propose amendments to changes to the Consent Decree and TPA changes.

SEPA is necessary to understand the proposed action, and Ecology should undertake SEPA before Energy takes actions under this agreement that could introduce waste shipments across the region. SEPA provides independent state review, and it can look beyond Washington's borders because the impacts to Washington's neighbors are important for Washington residents, particularly along transport routes that cross or parallel the Columbia River or other major water resources important to both states.

Additionally, Washington has its own Environmental Justice law, the HEAL Act. Accordingly, Ecology must consider the environmental justice impacts of the actions that would come from the proposed changes before approving Energy's proposed path forward (a decision that Energy has scheduled for the end of 2024, which cannot be achieved while honoring commitments and HEAL Act requirements to address environmental justice concerns for communities near transport routes).

The proposed changes open a wide swath of concerns in a large area. There is ample precedent for SEPA analysis looking at upstream and downstream impacts, and this could be important for the region's ability to understand the hazards involved with toxic and radioactive waste at Hanford. A robust analysis would include Ecology looking at potential major impacts to Washington communities along shipping routes, which may include Spokane, Pasco, and regional rail and public vehicle routes.

Additionally, Ecology must consider how proposed changes could cause major impacts in Tribal communities who were not reached out to, despite Energy insisting that waste transport has negligible risks. Ecology should consider impacts to any Tribes whose land the Hanford shipments would cross, with potential significant and adverse impacts to natural, cultural and religious resources.

i. Questions

- When will the community have an opportunity to meaningfully comment on Energy's decision to send waste, or not, through Spokane neighborhoods, or Tribal communities, or Bend?
- How will Ecology fulfill its responsibilities under the HEAL Act?

iii. Comment to EPA: EPA should seek more information before making determinations about the environmental justice implications of the proposed actions.

EPA's analysis of the implications of the Test Bed Initiative (TBI) was intentionally narrow, and specific to the waste being treated and the volume being moved. As suggested by Hanford Challenge during public meetings, agencies may want to understand the results of the TBI before making large resource commitments pursuant to the proposed changes. As ODOE noted, as of this comment deadline, the TBI has not produced grouted tank waste. It is difficult to think through the potential impacts of jumping from 2,000 gallons of tank waste to over 10 million gallons of tank waste, with undefined treatment locations and transport routes. The proposal involves the movement of toxic and radioactive waste across Tribal communities, environmental justice communities, on public roadways and rail lines with known maintenance challenges. 16 It seems premature to assume that the successful treatment of 3 gallons of tank waste (Phase 1 of TBI) can predict the success of grouting and shipping over 10 million gallons of tank waste, and yet Energy appears poised to make a decision by the end of 2024.

How can EPA accurately evaluate the environmental justice implications of Energy's proposed course of action on this timeline? Additional environmental review of the agreement proposals is necessary, and this review should explore ways to avoid harm to people in Tribal communities, communities with environmental justice concerns, and communities who rely on water resources impacted by Hanford waste and pollution

Comment O-6-4

- 4. Additional Comments and Questions.
- a. Riverkeeper is encouraged by the openness to explore new tank waste treatment and retrieval technologies, but concerned by assumptions regarding landfill closure.

Riverkeeper supports the comment shared by Miya Burke from Hanford Challenge during the Olympia public hearing suggesting that new tank waste treatment or retrieval technology information should be applied to areas where more waste could be removed, including areas such as WMA-C. Exploring the possibility of addressing harmful pollution (pollution currently destined for an unlined landfill closure, according to Energy's plans) with new and improved technology seems like a valuable idea, one that could lessen harm for future generations. Additionally, we support ODOE's recommendation for developing a longer-term committee or program to ensure continual technological assessment.

ODOE identifies in its comments an important underlying principle: retrieving tank waste, as much as possible, is a common goal. ODOE stated in its comments on the proposed changes

Minimizing the waste remaining in tanks when declared closed is a critical aspect of any closure plan. According to Washington Administrative Code (WAC) 173-303-61016, closures must minimize the need for further maintenance and controls and minimize or eliminate human or

environmental exposures to contaminants. Fully retrieving tanks before closure is the best method to meet relevant Washington Ecology and EPA requirements.

We agree, and the Washington law cited by ODOE supports Miya Burke's suggestion that Energy should be open to all strategies for reducing tank waste pollution as much as possible. Washington has itself acknowledged that grout is not as good as glass, and soil has absorbed high-level waste. Material that could go unretrieved in tanks and remain buried at Hanford forever was once intended to be turned into glass in steel canisters bound for a deep geologic repository.

This seems to deviate from the Nuclear Waste Policy Act, with consequences that were not fully addressed by the analysis offered in the TC/WM EIS.

Energy must produce a new supplemental EIS. Over 12 years old, the TC/WM provides tremendously valuable information and analysis, but it is nonetheless an analysis based on assumptions that have changed as climate models shift over time and additional tank leaks occur. Knowledge of how pollution behaves at Hanford has increased, due to intensive study, education and effort by Tribes, workers, agencies, watchdog groups, whistleblowers and experts from a wide array of communities, disciplines and organizations. Energy should leave more room for evolving knowledge to recover and immobilize more waste in tanks and soil while assessing the current path proposed more carefully.

We support the concerns raised by Yakama Nation objecting to the assumption that Hanford can be used as an unlined landfill for tank waste that has leaked into soil or left in grouted tanks in the soil at Hanford. Yakama Nation's comments include

the Yakama Nation will continue to disagree with leaving the tanks as RCRA/AEA landfills until there is some assurance that HLW has been retrieved to the maximum extent under existing technologies, and that in-tank treatment through grouting has been proven to be effective in stabilizing HLW permanently. Neither of those has happened yet.

And,

...the Tri-Parties have no legal authority to abrogate treaty rights or limit their exercise or scope in any DOE actions to close the tank farms. There is no explanation in the milestones about how any failure to protect treaty uses will be taken into account when making final closure decisions.

Yakama Nation's comments highlight the need for a full EIS to consider changes occurring in the cleanup. All parties acknowledge that cleanup is far from complete, and potentially far more challenging in a changing climate. The risks to future generations argue for the most durable waste form possible and a re-consideration of whether landfill closure is the right approach for cleanup in the Central Plateau. To support landfill closure, the agreement relies upon assumptions from Hanford's out-of-date and inadequate Comprehensive Land Use Plan (CLUP). The CLUP should not be relied upon without reconsideration and an overhaul or update.

b. The federal government must treat tank waste as the law requires, and the agreement does not resolve basic definitional questions.

The Nuclear Waste Policy Act defines tank waste as high-level waste. Rather than forbearing the use of a new, weaker definition of high-level waste (which is basically the status quo), Energy should permanently abandon plans to apply this definition at Hanford. It is not adequate to "forbear" what is not legal and not appropriate for Hanford.

The material in S, SX, and U farms is clearly high-level waste. Hanford's Dangerous Waste Managements Units report describes, waste in tank U-112 as follows, "Waste transferred to Tank 241-U-112 included bismuth phosphate first-cycle waste and REDOX high-level waste from the 241-U Tank Farm." The most recent tank status report indicates that U-112 is assumed to have leaked, and the tank holds 44,000 gallons of sludge and 4,000 gallons of supernatant 10. This is just one example of a high-level tank waste problem that Energy must not address through application of the interpretive rule.

c. Will one million gallons of new tank space be adequate, and how will ongoing and future tank leaks factor into the use of new tank space?

During public hearings, the new tank space was identified as being necessary for flexibility and efficiency in the tank waste storage and treatment system. M-045-139 states that, by 2040, Energy will "Complete construction and initiate operation of (i.e., declare ready to operate) 1 million gallons of new multipurpose storage capacity for Hanford tank waste in the 200 West Area." It also states

For purposes of this milestone, "multi-purpose" shall include, at a minimum, additional tank capacity to augment the existing SY Tank farm system, including providing operational capacity to potentially support Single-Shell Tank System retrievals and Double-Shell Tank System emergency space.

Why are the agencies waiting until 2040 to build and operate tanks that would seem to be very useful sooner? We hope the agencies think holistically about how and when to bring new double-shelled tank space into operation, and ODOE offers detailed suggestions for why accelerating the development of new tanks should be considered.

The Hanford Advisory Board (HAB) repeatedly urged the construction of new tank capacity, for years, for a combination of reasons. HAB advised Energy that it would likely need capacity to address leaks as well as additional capacity to run tank waste treatment more efficiently. For example, HAB Advice 294, which was routine advice on Energy's budget from 2017, urged Energy to "provide additional funds to establish new storage capacity for tank waste." 11 Riverkeeper supports the idea of establishing additional tank space as early as possible to assist in accelerating the work of addressing Hanford's tank waste and its harmful pollution. As ODOE points out, additional tank space may be necessary to leave open opportunities for on-site immobilization.

d. Establishing functional cross-site tank waste transfer lines for supernatant and sludge should be a high priority.

Energy has cited the difficulty in moving waste across the Central Plateau, from 200 West to treatment and immobilization facilities in 200 East as a reason for preferring to grout material either at Hanford or offsite. Because transfer lines for supernatant and sludge are critical to

connect tank waste to vitrification facilities, as well as facilitating efficient use of tank space, their completion should be a high priority.

We agree with comments and questions posed by the ODOE on this issue, including their suggestion that the "completion of upgrades to the cross-site supernatant transfer line should include the option to reach DFLAW feed tanks." In our view, this would allow for the possibility that additional 200 West material could be vitrified. ODOE is not objecting to considering grout, but ODOE's comments highlight a tangible long-term benefit of maximizing vitrification capacity, where safely possible, and its potential co-existence with grouting activities, stating, "Improving DFLAW operations and integration with the 200W mission would also serve a role in reducing the technetium-99 and iodine-129 risk budget on the site, as DFLAW condensate enriched in those isotopes can be incorporated into the grout that is transported off-site." ODOE's suggestion that the supernatant transfer line from 200 West be able to reach the DFLAW system improves the potential for greater groundwater protection and more durable waste immobilization. These issues are best addressed through a SEIS.

Data available on PHOENIX underscore ODOE's concern regarding the long-term impact of Tc-99 and I-129. The figure below [in pdf] includes data from a well near the T Farm which exceeds groundwater standards by an order of magnitude.

The ongoing Tc-99 problem in the Central Plateau underscores the importance of creating adequate and timely tank space and focusing on improving the ability of Energy to move tank waste towards effective treatment and immobilization facilities, many of which are still in planning.

We encourage Energy to provide more details about how to accelerate the schedule for establishing the option of cross-site transfers of tank waste. Where Energy discusses "reactivation" of the sludge line, we share ODOE's question about the practicability and status of this line and the concerns raised by Hanford Challenge.

i. Questions

- When will the public be able to review a budget that can accomplish the proposed timeline for establishing cross-site transfer of both supernatant and high-level waste sludge? As ODOE points out, the current five-year plan differs from the proposed changes with regard to transfer lines.
- Is the cross-site slide transfer line usable?
- e. The 2024 date for selecting a grouting alternative should be removed from the proposed changes.

The 2024 date is inappropriate and premature. As discussed in detail above, it is not possible to have the information necessary to make such a decision at this time, much less provide the public, Tribes, states, stakeholders, and every person impacted by the storage, transportation, and disposition of tank waste notification so that they can consent to the risks being imposed upon them. Additionally, as raised by Hanford Challenge, ODOE, and others, we are confused by the timing of the Test Bed Initiative (TBI), the results of which would seem to provide very

important information for decision-making currently scheduled for the end of 2024, well before completion of the TBI.

f. Riverkeeper opposes the shipment of liquid tank waste, and has major unresolved questions about the shipment of any tank waste through Tribal communities, communities along transportation corridors, and communities with environmental justice concerns.

Riverkeeper has serious concerns about the shipment of any tank waste through overburdened communities. Until these communities are part of this process, we cannot accurately evaluate issues that could arise with transporting waste. Additionally, we do not know the full scale of the shipments. Millions of gallons of high-level waste would be processed to remove some radionuclides, then processed to meet shipment requirements either as a liquid or a grout form, but the action is still too poorly defined for us to offer comments.

i. Questions

- What volume of liquid would be allowed in each truck or railcar?
- Is the tank waste characterized adequately to provide a realistic comparison and assessment of the harms that could be caused by moving tank waste in differing forms, volumes, and routes.
- g. Proposed changes to the TPA and Consent Decree raise questions about how tank waste will impact groundwater resources.

Proposed new milestones and revisions to existing milestones offer both good and concerning aspects. Establishing a goal for new tank storage capacity is a positive step. However, long timelines still leave ample room for further delays. What happens in 2040 if goals have not been reached for tank storage capacity, and tank leaks are progressing? Removal and treatment of the 22 tanks identified will theoretically be in progress for retrieval and treatment. The expectation is that a major renegotiation will occur in 2038. Riverkeeper remains deeply concerned that the proposed changes kick the can down the road when it comes to future delays, with major consequences for prolonged groundwater contamination. We believe a Supplemental EIS is necessary to evaluate this problem.

h. Should TPA agencies be grouting material that currently meets the definition of high-level waste? Why is vitrification not being pursued for all of the material?

At Hanford, money spent on grouting tank waste is money that could have contributed to the vitrification program that is underway. If the federal government can build a machine to turn tank waste into glass, why have the agencies abandoned the idea of vitrifying the waste in U, S, and SX farms? Why is Ecology's principle of "as good as glass" not being implemented more broadly, considering the immense potential benefit of immobilizing so much highly dangerous radioactive material? Ecology's website states

Concrete is not "as good as glass." Washington state has remained open to alternative treatments for Hanford waste, but we have always insisted that any treatment for disposal at Hanford be at least as good and effective as glass. So far, no alternatives have met that test, and concrete falls well short. It is porous and — relative to radioactive contaminants — short-lived. Large quantities of waste left in tanks, even if it is topped with concrete, eventually would

leak out, seep through the soil into the groundwater, and from there into the Columbia River. That is not an acceptable outcome to the state. **12**

Ecology and EPA must explain why the standard "as good as glass" applies to treated and immobilized tank waste in Washington, but not elsewhere. The same website states,

Up to 90 percent of Hanford's tank waste could be reinterpreted as low-level under this new interpretation. But that's already been done at Hanford. Nearly 20 years ago, the federal Energy department, federal Nuclear Regulatory Commission and Hanford regulators agreed to let 90 percent of the tank waste be treated as though it was low-level – referred to at Hanford as "low-activity." However, under this agreement the waste could only be treated as low activity if it is incorporated into glass, which will keep its toxic and radioactive constituents encapsulated and stable for thousands of years...

Since Energy is already treating 90 percent of the tank waste as if it were low-level, it would appear that the primary motivation to reinterpret that waste is to avoid its commitments to glassify much of the waste. Declaring most of the tank waste as low-level opens the door to treatment methods other than glass encapsulation. The most likely choice would be concrete. Energy already has discussed the possibility of leaving waste in dozens of the tanks and filling them with concrete rather than pumping the waste out. It also is considering removing some of the tank waste and mixing it with concrete rather than glass.

The agreement seems to set forth a new policy at Hanford, that grouting tank waste is the preferred method, producing a waste form Ecology finds unacceptable for waste disposal at Hanford. What environmental analysis supports grout as a superior form of waste for the material in tanks in the U, S, and SX farms?

Riverkeeper appreciates the urgency that supports the logic of removing as much tank waste from the Columbia Basin as quickly and safely as possible, based on a sincere desire to protect the Columbia and the Tribes and many communities who rely on it. This is a difficult question, and Riverkeeper does not have all of the information necessary to answer it. Regardless, it should not be answered by the "Business Case Analysis," but rather an environmental analysis that would allow Energy to fulfill its legal obligations, as well as the State of Washington.

5. Conclusion While the agreement has positive aspects, Riverkeeper continues to have major questions and concerns regarding the changes to the cleanup. However, Riverkeeper cannot comment adequately without a detailed NEPA analysis, including a proposal for how Energy plans to accomplish cleanup under the Settlement Agreement. As it stands, this process is inadequate for supporting the decisions being made and could lead to unnecessary harm and errors in judgment regarding treatment methods and transportation routes.

We agree with ODOE who wrote

Additional public dialog is warranted to ensure that landfill closure meets applicable regulatory and legal requirements... In conclusion, we recommend establishing a long-term, ongoing process for technology evaluation and development. This approach would ensure that the Hanford cleanup effort continues to benefit from the latest advancements in retrieval and treatment technologies, potentially leading to more complete waste removal and safer, more

efficient closure options, minimizing the amount of contamination left in unlined landfills on the Central Plateau.

Riverkeeper reserves the right to comment after September 1, 2024 as new information arises. By Energy's own admission, they intend to provide additional information regarding alternative treatment (grouting) location, transport, and disposition with respect to tank waste by the end of 2024 or 2025, at which point they should solicit public comment. This cannot be the only opportunity provided for meaningful public comment on these issues. Riverkeeper continues to stand for the position that any waste leaving Hanford must leave in the most stable manner possible (not just the most expedient or least expensive), reducing harm to people and the environment along any proposed shipping routes and final disposal locations over many generations. These harms and costs are not accounted for in the current process.

Communities along shipping routes and who will be receiving the waste deserve a say, and any process that does not include these communities is woefully inadequate. The production and deployment of nuclear weapons continues to have a disproportionate impact and place an unfair burden on BIPOC communities across the globe. Cleanup, in the aftermath, must not.

Thank you for the opportunity to provide public comment in support of a cleanup of Hanford that is thorough and just.

Dan Serres

Advocacy Director Columbia Riverkeeper

Samantha Paladini

Peace & Justice Program Manager Oregon Physicians for Social Responsibility

James Moschella Climate and Health Program Manager Washington Physicians for Social Responsibility

9 Hanford Site Waste Management Units Report. January 2023. DOE/RL-88-30. Rev. 32. P. 2531.

10 Waste Tank Summary Report for Month Ending June 30, 2024. P. 30.

11 Hanford Advisory Board. Advice 294. Budget Advice. November 13, 2017. p. 3. https://www.hanford.gov/files.cfm/Hanford_Budget_Advice_294.pdf

12 https://ecology.wa.gov/waste-toxics/nuclear-waste/hanford-cleanup/high-level-nuclear-waste-definition - accessed 8.27.24

O-7: Hanford Communities

Comment O-7-1

Dear Ms. McFadden,

Thank you for this opportunity to provide Hanford Communities' comments regarding proposed amendments to the Hanford Tri-Party Agreement and Consent Decree. As background, Hanford Communities represents the cities of Kennewick, Pasco, Richland, and West Richland, along with Benton County, Franklin County, and the Port of Benton on Hanford cleanup-related matters. Together, these local governments represent the over 320,000 people in the Tri-City

area, which is immediately adjacent and downstream of the Hanford Site, and as such we have a uniquely vested interest in the safe, timely, and successful cleanup effort.

First and foremost, we applaud the Tri-Party Agencies for actively working to achieve consensus on the path forward for managing and treating Hanford's tank waste. We have observed over the years that cleanup efforts across are most successful when there is alignment between the Department of Energy (DOE), its regulators, and key stakeholders. We hope that this approach will continue in the years to come, as it is critical to the long-term success of the Hanford cleanup mission.

Please find our comments below regarding several specific proposed changes.

FORBEARANCE PROVISION

Based on the Department's report to Congress as directed by Section 3139 of the National Defense Authorization Act of Fiscal Year 2018, Public Law 115-91, we have been very optimistic about opportunities to employ DOE's high-level waste interpretation at Hanford. Amongst other benefits, the report noted that applying the interpretation could reduce costs at Hanford by \$73 billion to \$210 billion, and that "it is possible that the mission could finish a decade or more earlier than the reference case...". Those cost savings can then be reinvested to expedite other Hanford cleanup activities.

Although we understand that the Washington State Department of Ecology (Ecology) has concerns about applying the high-level waste interpretation at Hanford, we believe the potential benefits are so great that this approach should not be excluded from consideration. Instead, we strongly encourage the agencies to work in a good-faith effort to identify opportunities to test the interpretation at Hanford to better understand the potential benefits, while also working to address any concerns. If successful, the interpretation can then be employed for other waste streams at the Site.

ATTACHMENT C: ESTABLISH MILESTONES TO BUILD ONE MILLION GALLONS OF MULTI-PURPOSE TANK WASTE STORAGE CAPACITY IN 200 WEST AREA (Change Number M-45-24-08)

Although we understand the merits of adding tank waste storage capacity, we believe the costs associated with designing, permitting, and constructing those tanks will be very significant. We also do not understand the rationale for exactly one million gallons of additional storage capacity.

Ultimately, successful retrieval and treatment of Hanford's tank waste is the permanent solution to this issue. Therefore, if resources that could be invested in those efforts are instead diverted to new storage capacity, it will further prolong mission completion. Rather than committing to a somewhat arbitrary number of additional tank waste capacity, we encourage the agencies to instead agree to add additional storage capacity on an as-needed basis if circumstances dictate.

ATTACHMENT L: UPDATE TPA MILESTONE M-062-45, REQUIRING SYSTEM PLAN NEGOTIATIONS AND ESTABLISH TWO NEW MILESTONES (Change Number M-62-24-03)

Paragraph 7 of this section would establish a milestone for completion of negotiations for "completion of closure of all Single-Shell Tank (SST) Farms" within 18 months of the date for

achieving HLW Facility hot commissioning. Given that hot commissioning isn't scheduled for over a decade, we are concerned about the prolonged timeline for tank closures. There is a distinct possibility that intrusions from rainwater and snowmelt could introduce additional liquids into already retrieved tanks, potentially necessitating additional retrieval campaigns.

Retrieving tanks twice (or more) would significantly increase the timeline and cost for completion of Hanford cleanup. Therefore, we encourage the Tri-Party Agencies to work proactively now to move forward with closure of retrieved tank farms.

ATTACHMENT M: ESTABLISH NEW TPA MILESTONES TO CREATE ALTERNATIVE TREATMENT CAPACITY FOR LAW FOR 200 WEST AREA SSTs (Change Number M-62-24-04)

Grouting and off-site disposal of low-activity waste has the potential to significantly reduce the timeline for completion of tank waste treatment, while saving billions of dollars in long-term costs. Tank waste treatment is the permanent solution for Hanford's single-largest environmental risk and cost driver, so every effort should be made to retrieve the waste and treat it as expeditiously as possible (either by grouting or vitrification). Therefore, we strongly support these new milestones, and encourage the TriParty Agencies to explore opportunities to employ grouting technologies at other tank farms as well.

Thank you for considering our comments, and again we commend the Tri-Party Agencies for their ongoing efforts to reach alignment on the path forward for Hanford cleanup.

Sincerely, Chuck Torelli Chair, Hanford Communities Mayor Pro Tem, City of Kennewick

O-8: Tri-City Development Council

Comment O-8-1

Dear Ms. McFadden,

Founded in 1963 as the Tri-City Nuclear Industrial Council and now known as the Tri-City Development Council (TRIDEC), we work to enhance economic growth and prosperity in Benton and Franklin counties. TRIDEC is managed by a 39-member Board of Directors, including elected officials, business, and community leaders from across the Tri-City area. Our organization also advocates for the policies and funding needed to advance the Hanford cleanup mission, and we serve as the Department of Energy (DOE) – designated Community Reuse Organization (CRO) for the Hanford Site.

We would like to begin by acknowledging the Tri-Party Agencies for their efforts to achieve consensus on the management and treatment of Hanford's tank waste. Over the years, we have observed that defense nuclear cleanup efforts are most effective when the Department of Energy, its regulators, and key stakeholders work in close alignment. We trust that this cooperative strategy will continue, as it is critical to ensuring the long-term success of the Hanford cleanup mission.

Below are our comments on several specific proposed changes.

FORBEARANCE PROVISION

Referencing the Department's report to Congress, as mandated by Section 3139 of the National Defense Authorization Act for Fiscal Year 2018, Public Law 115-91, there is optimism about the possibility of applying DOE's high-level waste interpretation at Hanford. The report noted that this interpretation could lead to cost reductions of \$73 billion to \$210 billion, and potentially allow the mission to be completed a decade or more earlier than otherwise planned. The savings could then be redirected to speed up other Hanford cleanup efforts.

While we recognize the concerns raised by the Washington State Department of Ecology regarding the application of the high-level waste interpretation at Hanford, we believe the potential advantages are too substantial to overlook. We urge the agencies to collaborate in good faith to explore possibilities for testing this interpretation at Hanford and addressing any issues as they arise. If proven successful, this approach could be extended to other waste streams at the site.

ATTACHMENT C: ESTABLISH MILESTONES TO BUILD ONE MILLION GALLONS OF MULTI-PURPOSE TANK WASTE STORAGE CAPACITY IN 200 WEST AREA (Change Number M-45-24-08)

Although we recognize the potential advantages of increasing tank waste storage capacity, the expenses involved in designing, permitting, and constructing these tanks are expected to be significant. Furthermore, the justification for a specific increase of one million gallons in storage capacity is unclear.

Ultimately, the permanent solution lies in the successful retrieval and treatment of Hanford's tank waste. Allocating resources to build new storage capacity might delay the completion of that effort. Instead of committing to a fixed amount of additional storage, we suggest that the agencies agree to expand storage capacity as needed based on evolving conditions.

ATTACHMENT L: UPDATE TPA MILESTONE M-062-45, REQUIRING SYSTEM PLAN NEGOTIATIONS AND ESTABLISH TWO NEW MILESTONES (Change Number M-62-24-03)

Paragraph 7 of this section suggests setting a milestone to complete negotiations for closing all SingleShell Tank (SST) Farms within 18 months of the HLW Facility's hot commissioning. Since hot commissioning is not expected to occur for more than a decade from now, we are worried about the long timeline for tank closures. There is a genuine risk that rainwater and snowmelt might add more liquids to tanks that have already been retrieved, possibly requiring further retrieval efforts in the future.

Repeatedly retrieving tanks would substantially expand both the timeline and cost of the Hanford cleanup. We strongly encourage the Tri-Party Agencies to take proactive measures now to advance the permanent closure of the retrieved tank farms.

ATTACHMENT M: ESTABLISH NEW TPA MILESTONES TO CREATE ALTERNATIVE TREATMENT CAPACITY FOR LAW FOR 200 WEST AREA SSTs (Change Number M-62-24-04)

Grouting and off-site disposal of low-activity waste could greatly shorten the timeline for finishing tank waste treatment and save billions in long-term costs. Given that tank waste treatment addresses Hanford's biggest environmental risk and cost driver, every effort should be made to speed up waste retrieval and treatment, whether through grouting or vitrification.

We strongly endorse these new milestones and encourage the Tri-Party Agencies to consider applying grouting technologies at other tank farms as well.

Thank you for your consideration of TRIDEC's comments. Like the Tri-Party Agencies, we are deeply committed to successful Hanford cleanup, and we again express our appreciation for the Tri-Party Agencies' efforts to achieve alignment moving forward.

Sincerely, Karl Dye President & CEO TRIDEC

O-9: Western Interstate Energy Board High-Level Radioactive Waste Committee

Comment O-9-1

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 [lowactivity 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 EnergySolutions 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 lowactivity 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. 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 colocated 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. Thus, a decision about where the tank wastes will be grouted and disposed of will affect the number of 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 and Elitha Trujillo

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/safetyresiliency/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.

O-10: Heart of America Northwest, -1-the public's voice for Hanford cleanup-1-

Comment O-10-1

Attached are the comments of Heart of America Northwest "the public's voice for Hanford cleanup". Please respond to gerry@hoanw.org and office@hoanw.org For the public seeking information, our comments begin with an overview of "WHY WE CARE ABOUT HANFORD'S HIGH-LEVEL NUCLEAR WASTE TANKS" and continue with background information on leaking tanks and risks of transporting liquid radioactive wasttes through Spokane or Oregon along with extensive comments on the need for an EIS as required by NEPA and SEPA.

- Maintaining existing time frames for starting tank waste treatment
- Low-activity waste in 2025
- High-level waste in 2033
- Immobilizing waste in glass via vitrification

The Agreement anticipates vitrifying the most radioactive portion of tank wastes as High Level Nuclear Waste, which must legally be disposed in a deep geologic repository. About 90% of the radioactivity is in about 10% of the volume.

The "Low Activity" (LAW) tank wastes disposed on the Hanford site would be vitrified, as has been the plan under the Hanford Cleanup Agreement / TPA. However, the LAW vitrification plant, which is built and expected to start processing waste in 2025, only has the capacity to treat 40-60% of the LAW tank waste in the next fifty years.

The Agreement proposes to remove LAW from tanks in three tank farms in 200 West to be either treated onsite or at offsite commercial facilities for disposal at licensed radioactive hazardous waste facilities in West Texas or Utah where there is no groundwater that would ever be at risk from the waste. Thus, this portion of the LAW would not be vitrified, but would be treated and solidified in a cement-like grout for disposal offsite.

This is an aspect of the Agreement that Heart of America Northwest strongly supports because it should enable removal of much more tank waste for treatment decades ahead of current plans. Our top priority is keeping High Level Nuclear Waste from leaking to the soil and ensuring it does not spread to the groundwater and Columbia River. However, we are very concerned that USDOE may seek to ship the waste as a liquid instead of treating and solidifying it before shipping to be disposed.

Comment O-10-2

- Using direct-feed approach for immobilizing high-level waste in glass, similar to Hanford's Direct-Feed Low-Activity Waste Program
- Evaluating and developing new technologies for retrieving tank waste
- Preparing technology evaluation
- Convening expert panel to provide analysis and recommendations

The language in the agreement will impermissibly delay action to remove leakable liquids from leaking Single Shell Tanks.

Comment O-10-3

Revising milestones for pretreatment and full operation of plant after starting treatment of high-level waste

Under the Agreement, milestones would be revised within a few years after the startup of the vitrification plant for High-Level Nuclear Waste. We remain concerned that this does not take into account the possibility that the High-Level Vitrification Plant will not get completed on time or will have significant safety and engineering obstacles. We suggest the agencies adopt an earlier alternative trigger to start negotiating a "Plan B"

Comment O-10-4

- Retrieving waste from 22 tanks in Hanford's 200 West Area by 2040
- Grouting low-activity portion of waste for disposal off-site

We strongly support accelerating removal of waste from tanks in the 200 West Area. This is where 2 of the 3 tanks that are currently leaking are located. Acceleration is only possible if this waste can be treated, solidified into a grout, and disposed offsite – in licensed facilities that have no groundwater.

HOWEVER, The agencies have not explained how they chose the 3 "tank farms" with 22 tanks from which the waste would be removed under this part of the Agreement. The tank farm with the 2 leaking tanks (T-Farm) is NOT one of the tank farms that USDOE agreed to accelerate removal of waste from.

One of our top comments: The priority for which tank farms have waste removed on an accelerated schedule should be based on preventing more tank leakage. T-Farm, with 2 leaking tanks, should be prioritized to have waste removed. Otherwise, under the Agreement, tanks T-101, T-111 and B-109 are likely to keep leaking for decades.

Prior to adopting this agreement, an EIS is necessary to examine impacts of not removing leakable liquids from the leaking tanks and not prioritizing retrieval of wastes from tank farms with leaking tanks, along with a full examination of alternatives that would include removal or retrieval of wastes from leaking tanks. The agencies have failed to show that they intend to comply with federal and state hazardous wastes laws requiring removal of as much waste as necessary to stop leaks as soon as practicable (see discussion and citations below).

Comment O-10-5

Heart of America NW Comment M-62, 45 & 92 re: offsite waste disposal v. onsite disposal:

M-062-64 is a **huge positive step forward anticipating, for the first time, that waste can be removed from Hanford** after decades of the public, led by Heart of America Northwest, fighting to stop USDOE from adding more waste to Hanford!

This exciting development should speed the removal of leakable waste from Single Shell Tanks in the 200 West Area, where at least one tank is currently leaking. However, the failure to prioritize retrieval of wastes from T-Farm, with two leaking tanks, undermines this potential environmental benefit. The agencies have failed to disclose how they chose tank farms to prioritize in 200 West. An EIS is needed to analyze the risks / impacts of these choices and the alternatives, including prioritizing tank farms with leaking tanks.

The volume of "Low Activity Waste" (LAW) in the tanks is so great that there has been no path for disposal of the waste onsite that will not contaminate groundwater that flows to the Columbia River for thousands of years.

Adding to our support for this provision is the agreement that "No grouted tank waste will be disposed of within the contiguous borders of the Hanford Nuclear Reservation."

Disposing of grouted waste at Hanford would greatly increase the contamination of groundwater and the Columbia River for thousands of years. Barring disposal of grouted tank waste at Hanford, coupled with the first commitment to remove wastes to be disposed offsite, will be the single largest step forward for long term protection of the Columbia River from Hanford's tank wastes.

M-062-64 along with M-045-135 provide for OFFSITE disposal of the LAW in the tanks from the 200 West Area. By the end of this year, USDOE will select facilities to separate, pretreat and transport waste for offsite treatment and disposal of this waste.

Ironically, the In-Tank Pretreatment System which makes the removal of LAW liquid from tanks possible is also available to remove leakable liquids from the tanks that are currently leaking. However, Ecology failed to require that this same technique and equipment be deployed to stop current leaks

M-045-135 retrieve waste from 22 SSTs in S, SX, U tank farms by 12/31/2040. (Page 70) Washington's agreement on this is a very positive step forward as it anticipates for the first time USDOE REMOVING tank waste from Hanford instead of adding to the total contamination burden of waste being disposed onsite in landfills. Disposal in onsite landfills of all of the LAW waste from SSTs is not possible without contamination leaching to groundwater at levels exceeding current standards.

"DOE's obligations under this milestone are expressly contingent on DOE having a regulatory pathway to grout and dispose of waste offsite consistent with the conditions of Milestone M-062-66, the tank waste from each of the 22 SSTs."

Comment O-10-6

• Designing and constructing 1 million gallons of capacity for multipurpose storage of tank waste. Operating by 2040 in 200 West Area

this new tank or tanks to be added by 2040 is not planned as a tool to enable removal of waste from leaking tanks. 2040 is a long way off while tanks leak in the 200 West Area.

Comment O-10-7

immediate action is needed to stop or reduce leaks from Single Shell Tanks and dramatically increase the pace of waste retrieval:

- USDOE should be required to continue to retrieve waste from tanks in the 200 East Area after 2028 while also starting to retrieve waste from tanks in 200 West.
- Enforceable milestones need to be added for removal of leakable liquids from 200 West tanks using in-tank pretreatment followed by treatment to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.
- Leaking tanks must be prioritized for removal of all leakable liquids or full retrieval. Tanks cannot be allowed to keep leaking until 2040 or later.
- Pursuant to federal and state hazardous waste laws, removal of leakable liquids is required as soon as practicable. The Agreement fails to include any commitment to meet this fundamental environmental protection standard. If removal of liquids from a leaking tank is documented as not being practical, then that tank must be prioritized for early retrieval.
- The agencies must explain the rationale for why they did not include the tank farm with leaking tanks (T Farm) to be amongst the 3 200 West tank farms they chose to be retrieved by 2040 in the Agreement.
- An EIS is required to review the impacts of decisions, such as not retrieving waste from leaking tanks, and present reasonable alternatives to stop the leaks and speed up retrieval before more tanks leak.

• Enforceable milestones need to be added for removal of leakable liquids from 200 West tanks using in-tank pretreatment followed by treatment to be solidified and disposed offsite. This needs to be in addition to full retrieval of 22 tanks.

Comment O-10-8

Heart of America Northwest asks, and expects Washington Ecology to respond:

- Why has Washington State never expressed concern about USDOE trucking millions of gallons of liquid waste?
- o While Oregon has expressed its deepest concerns over a program shipping liquid radioactive wastes when there is a readily available safer alternative; and the need for an EIS, Washington state's silence is disturbing.
- Why isn't Washington joining Oregon in urging that the wastes are treated and solidified before being shipped 1,575 to nearly 1,900 miles to be disposed in Texas?
- Why isn't Washington Ecology at least insisting that an environmental impact statement (EIS) be prepared to consider the risks and alternatives before the agreement adopts this program?
- If, as we expect, USDOE issues a Finding of No Significant Impact or claims that the 1997 Waste Management Programmatic EIS provides NEPA review of potential significant impacts, Washington Ecology has an independent duty under SEPA to review and consider impacts along with a duty to mitigate impacts before it can adopt such a determination from USDOE.

Ecology's review must also consider environmental justice issues and additional burdens or risks from transport of liquid radioactive wastes through communities designated as "overburdened" or "highly impacted" and reservations of federally recognized Tribes (e.g., Confederated Tribes of the Umatilla Indian Reservation) and ceded lands to which such Tribes retain Treaty rights to resources under Washington Healthy Environment for All (HEAL) Act.

Thus, Ecology needs to respond independently from the regulated entity, USDOE.

• Transportation of liquid waste has significantly higher risks than transport of treated solids, as Oregon and the CTUIR also point out. And there is a readily available mitigation or reasonable alternative that eliminates most of the risk including to overburdened, highly impacted communities and Tribal members. Thus, if USDOE repeats its January 2023 determination that there will be no EIS, under SEPA Ecology must either reject USDOE's threshold determination and require an EIS or Ecology must adopt mitigation requirements that eliminate or greatly reduce those risks (via a "Mitigated Determination of Non-Significance, "MDNS").

Comment O-10-9

Our SEPA and NEPA comments summarized, notice of violations and intent to challenge if not cured, with explanatory notes:

1. An Environmental Impact Statement (EIS) is required to adopt the new program for Hanford's High Level Nuclear Wastes and prior to expending federal resources (including hundreds of millions of dollars in Fiscal year 2025) to reflect new directions in the agreement.

This is a requirement under both the National Environmental Policy Act (NEPA) for USDOE and the State Environmental Policy Act (SEPA) for Ecology.

There is no point in conducting a "supplement analysis" for months extending beyond the timeline that the agencies have announced for signing the agreement.

For the reasons discussed above and detailed in this section, it is clear that the adoption of the program is a major federal action with the potential for significant adverse environmental impacts. That is the trigger for an EIS under NEPA. Ecology's adoption of the program, including participating in numerous elements of the agreement under which USDOE will proceed to expend hundreds of millions of dollars in near term implementation, also triggers SEPA.

- 2. USDOE is utilizing a Supplement Analysis. Despite leading the public at meetings to believe there will be meaningful public engagement, USDOE has no legally required public review, comment, or meetings on SAs. USDOE is not likely to engage the public prior to making decisions based on its "business case analysis." An SA is not a comprehensive review of potential significant impacts and reasonable alternatives, which would be in an SEIS. Rather, an SA is a review by the agency during which it determines whether a new or supplemental EIS is required. USDOE sometimes uses an SA as a functional equivalent of a FONSI to find no further environmental review is required.
- a. USDOE is likely to issue an SA finding that there is no need for additional environmental analysis, as it did in January 2023—without any public engagement—for a program authorizing transportation of approximately 27,500 cubic meters (equivalent to 7.264 million gallons) of mixed radioactive hazardous "secondary" liquid tank wastes for treatment and disposal **11**
- i. Notably, USDOE's January 2023 SA to authorize these shipments did not include any route specific impact analysis or review of environmental justice requirements to consider avoiding permitting transportation and other projects that add risk to "overburdened" or "highly impacted" communities, including Native American Tribal reservations and communities. 12 The SA also relied on out-of-date analysis of risk from radiation exposure to the public and workers (truckers) despite significant changes in science regarding risk from low level radiation doses.
- ii. USDOE's response to Oregon of July 26, 2024 clearly indicates that USDOE intends to only meet the minimal requirement of having the completed SA "available to the public," not to hold meetings on a draft for comment, including along potential transport routes. We remain dismayed that USDOE and Ecology failed to have any engagement with Spokane City and County officials in regard to the decision to start trucking liquid wastes through Spokane this year under the Test Bed Initiative. Public meetings in Spokane are essential for any meaningful engagement regarding analysis of transport of liquid wastes.
- 3. Major changes to the tank waste cleanup program which would occur under the Agreement, and changes in conditions and technologies since the prior Tank Closure and Waste Management (TC&WM) EIS, are significant enough to trigger an SEIS. There are potential significant adverse impacts and reasonable alternatives that have not been analyzed.
- 4. Ecology should use its substantive authority to enforce mitigation measures to minimize impacts to the environment and to the public.
- a. If, as we anticipate, USDOE decides that no further NEPA review is required, Ecology has authority to require mitigation rather than just adopt USDOE's "supplement analysis" (SA).

- b. Both USDOE and Ecology are legally required to consider the cumulative impacts from transport of wastes to facilities in Texas resulting from both the January 2023 SA and the new Agreement.
- 5. If USDOE issues an SA finding that there is no further need for environmental analysis (similar to a FONSI) despite the new information, cumulative impacts, and new breadth of never before analyzed actions —as USDOE's January 2023 SA likely indicates Ecology has a duty under SEPA to analyze the significant adverse impacts missed in the NEPA analysis.

If potentially significant adverse impacts are reasonably foreseeable, Ecology's choices will be to:

- a. reject the SA,
- b. require a supplemental EIS, or;
- c. require and adopt enforceable mitigation measures that would eliminate potential significant adverse impacts. Ecology would adopt enforceable mitigation measures in a Mitigated Determination of Nonsignificance (MDNS). An MDNS would be appropriate if Ecology determines that the potential significant impacts may be mitigated to a degree that they are no longer significant to reach the threshold requiring a new EIS. WAC 197-11-35513

Such mitigation measures may include:

- i. Barring transport of untreated liquid wastes for more than a de minimis distance required for treatment and solidification;
- ii. Requiring tanks/tank farms with leaking tanks or tanks with significant drops in liquid levels to be prioritized for retrieval, rather than adopting a schedule for tank retrievals which did not consider the impacts of allowing tanks to leak in other tank farms;
- iii. Requiring use of available technologies to remove leakable liquids as soon as practicable. Ecology should not delegate determination of what is practicable to USDOE and cannot accept use of criteria that replaces the legally applicable standard with USDOE consideration of "cost-benefit" analyses for whether it should remove leakable liquid waste from leaking tanks.
- 6. Ecology's SEPA rules require public comment prior to Ecology adopting an SA or FONSI issued by USDOE. **14** Ecology should be insisting that USDOE work with Ecology, Oregon, Tribes, and public interest groups to ensure an appropriate timeline for public review, comment and meetings occur prior to adopting any USDOE NEPA review. Otherwise, Ecology should warn USDOE that Ecology will not adopt USDOE's NEPA determination without Ecology undertaking those public involvement steps, including meetings in potentially affected transportation route cities.
- a. Ecology's own SEPA guidance says additional public notice is encouraged for important or controversial proposals such as this 15. After the public meetings held 7/9/24-7/11/24, it is evident that the public desires more robust public engagement from Ecology.
- i. Prior to adopting USDOE's NEPA SA / FONSI, a minimum 14-day SEPA comment period is required. WAC 197-11-340(2)(b) and (c)16. This 14 day comment period is also required of an MDNS17.

b. In order to ensure meaningful notice **18**, adequate time for public meetings and for review in the name of the "meaningful engagement" that has been promised, Ecology should be asked to take a firm position that USDOE should jointly hold a formal comment period of 60 days with public meetings (including in communities which may be affected by transportation of wastes) with notice to the full TPA public notice list prior to USDOE issuing the SA or adopting a FONSI if USDOE hopes to have Ecology agree to utilize USDOE's determination.

Ecology cannot rely on, or delegate to, USDOE for notice and public engagement for environmental impact analysis (including alternatives and mitigation). Ecology's responses to the public at meetings clearly indicated that Ecology intended to rely on USDOE for vague additional promises of additional "public engagement." These responses failed to reflect Ecology's own duties under SEPA as well as the fundamental flaw that doing an environmental review after agreeing to a program that has undeniable potential significant impacts and beginning its implementation before there is any threshold determination (i.e., SA) is the legal equivalent of opening the barn door and letting the horses out before looking to see if there is a corral.19

11 Supplement Analysis of the Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington - Offsite Secondary Waste Treatment and Disposal; DOE/EIS-0391-SA-3; January 2023. Referred to in this memo as the "January 2023 SA."

The January 2023 SA was adopted to authorize the transportation of approximately 27,500 cubic meters (equivalent to 7.3 million gallons) of mixed radioactive hazardous mixed waste, a similar amount of solid LLW and 63,000 cubic meters (which would be 16.6 million gallons if all liquid) of hazardous wastes. Table 2-1 presents "annual average volumes", including 18 cubic meters (4,700 gallons) per year which would be trucked all the way to Kingston, Tennessee for treatment – a distance of 2,400 miles.

It is unclear how the volumes for waste which would be trucked to either Utah or West Texas for treatment or disposal under the January 2023 decision and Supplement Analysis and those proposed under the Agreement compare. However, USDOE is now obligated to consider the cumulative impacts of both programs, rather than "piecemealing" consideration of the transportation impacts in two separate analyses.

Ecology, under SEPA, must also consider the cumulative impacts of trucking both secondary tank wastes and tank wastes removed from 200 West tanks under the Holistic Negotiation Agreement.

- **12** RCW 70A.02.010(11). SEE RCW 70A.02.060(1) (HEAL Act regarding environmental justice assessments required for state agency actions that affect overburdened communities.).
- **13** If Ecology determines that mitigation measures will not prevent the proposal from still having potential significant impacts, then an EIS is still required per WAC 197-11-350(2): "If a proposal continues to have a probable significant adverse environmental impact, even with mitigation measures, an EIS shall be prepared."

We are aware that Ecology has maintained that agreeing to changes in the Tri-Party Agreement or amending a Consent Decree do not trigger SEPA review, and that the SEPA review would occur when permitting or via an equivalent when there is an RIFS or MTCA cleanup plan considering alternatives. There is no categorical exemption supporting this. Even if this is generally supportable under SEPA, this approach does not apply in the present circumstances. There is an existing EIS for the program adopted under the TPA for tank waste retrieval, treatment, disposal and closure. Tank Closure and Waste Management EIS (USDOE, 2012) DOE/EIS-0391 (TCWMEIS). The TCWMEIS reflected explicit recognition that each of these elements required NEPA and SEPA analyses, including of alternatives, in an EIS. The current Tank Waste Holistic Negotiation Agreement would dramatically revise retrieval, treatment and disposal as well as create new impacts (i.e., from a new pathway for treating, disposing and transporting radioactive mixed hazardous tank wastes and deferring action on leaking tanks) without reviewing those impacts and alternatives in a NEPA or SEPA process.

Having acknowledged that the program exceeds NEPA and SEPA thresholds for an EIS and now committing resources to dramatic changes in the program, the current action is not at all equivalent to merely adopting a proposed new TPA milestone to carry out elements of the program already reviewed in the TCWMEIS. Rather, the new program reflects dramatically changed circumstances, changes in technology, changes in science and adoption of entirely new programs —

each with recognized potential significant impacts and alternatives - without any updated NEPA and SEPA review before irreversibly committing resources to the program laid out in the Agreement.

14 Ecology's SEPA Guidance does not discuss a NEPA supplement analysis specifically. However, WAC 197-11-310 requires a threshold determination be made as either a Determination of NonSignificance (DNS) or a Determination of Significance (DS). Thus, if Ecology wishes to adopt USDOE's SA in lieu of an EIS, Ecology must issue a DNS which requires public comment. WAC 197-11-340.

15 Washington Department of Ecology, State Environmental Policy Act Handbook, 2018, p.26 https://ecology.wa.gov/getattachment/4c9fec2b-5e6f-44b5-bf13-b253e72a4ea1/2-2018-SEPA-Handbook-Update.pdf

16 Id. at 54.

17 Id. at 25.

18 WAC 197-11-340 and 197-11-510 require use of "reasonable methods" to ensure public notice of the adoption of a DNS / SA or MDNS. For Hanford decisions, this should include use of the Hanford Cleanup TPA public notice list, not just USDOE's limited NEPA notice list.

19 See footnote 12 infra

O-11: Hanford Challenge

Comment O-11-1

It is critically important to Hanford Challenge that the cross-site transfer lines work. Please consider our additional comments regarding Attachment B: Establish New TPA Milestones to Activate Cross-Site Transfer Lines Connecting Double-Shell Tanks

Hanford Challenge echoes concerns voiced by Oregon Department of Energy and Columbia Riverkeeper about the importance of prioritizing work to realize functional cross-site transfer lines.

- Please move up the deadlines to accelerate M-42-03 and M-42-04 work in an effort to further prioritize successful activation of the cross-site transfer lines.
- Add an additional interim milestone to enable the suggestion by ODOE that "completion of upgrades to the cross-site supernatant transfer line should include the option to reach DFLAW tanks."

Thank you for considering our additional comments. Hanford Challenge

O-12: Energy Communities Alliance

Comment O-12-1

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.

- 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 19823. 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 20234. 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 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 activities5.
- 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: Reenergizing 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.

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

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 Energy Communities Alliance

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. Energy Communities Alliance

5 Environmental Liability Continues to Grow, but Opportunities May Exist to Reduce Costs and Risks, GAO, June 2021. Energy Communities Alliance

A-1: Oregon Department of Energy

Comment A-1-1

Oregon appreciates the opportunity to comment on the proposed Holistic Negotiations Agreement modifying the Hanford Nuclear Waste Site Tri-Party Agreement and Consent Decree. The agreement represents a long-awaited step towards risk reduction at the Hanford site. This set of proposed changes comes after nearly four years of confidential negotiations between the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency, and the Washington Department of Ecology. The scope and consequence of this agreement are among the most anticipated and significant revisions to the tank waste mission at the Hanford site in recent memory.

This letter transmits comments from Governor Kotek, a letter from the Oregon Department of Energy and members of the Oregon Hanford Cleanup Board, and includes technical comments from Oregon Department of Energy staff. Oregon looks forward to providing additional comments as the TPA agencies publish specific details about the preferred path to achieve the framework described in the agreement. Oregon is ready to help facilitate public information and engagement campaigns in our state regarding tank waste transportation, in particular.

The details of and manner in which the Holistic Agreement has been presented are of concern at the highest levels of Oregon Government (Attachment A). In a letter dated July 11, 20224, Governor Kotek expressed Oregon's position in three critical areas: solidifying waste prior to transport, the means of transport, and the clarity on NEPA requirements. We include Governor Kotek's letter for submittal as a formal comment, along with commitments made by US DOE in a July 26, 2024 response (Appendix B).

The lack of clarity on these key areas, coupled with a not-yet-conducted process for engagement along potential transportation corridors, is a significant concern. Offsite tank waste disposal requires close cooperation between several levels of government, some of whom have never previously been impacted by Hanford issues and must be consulted prior to decision-making. The current draft agreement leaves critical issues open for decision by the U.S. Department of Energy without assurance of further notice, engagement, or comment.

While DOE's response to Governor Kotek's letter assures a commitment to transparency and future public involvement, the effectiveness of these commitments will depend on their implementation. Transportation of Hanford tank waste through Oregon is our top issue and concern. The inherent risks of transporting treated tank waste liquids, the yet-tobe-determined plans for waste transportation methods and routes, and the uncertainty whether there will be any task-and-route-specific NEPA process are issues that require thorough public information-sharing and input, prior to decision-making. As additional preliminary decisions are made, timely outreach to and input from governmental entities, and Tribal governments potentially impacted by proposed transportation routes will be an important component of a decision process that is open and transparent.

While more detailed comments are included in Appendix C, a summary of Oregon's top issues is presented here:

• Environmental Impact Assessment: DOE should either conduct a full supplemental Environmental Impact Statement (EIS) for the proposed grouting campaign and off-site transportation of waste, or demonstrate with clarity how the requirements of NEPA are met in the absence of an EIS. Regardless of whether NEPA requirement will mandate an EIS process, DOE needs to undertake a comprehensive plan for the transportation and disposal of treated waste.

- Emergency Responder Training: Transportation planning needs to include clarity about how DOW will engage with potentially impacted communities (including sovereign Tribal Governments) to ensure they are prepared for the proposed shipping campaign and a potential transportation accident.
- Treatment Strategy: Oregon is opposed to shipping of liquid tank waste through our state. While Oregon supports offsite disposal for treated tank waste, the waste should be solidified on-site at Hanford before offsite shipment. This approach offers several advantages in terms of waste form stability, transportation safety, and local economic benefits.
- Public Engagement and Transparency: DOE should provide clear, accessible information to the public about cleanup strategies, timelines, and decision-making processes. This includes making key documents, such as System Plans and Analyses of Alternatives, readily available for public review. Regarding offsite shipping of tank waste, DOE should ensure that transportation plans and shipping options are analyzed and shared with the public, and public comments are actively solicited, prior to decisions. Oregon also recommends that this includes consultation with all potentially impacted Native American Tribes, including those along shipping routes. In Oregon, this may include Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of Warm Springs, and Klamath Tribes. The Oregon Department of Energy is ready to support DOE with an information and engagement campaign regarding transportation through our state.
- Waste Retrieval Optimization: DOE should build on the requirements of the agreement and continue to develop and implement technologies that maximize waste retrieval from tanks, particularly those that minimize the addition of liquids to leaking tanks. The goal should be to leave as little waste as practicable in tanks Oregon Department of Energy declared "retrieved." The process for declaring a tank retrieved should reflect lessons learned over the decades of retrievals.
- Timeline and Milestone Management: DOE should regularly reassess the feasibility of established milestones, particularly considering technological developments, regulatory changes, and project progress. The agency should consider adjusting milestone dates, such as M-062-24-04, to account for the availability of crucial data from initiatives like the Test Bed Initiative (TBI).

The Hanford site cleanup presents complex challenges that require innovative solutions, ongoing technological development, and careful consideration of long-term environmental and public health impacts. By implementing the recommendations outlined above, the Hanford tank waste mission can progress more efficiently, effectively, and safely, while minimizing long-term environmental and public health risks. Continued adaptability, innovation, and commitment to thorough cleanup will be essential as this complex project moves forward.

If you have any questions, please contact Maxwell Woods (503-551-8209 or maxwell.woods@energy.oregon.gov) of my staff.

Thank you for your consideration, Janine Benneree, Director, Oregon Department of Energy Jeff Wyatt Chair, Oregon Hanford Cleanup Board

Comment A-1-2

Attachment A: Waste Treatment Plant (WTP)

Construction and Startup The Waste Treatment Plant (WTP) is slated for a "hot start" on 12/31/2033, with "Initial Start-up" aligning with System Plan 101 Baseline and Scenario 1A start dates. By 2036, the WTP is expected to vitrify High Level Waste (HLW) at a rate of 4.2 metric tons of glass (MTG) per day. However, revisions to the plan proposed in the agreement resulting from the holistic negotiations raise concerns. Operating the vitrification plant in a two melter configuration with a direct feed waste form will impact operational efficiency and waste processing capabilities, especially when additional pretreatment capabilities are added as an afterthought once the melters are full of high-level glass. 2 Until the Tank Waste Characterization and Staging Facility (TWCS) is completed, there is no plan for removal of aluminum from the waste. This limitation will likely lead to a 10% increase in the quantity of high-level glass logs. 3 Without the ability to pretreat the feed, it becomes more critical to select appropriate stock. With less suitable feedstock and more aluminum, there is more likelihood that the vitrification process will facilitate spinel crystal formation or generation of the mineral nepheline instead of more resilient glass.4 Because this increased likelihood will need to be actively managed there is a risk that the 70% Total Operating Efficiency (TOE) established in the Consent Decree will not be met until after the TWCS is completed. Additionally, it is an open question as to whether the resultant waste form meets the acceptance criteria for the eventual national repository without additional pretreatment capability. There should be a publicly available plan that addresses whether such noncompliant glass will be re-introduced into the feedstock, or if it will remain on the Hanford site as an orphan waste. Under the AoA5 there are three Alternatives that call for direct feed high level waste, Alternatives 15 through 17. In these alternatives, leaching aluminum is performed in double-shelled tanks (DSTs), the youngest of which is 38 years old, poses potential risks. The process involves adding sodium hydroxide and heating the solution, potentially causing thermal cycle strain on these aging tanks. To mitigate these risks and improve efficiency, we recommend accelerating the construction of treatment facilities for better feedstock. This approach would lower the number of waste containers created, provide surety in meeting compliance criterion, and spare critical and aging tanks from thermal shock.

- 1 https://pdw.hanford.gov/document/AR-27710/
- **2** https://fortress.wa.gov/ecy/ezshare/NWP/HN/HN-Agreement-Proposed-TPA-CD-Changes.pdf p.23
- 3 https://pdw.hanford.gov/document/AR-27710/ p.xxvii
- 4 https://www.pnnl.gov/main/publications/external/technical reports/PNNL-25835.pdf

Comment A-1-3

Attachment B and C: Reactivation of Cross-Site Transfer Lines and Build One Million Gallons of Storage in 200 West Area

The reactivation of cross-site transfer lines is crucial for efficient waste management at Hanford. These lines will be essential for moving tens of millions of gallons of existing supernatant and solubilized saltcake to vitrification facilities in the 200 East area. These cross-site transfer lines -line 3150 for liquid and line 3160 for sludge- are expected to be the only link between the 200W area and the WTP facilities. Even the future Waste Receiving Facilities for T-farm tanks, with the T-farm facilities will be linked via a new transfer line to the SY farm. Currently, all waste in 200W requiring treatment must utilize the cross-site transfer lines unless an alternative mode of transport is developed. Given the critical nature of these transfer lines and the potential for cost increases decisions, design, and construction must begin as soon as possible to meet the established deadlines.

We continue to support upgrades to the cross-site transfer lines as they have the potential to safely increase the utilization of available storage capacity. A missing piece of information to add context for comment on the various transfer lines that must be installed or updated is publicly available timelines for the construction of waste receiving facilities.

Given the critical nature of these transfer lines and the potential for cost increases decisions, design, and construction must begin as soon as possible to meet the established deadlines. Because the tank waste mission does not occur in entire isolation from cleanup activities elsewhere at Hanford, the planning and execution of these transfer line projects should be coordinated and optimized with other related and co-located initiatives, such as waste site remediation along the transfer line path and the construction of additional tank waste storage in the 200 West Area (as outlined in Attachment C). This integrated approach will ensure efficient use of resources and minimize potential conflicts, re-works, or delays in the overall waste management and cleanup strategy at Hanford.

Comment A-1-4

Milestone M-042-03 3150 Supernatant Line

Line 3150, designated for supernatant transfer, is scheduled to be operational by 12/21/2030. As of 2017, the estimated cost for reactivation was \$35,189,633, with a projected timeline of 5 years. 6 To meet the 2030 deadline, work must commence by the end of 2025. We note that due to the federal fiscal process, the soonest that this planning work can be funded is federal fiscal year 2027 (October 2026), with a corresponding budget request from the Hanford office in spring of 2025. The cross-site transfer lines do not currently appear on the sites' 5-year vision. 7

6 https://pdw.hanford.gov/document/AR-26310

7 https://www.hanford.gov/page.cfm/5-YearPlan2023-2028

Comment A-1-5

Milestone M-042-04 3160 Slurry Line

The slurry/sludge line, 3160, presents a more significant challenge. This line has never been activated or used. A 2011 evaluation estimated the cost to bring the line into modern compliance at approximately \$10,000,000, with a 3-year completion time. The new milestone M-042-04 sets a due date of 12/31/2036 for this line, six years after the supernatant line. This

timeframe appears reasonable, considering the 5-year project timeline of line 3150, for upgrading the existing line and making appropriate changes at the SY farm in anticipation of a new 1,000,000-gallon storage facility. Oregon supports these efforts, but would point out potential concerns with budgetary and workforce constraints to completing all these critical components in the allotted timeframe while still safely advancing the cleanup mission and recovering waste from tank farms. Indeed, the concern grows if additional tank capacity is needed before late 2040 expectation.

Comment A-1-6

M-045-138 and M-045-139 re new 1,000,000 Gallon capacity in 200W

Accelerating the installation schedule for a new 1,000,000-gallon tank in the SY farm would have protective benefits to the mission, and it would enhance operations of the 200W waste treatment system. Milestone M-045-139 calls for an operational date of 9/30/2040 a mere three months before the 200W retrievals are scheduled for completion. The new tank will be used to support T-farm retrievals and the High-Level Waste (HLW) treatment mission. Under an accelerated schedule the new tank can support the low activity waste mission portion and be used as emergency space in case of SST or DST leaks.

Tank SY-103 is designated to receive waste from the 200W waste treatment system and must be processed before any other 200W tanks can be retrieved. With 323,000 gallons of supernatant and 410,000 gallons of saltcake8, there is not enough spare capacity in the SY farm to absorb this volume without evaporation. This forces the retrieved LAW into temporary storage if treatment facilities are not available. Already, TSCR had to reprocess waste due to contamination that was still present in the receiving tank after retrieval.9 There is significant potential that a similar situation arises in tank SY-103 requiring reprocessing of a liquid into a capacity limited system. Having a new tank eliminates the risk of contaminating treated LAW batches and lessens capacity restrictions. The extra capacity would enable 200W TSCR retrieval operations to start even if the transfer line or LAW treatment facilities are delayed. Without capacity to treat or store treated LAW all retrieved LAW would be shipped offsite in liquid form, which Oregon strongly opposes.

8 https://pdw.hanford.gov/document/AR-30176

9https://www.dnfsb.gov/sites/default/files/document/30026/Hanford%20Week%20Ending%20February%202%20 2024.pdf

Comment A-1-7

Attachments J and M: New TPA Milestones for SST Retrieval and LAW Treatment in 200 West Area

1. These two new sets of proposed milestones are intrinsically linked, as the retrieval of 22 Single Shell Tanks (SSTs) in the S, SX, and U Farms cannot proceed without corresponding treatment capacity in the vicinity. This interdependence underscores the need for a comprehensive approach to waste management in the 200 West Area.

2. Oregon has consistently advocated for disposal of Hanford waste outside the Northwest region, preferring conservatively engineered facilities underlain by favorable, protective geologies. 10 We maintain that incorporating a pathway for offsite disposal of the grouted portion of the low activity tank waste may be a viable component to complete the overall Hanford tank waste mission. This approach would reduce the risk budget burden for the Hanford Central Plateau, particularly concerning key radionuclides like Tc-99 and I-129, and hazardous chemicals such as nitrate species and heavy metals.

Several key aspects remain unresolved and will be crucial in meeting milestone M062-24 by 12/30/2024. As the information provided as part of the current comment period largely consisted of a plan to announce a plan, we look to the National Academies of Science Engineering and Medicine (NAS) study on Supplemental Treatment Approaches of Low-Activity Waste at Hanford to provide insights applicable to the treatment of 200W tanks. 11 The NAS study suggests that solid grouted forms are safer and more resilient for shipping. They offer natural selfshielding, improved safety, and consistency in volume and dimensions. The mixing with grout components dilutes the radioactive portion and fixes it while also reducing mobility and controlling other chemical hazards such as RCRA heavy metals and corrosivity. More materials can be shipped as Class A waste with low concentration of radioactive material and greater ease in meeting applicable regulations. In the event of an incident during transport, solid materials are more easily retrievable and less prone to cause catastrophic damage to human health and the environment.

While grouting increases the volume shipped, our analysis shows that it results in fewer overall rail transportation events, thereby reducing accident risks in the transportation corridor and simplifying logistics. Standardized shipping volumes would aid onsite administration and help delineate site needs for storage space. Moreover, on-site grouting would retain construction, staffing, and operation budgets in the local region and allow for DOE onsite management and oversight.

Given these considerations, Oregon expects that if grouting is deemed an acceptable treatment for Low Activity Waste (LAW), that treatment will be performed on-site at Hanford and then shipped for final disposal off-site. We also expect further analysis of accident scenarios involving liquid shipments to better understand potential risks and cleanup costs, and to ensure that first responders along the transit route have the resources needed to respond to any incident.

3. A full supplemental Environmental Impact Statement (EIS) should be performed for the full grouting and offsite disposal transportation campaign. The impact of a comprehensive off-site transportation and disposal campaign has not been thoroughly assessed. The scale of potential grouting at 200W, tens of millions of gallons, far exceeds scenarios assessed in prior impact evaluations. The most recent submission to the Federal Register was AR-23306, 12 and the 2013 Record of Decision stated, "DOE has decided to implement Waste Management Alternative 2, which includes disposal of LLW [low-level radioactive waste] and MLLW [mixed lowlevel radioactive waste] at IDF [Integrated Disposal Facility]-East from tank treatment operations." and "While the TC&WM EIS did not anticipate a large increase in the amount of secondary waste sent offsite for treatment and potential disposal, it did acknowledge that it

could occur." The above statements were made as justification for the lack of a supplemental EIS for at most 332 m3 of mixed low-level waste (LLW) offsite. Tens of millions of gallons of liquid would be well over 100,000 m3 grouted if as suggested by System Plan 10 approximately 71,000 m3 of LAW is generated by S, SX, SY, and U tank farm. This volume, if shipped, is more than two orders of magnitude higher than previously considered offsite shipping campaigns. Population densities and the standard of care for such evaluations including environmental justice assessments have also changed since the TC&WM EIS was completed. Because of the significant scope change, previously unassessed factors, and time elapsed since the last full EIS and NEPA evaluation, Oregon expects an updated assessment with full public participation and comment, including route-specific analysis of potential transportation options.

4. As is the case with Test Bed Initiative TBI treatment, the Direct-feed Low Activity Waste portion of the waste treatment plant has yet to produce materials using treated tank waste. During public meetings, DOE was confident that there will be sufficient mixed low-level waste in 200 east to ensure that DFLAW can continue to operate using tank waste, once started. However, glass scientists at Pacific Northwest National Laboratories have continued to improve glass formulations and efficiencies. 13 The DFLAW melters have the potential to produce 15 metric tons of glass (MTG) per melter but are only expected to make 40% total operating efficiency (TOE) or about one full waste container of glass per melter per day. If DFLAW performs at its least efficiency, Oregon's calculations show that DOE will have exactly enough feed to operate in 200E until 2040. Any improvement to efficiency realized through poststartup operation would result in a potential lack of feedstock. If this occurs, DOE may find itself in the position where there is insufficient feed waste to support DFLAW operations. Instead, 200W tank waste is directed to make grout for offsite disposal with no intention of having a way to transport treated low level waste liquids to serve as feed for DFLAW until 2031 at the earliest. To be clear, while Oregon supports disposal of tank waste off site in grouted form, it is more important to ensure that the DFLAW facility which the nation invested in is operated to the fullest possible measure that it can within safety standards. Rather than restricting DFLAW operation, fully utilizing the facility and adopting modeling updates would feed the virtuous circle and demonstrate efficient use of federal funds. Completion of upgrades to the cross-site supernatant transfer line should include the option to reach DFLAW feed tanks. Improving DFLAW operations and integration with the 200W mission would also serve a role in reducing the technicium-99 and iodine-129 risk budget on the site, as DFLAW condensate enriched in those isotopes can be incorporated into the grout that is transported off-site.

10 https://www.oregon.gov/energy/safety-resiliency/Documents/2022-05-NAS-SLAW-Study-OregonComments.pdf

11https://www.nationalacademies.org/documents/emed/link/LF2255DA3DD1C41C0A42D3BEF 0989AC

AECE3053A6A9B/file/DB760207C1E4245E165FB35070A0676193DF3E673310?noSaveAs=1

- 12 https://pdw.hanford.gov/document/AR-23306
- 13 https://www.pnnl.gov/main/publications/external/technical reports/PNNL-30932Rev1.pdf

Comment A-1-8

Milestone M-062-24-04 Selection of facilities to support 200W LAW disposal

Oregon is confused by the timing of the Test Bed Initiative, compared to the date in the Holistic Agreement for deciding on where to treat Hanford tank waste. The Test Bed Initiative process has not even begun physical operations, let alone test and ship the treated supernatant. Washington Ecology issued a permit that expires in 202514 with the assumption that TBI will start in the middle of calendar year 2025 and the test data available by the end of 2025 or early 2026. And yet, Milestone M-062-24-04 calls for a date of 12/31/2024 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." In the absence of any TBI data making this selection so soon means it will not be supported by the most up to date site-specific data. The date for M-062-24-04 should be moved back a minimum of one year for this reason alone.

14 https://fortress.wa.gov/ecy/nwp/permitting/TBI.2024.1F/Start.html

Comment A-1-9

Milestone M-045-135 Complete retrieval of 22 SST in S, SX, and U

The timeline for treating 22 tanks in 200W by 2040 appears optimistic, as several issues could cause serious delays. These include the limited capacity of the as yet undesigned 200W treatment system, the need for additional storage capacity, limited available capacity in the SY farm, and potential regulatory hurdles. It's crucial that these challenges are addressed proactively to ensure the successful implementation of the new milestones for 200W tank retrieval and treatment.

Several regulatory and administrative hurdles must be addressed. Each tank has a unique chemistry and the process for determining how many Waste Incidental to Reprocessing (WIR) determinations will be required has not been established. The dissolution of saltcake for retrieval further complicates characterization and tank chemistry. These varying chemistries will necessitate additional EPA variances, requiring more time for analysis and public input to ensure compliant off-site disposal. We advocate for one EPA variance for every tank or group of tanks covered by a WIR determination. This is critical for confirmation that each load meets safety requirements for shipping, public transparency, disposal requirements, and associated waste acceptance criteria.

Comment A-1-10

Attachment I: Establish New TPA Milestones for Retrieval Technology Work Plan and Implementation

1. The current formulation of these milestones suggests that the technology evaluation may cease once this milestone is met. To address this, we recommend developing a longer-term committee or program to ensure continual technological assessment. The proposal for DOE and Ecology to meet periodically (at least every six months) throughout the evaluation and development process is a good start, but this collaborative effort should be extended beyond the initial milestone completion. This encourages longer term innovation and technology

development which has the potential to extend beyond Hanford and provide benefit elsewhere in the nation. Opening the process earlier to all stakeholders would assist DOE in fulfilling their own stated conclusion; "... the Office of EM's adaptive management framework can provide ongoing opportunities for stakeholders to engage in riskreduction decisions regarding tank treatment R&D prioritization. This iterative process is vital for affected local governments, regulators, tribal representatives, and the public to convey their views and engage DOE as the agency pursues a sustainable and effective R&D Roadmap."15

Continuing these periodic meetings and inviting experts from Federally Funded Research Development Centers, academia, and private industry for "State of Science" discussions would help ensure the best available technology is employed throughout the cleanup process. Including some of the most difficult tank waste problems into a DOE challenge grant concept could expand the number and experience base of those interested in providing innovative solutions. This longterm technology review component would benefit additional milestones as well, such as the retrieval of Tanks A-104 and A-105, scheduled for completion by the end of 2040.

2. Technologies developed for problematic tank retrievals should also be evaluated for their potential application in future tank waste recovery efforts, even when those recoveries are being conducted in non-problematic tanks. Minimizing the waste remaining in tanks when declared closed is a critical aspect of any closure plan. According to Washington Administrative Code (WAC) 173-303-61016, closures must minimize the need for further maintenance and controls and minimize or eliminate human or environmental exposures to contaminants. Fully retrieving tanks before closure is the best method to meet relevant Washington Ecology and EPA requirements.

It is worth noting that in the 22 tanks declared retrieved, mostly from AX and C farms, there is still an estimated 100,000 gallons of waste left behind. 17 Until the WMA-C WIR determination is completed, all 100,000 gallons of that waste is managed as high-level waste. This underscores the importance of continued technological development and assessment, and the importance of the TPA agencies in refining the definition of a complete recovery.

3. Considering Attachment F, which establishes new TPA milestones for the closure of various Single-Shell Tank Waste Management Areas (WMAs), it's noteworthy that DOE anticipates using landfill closures for tank farms, following completion of WIR evaluations. The expectation is that once tanks are declared retrieved and a WIR is completed, remaining waste will be landfilled place, with the contaminant load accounted for through other controls such as filling the tank with grout, impermeable caps and/or pump and treat systems. The non-radioactive components of such a landfill would be subject to permitting by the WA Department of Ecology. Additional public dialog is warranted to ensure that landfill closure meets applicable regulatory and legal requirements.

In conclusion, we recommend establishing a long-term, ongoing process for technology evaluation and development. This approach would ensure that the Hanford cleanup effort continues to benefit from the latest advancements in retrieval and treatment technologies, potentially leading to more complete waste removal and safer, more efficient closure options, minimizing the amount of contamination left in unlined landfills on the central plateau.

15 https://www.energy.gov/sites/default/files/2023-07/EMAB-Hanford-Tank-Waste-Roadmap-2023-07-10.pdf

16 https://apps.leg.wa.gov/WAC/default.aspx?cite=173-303-610

17 https://pdw.hanford.gov/document/AR-30176

Comment A-1-11

Milestone M-045-136 and 137 Retrieval Technology Workplan and written technology evaluation development

The inclusion of technological innovation and testing as a milestone is a commendable development in the Hanford cleanup effort. Oregon has long advocated for research into dry mining of tank waste to allow for maximum recovery from non-competent tanks. Of note is the upcoming deadline of 3/30/2025 to submit a work plan for constituting an expert panel on tank retrieval technologies. While the only method explicitly mentioned is salt-well pumping - a previously used and highly rated retrieval technology 18 when there are recoverable liquids present -, it would be beneficial to also include updates on other potential techniques.

Specifically, there is interest in the status of potential dry-mining or other methods that do not require the addition of water into leaking tanks. Such innovative approaches could significantly improve retrieval timelines, especially for tanks of questionable integrity. The continuous technological innovation driven by DOE laboratories 19 means that many technologies are improving, and methods previously deemed ineffective may become viable options. At a minimum dry-mining should be included in Milestone M-045-136 and 137. The use of dry mining to accelerate the Hanford Tank Waste Mission has been published previously, with techniques that could be useful on site. 20 As both salt-well pumping and dry-mining have a preexisting knowledge base the limitations of "at least 2 new, or refined, existing retrieval technologies" is restrictive. We believe a change in the milestone to "at least 2 new, or refined, existing retrieval technologies in addition to saltwell pumping and dry-mining" would provide assurance of a broad and inclusive technology review.

18 https://pdw.hanford.gov/document/AR-04419

19 https://www.energy.gov/em/hanford-tank-waste-research-and-development

20 https://www.energy.gov/em/rd-roadmap-hanford-tank-waste-mission-acceleration

A-2: City of Bend, Oregon

Comment A-2-1

To the State of Washington Department of Ecology,

The City of Bend is writing to endorse the comments from the Governor of Oregon, Oregon Hanford Cleanup Board, and the Oregon Department of Energy on the proposed Holistic Negotiations Agreement modifying the Hanford Nuclear Waste Site Tri-Party Agreement and Consent Decree. The City of Bend is also writing to express concerns regarding the transportation of Hanford waste through central Oregon.

The top issues identified and outlined in the State of Oregon's comments are in alignment with the City of Bend's concerns, specifically to include emergency responder training, Environmental Impact Assessment (EIS), treatment strategy, and public engagement and transparency.

Our region's closest Hazmat Regional Response Team is in Salem Oregon, making us particularly vulnerable to transportation incidents involving hazardous materials. The plan for transporting the low-activity waste has not been specified and the commitment for additional public engagement once specified is unclear. This is problematic as it requires transport by either truck or rail through populated corridors like Bend, and we believe that waste in a liquid form poses significantly more risks to our community than waste in a solid form. The City of Bend is ready to help support the State of Oregon with their offer to facilitate public information and engagement campaigns in our region regarding tank waste transportation.

The agreement represents an important step towards risk reduction at the Hanford site and requires innovative solutions and careful consideration of the long-term environmental and public health impacts. Please consider Oregon's recommendations to ensure the Hanford tank waste mission can progress more effectively and safely, while minimizing long-term environmental and public health risks.

Sincerely, Melanie Kebler,

T-1: Confederated Tribes of the Umatilla Indian Reservation

Comment T-1-1

Subject: Comments to the proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste

To Whom It May Concern:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) appreciates the opportunity to review and comment on the proposed changes to the Tri-Party Agreement between the United States Environmental Protection Agency (EPA), the United States Department of Energy (DOE), and the Washington State Department of Ecology (ECY).

After being excluded from these negotiations for years, one area that is clear to the CTUIR from the work completed by DOE, EPA, and ECY is that the Tribal voice and perspective in these negotiations were overlooked. There is no evidence that the interests of the CTUIR, long-term stewards of the lands at the Hanford Site, were considered in these changes and amendments.

It is also concerning that large-scale changes such as these would be released without any sideby-side information related to analysis of the environmental impacts associated with the changes, as required by federal law.

The involvement of Affected Tribes is essential in consideration of changes to the Tri-Party Agreement. In failing to involve the CTUIR in the revision process, the Tri-Parties failed to meet their trust obligations to the CTUIR. This failure has left the CTUIR unable to fully advocate for our interests in relation to the land and First Foods and to protect them from additional harm. The CTUIR is concerned that the Tri-Parties seem to have focused on checking regulatory boxes

rather than addressing the systematic environmental damage caused by the United States at the Hanford Site.

The following comments on the proposed changes to the Tri-Party Agreement and consent decree on Hanford Site tank waste reference the Attachment Letter and Change Number DRAFT form organization outlined in the attachments of the Holistic Negotiations:

Attachment B: M-42-24-01- Establish New TPA Milestones to Activate Cross-Site Transfer Lines

Connecting Double-Shell Tanks

Language should be added to the conditions of these milestones to:

- 1. Remove carbon steel transfer line sections in their entirety and replace them with non-corroding stainless steel.
- 2. Require removal and disposal of SNL-3150 and SLL-3160 cross-site transfer lines and associated infrastructure after mission completion or service life, whichever comes first.
- 3. Require remediation and restoration of the affected lands after removal of transfer lines. It is the policy of the CTUIR that:
- Infrastructure must be removed from the Hanford Site. This includes, but is not limited to, buildings, pipelines, waste storage tanks, and most (but not all) roads.
- Hanford lands and resources should be restored to their pre-Hanford environmental conditions,

or equivalent to those that existed at the time of the Treaty of 1855.

• Work with the USDOE, and other state andfederal agencies to proactively be prepared/or accidental release of hazardous radioactive materials or chemicals and to be a partner in the safe transportation to a final destination.

Attachment C: M-45-24-08-Establish New TPA Milestones to Build One Million Gallons of MultiPurpose

Tank Waste Storage Capacity in 200 West Area

Language should be added to the conditions of these milestones to:

- 1. Investigate the true need for double-shell tank capacity, specifically as related to the timing of pretreating, grouting, and offsite shipment BEFORE building additional tank capacity.
- 2. Require the additional one million gallons of storage capacity to be removable.
- 3. Include an additional milestone for removing and disposing of this storage capacity and all related infrastructure.
- 4. Include a milestone for the complete restoration of the lands after removal.

DOE has a long-standing tradition of installing and contaminating infrastructure at the Hanford site and then leaving this infrastructure in place as landfill disposal units. Care and purpose

should be taken in advance to ensure that this new storage capacity in the 200-area does not become another landfill project.

It is the policy of the CTUIR that:

- Infrastructure must be removed.from the Hanford Site. This includes, but is not limited to, buildings, pipelines, waste storage tanks, and most (but not all) roads.
- Hanford lands and resources should be restored to their pre-Hanford environmental conditions, or equivalent to those that existed at the time of the Treaty of 1855.

Attachment D: M-45-24-05 - Update to TPA Major Milestone M-045-00, Complete Single-Shell Tank System Closure

Attachment E: M-45-24-03-Extend Due Date of TPA Milestone M-045-15 for Completion of Tank

A-103 Single-Shell Tank Waste Retrieval Project

Attachment F: M-45-24-04 - Establish New TPA Milestones for Closure of SST WMAs A-AX, BBX-

BY, C, S-SX, T, TX-TY, and U, and the 241-C-301 Catch Tank and 244-CR Vault

Attachment G: M-45-24-02- Update to TPA Milestone M-045-70, Complete Retrieval of all SingleShell

Tanks

Attachment H: M-45-24-07 - Update TPA Milestone M-045-85 to Complete Negotiations and Establish TP A Milestones for Closure of the Remaining SST WMAs

Attachment J: M-45-24-01-Establish New TPA Milestone to Complete Retrieval of 22 Single Shell

Tanks in S, SX, and U Farms

For the above M-45-24-0I/02/03/04/05/07:

Language should be added to the conditions of these milestones, and/or milestones added to:

- 1. Fully remove and dispose of the tanks, vaults, and associated infrastructure.
- 2. Fully remediate contaminated soils around the tanks.
- 3. Backfill the voids left by the tanks and restore the land.
- 4. Specific to Attachment J: M-45-24-01 waste retrieval from the 22 tanks should be a requirement with no contingencies associated with grout disposal pathways.

DOE continues to advocate for leaving radioactive tanks with residual dangerous waste in the ground and administratively closing these disposal units as landfills. This is not acceptable to the CTUIR.

Waste tanks and their residual contamination, which are the sole property of DOE, need to be removed from CTUIR treaty-protected lands and disposed of. The contaminated tanks and soils should be replaced with clean fill of acceptable quality to support vibrant native plant and animal communities and the area restored.

The CTUIR has been stewards of the lands that now comprise the Hanford Site since time immemorial, and will continue to be stewards of the land in perpetuity. Although it is understood that some level of contamination will remain at the Site at the completion of the cleanup mission, this large-scale dumping in place is not an acceptable form of remediation and is a direct violation of the federal government's treaty commitments.

It is the policy of the CTUIR that:

- Infrastructure must be removed from the Hanford Site. This includes, but is not limited to, buildings, pipelines, waste storage tanks, and most (but not all) roads.
- All sources of contamination that will impact groundwater will be removed and all groundwater contamination will be removed.
- Irreversible actions must not be used as interim solutions such the further remediation in the future would be made more difficult.
- The US DOE must use the CTUIR subsistence exposure scenario in all risk assessments and in setting all clean-up goals. This scenario is consistent with the Treaty of 1855, and with U.S. v. Washington and U.S. v. Oregon.
- Hanford lands and resources should be restored to their pre-Hanford environmental conditions, or equivalent to those that existed at the time of the Treaty of 1855.

Attachment I: M-45-24-06 - Establish New TPA Milestones for Retrieval Technology Work Plan and Implementation of Work Plan

The milestone stipulations must be changed to include:

1. Members of the expert advisory panel should not be chosen by DOE. Panel oversight should also not be administered by DOE. The panel should be established, members chosen, and the panel overseen by an independent and credible outside entity (e.g., the National Academy of Sciences).

Language should be added to the conditions of these milestones to include:

- 1. In addition to a one-time advisory panel, establish ongoing research capacity to continually innovate and deploy better methods of tank waste treatment and disposal.
- 2. Establish ongoing research capacity to continually innovate and deploy more effective soil remediation treatments.
- 3. State specifically that pump and treat is not a retrieval technology but a last-ditch effort to clean up a leak that should have been addressed earlier.

As written, the expert advisory panel work proposed in this milestone appears to be controlled by DOE. The panel must be truly independent if its findings and recommendations are to be deemed credible.

In addition to the expert panel, DOE must move quickly and purposefully to address leaking tanks and retrieval challenges by establishing ongoing funding of a workgroup to lead iterative and continual research to find innovative cleanup solutions. Furthermore, this group should not be established or chosen by DOE .

Attachment K: M-62-24-02 - Update to TPA Major Milestone M-062-00, Complete Pretreatment

Processing and Vitrification of Hanford High Level and Low Activity Tank Wastes

The CTUIR supports the need to adjust this milestone to reflect schedule challenges.

Attachment L: M-62-24-03- Update TPA Milestone M-062-45, Requiring System Plan Negotiations

and Establish Two New Milestones

Requirements should be added within the M-065-45/46/47 negotiations to:

1. Include representatives of Affected Tribes and members of the general public.

The CTUIR is concerned by the Tri-Parties proceeding with additional closed-door negotiations as was done during the recent 'Holistic' Negotiations.

In addition, CTUIR does NOT support further revisions to the 2047 date in Milestone M-062-00.

It is the policy of the CTUIR that:

• CTUIR will work toward being long term partners and managers of all of the lands and resources at Hanford. CTUIR expects the federal government to fulfill its Trust responsibility to enable the CTUIR to fully participate in this long term multi-generational mission.

Attachment M: M-62-24-04 - Establish New TPA Milestones to Create Alternative Treatment Capacity for LAW for 200 West Area SSTs

The CTUIR supports the need for this alternative treatment capacity.

Language should be adjusted/added to these milestones to:

- 1. Expressly disallow the shipment of waste in liquid form across the Columbia Basin.
- o As mentioned previously in the October 30, 2023 letter from CTUIR to Secretary Granholm and Senator Murray, CTUIR does NOT support shipping Hanford liquid waste of any hazard level within the Columbia River Basin.
- 2. Add a second treatment path option with a near-site contractor to grout pretreated low-activity waste and ship out of state for permanent disposal.
- o CTUIR views this near-site contractor treatment pathway as having a high value for near term risk reduction to groundwater and the Columbia River. Having a greater capacity to speed up treatment and disposal is key to risk mitigation.

It is the policy of the CTUIR to:

- Work with the USDOE, and other state andfederal agencies to proactively be prepared for accidental release of hazardous radioactive materials or chemicals and to be a partner in the safe transportation to a final destination.
- The Columbia River including the Hariford Reach should be protected from all pollution associated from the historic operations of the Hariford Nuclear Reservation and wherever and for as long as those pollutants may pose a threat to the CTUIR.

Attachment N: M-90-24-01 - Update to TPA M-090 Milestone Series for Acquisition and Modification of Facilities for First 2 Years of Hanford Site IHL W from WTP Operations

Language should be adjusted to include:

- 1. DOE should make every effort to use existing facilities to store Immobilized High Level Waste (IHL W). If DOE decides to build new or repurpose planned facilities, this plan to add additional infrastructure must be done in consultation with Hanford Tribes.
- 2. Storage of IHL W should only be allowed if a disposal pathway is defined and contracts are in place for final offsite disposal.
- 3. Disposal of IHL W should be at permitted facilities off the Hanford Site.

It is the policy of the CTUIR that:

• Infrastructure must be removed from the Hanford Site. This includes, but is not limited to, buildings, pipelines, waste storage tanks, and most (but not all) roads.

Attachment 0: M-47-24-01- Update to TPA Major Milestone M-047-00 to Complete Work Necessary to Provide Facilities for Management of Secondary Waste from WTP

The CTUIR supports the need to adjust this milestone to reflect schedule challenges.

Attachment P: M-62-24-05-Extend Due Date of TPA Interim Milestone M-062-56 in TPA Action Plan, Appendix D

The CTUIR supports the need to adjust this milestone to reflect schedule challenges, but not a full year as proposed.

Language in the due date should be adjusted to:

1. 02/28/2026 at the latest

The additional Low Activity Waste Pretreatment Capability is key to supporting pre-treatment, grouting and off site disposal; and most importantly decreasing the risk of leaking tanks to CTUIR treaty-protected resources. Strides should be taken by the Tri-Parties to move this project forward rather than hold it back.

Attachment Q: M-62-24-06 -Extend Due Date of TPA Interim Milestone M-062-21 in TPA Action

Plan, Appendix D

CTUIR supports the need for adjusting the due date of M-062-21 to align with the start of operations of the WTP but does NOT support the underlying renegotiation or extension of the 2047 due date in M-062-00 to ... "Complete pretreatment processing and vitrification of Hanford High Level (HL W) and Low activity (LAW) Tank Wastes."

Further extension of due dates for completing waste treatment leaves leaking tanks in place and incrementally increases the risk to treaty-protected First Foods (water, flora, and fauna) and cultural resources.

The addition of on-site grouting with off-site disposal should be leveraged to increase waste treatment and disposal to meet the 2047 due date outlined in M-062-00.

Language should be added:

1. DOE will make every effort to safely increase the rate of waste treatment to achieve treatment of all Hanford tank waste well before the M-062-00 milestone date as written of 12/31/2047.

Thank you for the opportunity to comment on the proposed changes to the Tri-Party Agreement. If you have any questions regarding this letter, please contact Mason Murphy at MasonMurphy@ctuir.org or (541) 429-7766.

Respectfully,

Gary I. Burke, Chairman

Board of Trustees

B-1: West Seattle Administrative & Paralegal Services

Comment B-1-1

High Level Nuclear Waste tanks are leaking and the contamination is spreading to the groundwater that flows to the Columbia River. But will anything be done to stop the leaks as required by federal and state hazardous waste laws?

The USDOE and Washington State spent four years negotiating to revise the Hanford Cleanup Agreement governing the cleanup of Hanford's High-Level Nuclear Waste tanks for the next two decades.

But did they agree to take any action to stop the leaks from tanks? No.

Since the public meetings on the agreement in July, USDOE has announced that yet another of the 149 Single Shell Tanks is leaking. That makes 3 leaking tanks.

Millions of gallons of liquid radioactive waste from those tanks are likely to be trucked through Spokane or Oregon!!!

There is a safe alternative to have the waste treated and solidified before being shipped. Your comments are needed to insist that liquid waste is not shipped through our communities and over mountain passes.

We strongly support having some low radioactive waste disposed offsite to protect the groundwater and Columbia River. But it is vital that the waste be treated and solidified before being shipped.

This has taken far too long to be dealt with and transporting nuclear waste through Washington and Oregon is not an option without the proper steps.

Oth-1: City of Bend Oregon

Comment Oth-1-1

See attached comments from the City of Bend, Oregon forwarded by the Oregon Hanford Cleanup Board by request of Carrie Karl Director of Risk and Emergency Management City of Bend

To the State of Washington Department of Ecology,

The City of Bend is writing to endorse the comments from the Governor of Oregon, Oregon Hanford Cleanup Board, and the Oregon Department of Energy on the proposed Holistic Negotiations Agreement modifying the Hanford Nuclear Waste Site Tri-Party Agreement and Consent Decree. The City of Bend is also writing to express concerns regarding the transportation of Hanford waste through central Oregon.

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The agreement represents an important step towards risk reduction at the Hanford site and requires innovative solutions and careful consideration of the long-term environmental and public health impacts. Please consider Oregon's recommendations to ensure the Hanford tank waste mission can progress more effectively and safely, while minimizing long-term environmental and public health risks.

Sincerely, Melanie Kebler, Mayor City of Bend

Oth-2: Columbia Riverkeeper members

Comment Oth-2-1

The U.S. government must act to protect the River . from highly radioactive and toxic pollution at the i Hanford Nuclear Site. This includes honoring the • commitments made in Treaties with Tribal Nations • at Hanford, and recognizing that the nuclear waste i created at Hanford has caused immeasurable harm to Tribal communities and others who depend on i the Columbia River.

I call on the TPA agencies to undertake the most I protective cleanup possible, given the enormously / high stakes for the Columbia River and everyone i depends on it.