

Heart of America Northwest, -1-the public's voice for Hanford cleanup-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 wastes through Spokane or Oregon along with extensive comments on the need for an EIS as required by NEPA and SEPA.

COMMENTS OF HEART OF AMERICA NORTHWEST

“HOLISTIC AGREEMENT ON CLEANUP OF HANFORD TANK WASTE”

SEPTEMBER 1, 2024



HANFORDCLEANUP.ORG

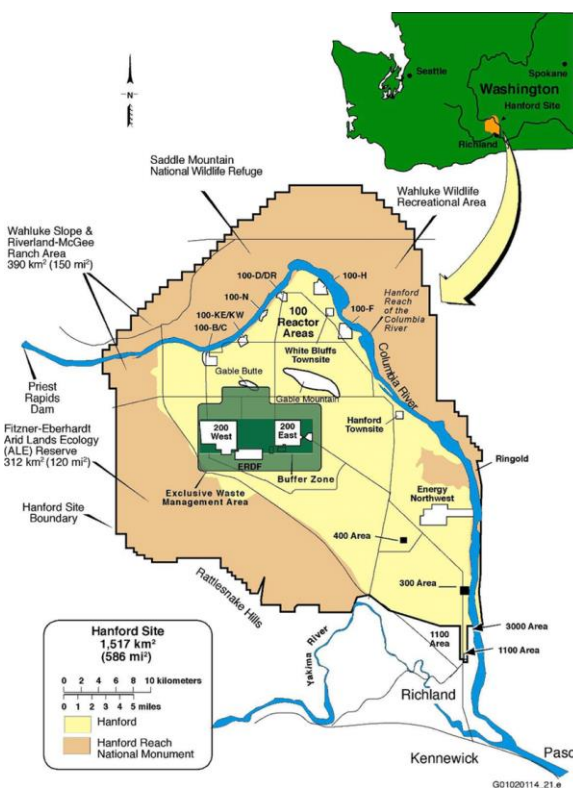
EMAIL RESPONSES OR QUESTIONS TO GERRY@HOANW.ORG AND
OFFICE@HOANW.ORG

SUBMITTED ELECTRONICALLY: <https://nw.ecology.commentinput.com/?id=dA7gsj8ZM>

Organization of our comments: Following our overview and perspectives driving our comments, we present key elements of the Agreement as described by the US Department of Energy (USDOE), Washington Ecology and US Environmental Protection Agency (EPA) with our relevant comments inserted and explained. Most of the agency descriptions are from the USDOE – Ecology presentations at public meetings. Additional detailed comments follow. The final section provides notice in regard to the agencies' violations of NEPA and SEPA for failing to ensure that there will be new or supplemental EISes prior to committing resources to the dramatically changed tank waste program.

WHY WE CARE ABOUT HANFORD'S HIGH-LEVEL NUCLEAR WASTE TANKS:

- The Columbia River flows through Hanford for over **50 miles**, past **nine closed weapons Plutonium nuclear reactors**, and hundreds of liquid waste and burial sites.
- Some contaminants enter the Columbia at levels >1,500 times the Drinking Water Standard.
- The Hanford Reach is the only portion of the River in the US that is free-flowing and has natural salmon spawning grounds.
- On August 15, USDOE announced that a **third High-Level Nuclear Waste tank is actively leaking** (Tank T-101). As shown below and the [accompanying presentation](#), 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.

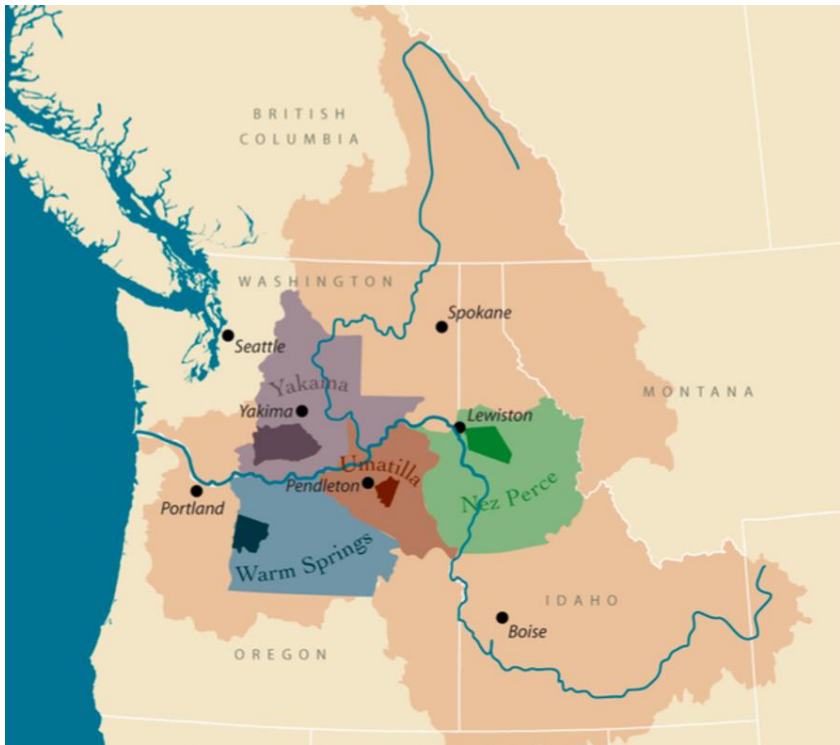


The 9 nuclear weapons Plutonium reactors were built along the River.

The 200 East and 200 West Areas are on the Central Plateau where Plutonium and Uranium were processed, and where 177 High Level Nuclear Waste tanks hold about 56 million gallons of waste

- The “Holistic Negotiation Agreement” is focused on the 177 High-Level Nuclear Waste tanks and on the waste treatment plants to “vitrify” / glassify tank wastes which are being constructed on the eastern edge of the 200 East Area.

- MAP: PNNL



Hanford on Tribal lands and waters

- Since time immemorial, tribal people have lived, fished, gathered and hunted on the area now known as the Hanford Nuclear Reservation.
- Under the Treaties of 1855, the Yakama Nation and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) retain specific rights to use resources on the lands that comprise Hanford.
- The Yakama, CTUIR and Nez Perce have Treaty rights to fish and temporarily live along the 50 miles of the Columbia River that runs through Hanford.



56 million gallons of "Mixed" High-Level radioactive and chemical waste are in 177 tanks in the 200 East and 200 West Areas on Hanford's Central Plateau

Picture: Double Shell Tanks under construction in the 1970's. One DST has already leaked.

As these corrode, waste leaks to soil and migrates to the groundwater, which flows to the Columbia River

At least two Single Shell Tanks are currently leaking:

T-111 has been leaking for over a decade
 B-109 was publicly reported leaking in 2021 (monitoring showed a massive leak between December 2018 and March 2019)

UPDATE

August 15 2024:

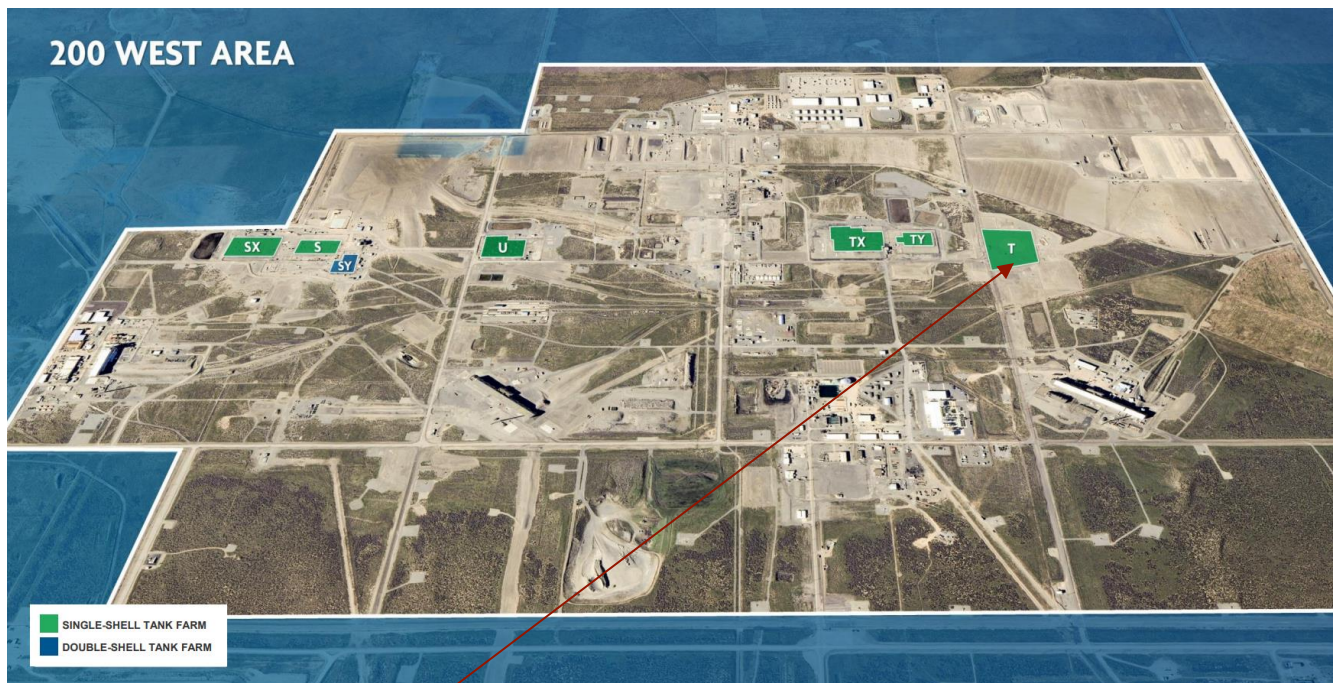
USDOE announced that a third tank is actively leaking (Tank T-101).

Double Shell Tanks under construction in the 1970's.

HOW THE AGENCIES DESCRIBE THE AGREEMENT

“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 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 shared commitment to the safe and effective cleanup of tank waste.”



Aerial view of Hanford's 200 West Area (copied from USDOE- Washington Ecology joint public meeting presentation on the Holistic Negotiation Agreement. Some of the bare areas are unlined “burial grounds” with dozens of miles of unlined trenches in which waste was disposed. Large structures in foreground are Plutonium and Uranium processing plants.

The arrow shows T-Tank Farm where 2 single shell tanks are now officially reported by USDOE as leaking. 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.

Key “Agreement Highlights” quoted from [the Agencies’ public meetings presentation](#) [with our notes or comments inserted in italics in text boxes]:

- 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

Heart of America NW’s comment:

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.

- 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

Heart of America NW comment:

The language in the agreement will impermissibly delay action to remove leakable liquids from leaking Single Shell Tanks.

Key Agreement Highlights Presented by the Agencies Continued:

- Revising milestones for pretreatment and full operation of plant after starting treatment of high-level waste

Heart of America NW comment:

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”

- Retrieving waste from 22 tanks in Hanford’s 200 West Area by 2040
- Grouting low-activity portion of waste for disposal off-site

Heart of America NW comment:

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).

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-062-64¹ 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."

- Designing and constructing 1 million gallons of capacity for multipurpose storage of tank waste. Operating by 2040 in 200 West Area

Heart of America NW comment: *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.*

The Settlement Agreement between USDOE and Washington State includes a statement that USDOE intends to ‘forbear’ from applying USDOE’s own definition of High Level Waste to Hanford’s wastes:

High Level Nuclear Waste can only be disposed of in deep geologic repositories pursuant to the federal Nuclear Waste Policy Act. USDOE adopted its own definition in recent years, which would exclude waste in Hanford’s tanks.

As explained in the agencies’ presentation, the Settlement Agreement:

“(i) includes statement that DOE intends to forbear from applying high-level waste interpretation at Hanford

“Does not affect other authorities (e.g., Waste Incidental to Reprocessing determinations)”

USDOE is not withdrawing its redefinition of High Level Waste. It simply says USDOE does not intend to try to apply this authority at Hanford – at this time. Washington State, Oregon, Tribes and environmental groups may challenge USDOE’s authority in court if USDOE does try to apply its own definition to Hanford wastes.

Does it matter? USDOE still asserts that it can “reclassify” waste from High Level to Low Level, as it did unilaterally for waste that leaked from tanks. USDOE does not need to use its adopted redefinition of High Level Waste to dispose of treated tank waste at Hanford. USDOE will still be able to dispose of tank waste (either vitrified or grouted secondary wastes) in Hanford landfills under existing DOE Orders and the Tri-Party Agreement using a procedure called “Waste Incidental to Reprocessing (WIR).”¹

¹ The text of the Agreement states: this: “shall not be construed as forbearance by Energy from classifying or reclassifying reprocessing waste at or from the Hanford Site pursuant to any other asserted authority, including Energy’s authority to make Waste Incidental to Reprocessing determinations.” Forbearance provision of Agreement Section 5 page 10.

On August 15, 2024, USDOE announced that a third Single Shell Tank is leaking (Tank T-101 in the 200 West Area).

“Why do we expect the US government to invest billions of dollars a year to retrieve waste from Hanford’s tanks and build vitrification plants?” asks Heart of America Northwest Director Gerry Pollet. “The answer is to keep the waste out of the soil, to keep the waste from reaching the groundwater and to protect our Columbia River. To Heart of America Northwest, letting tanks leak for years and decades is unacceptable and undermines the whole concept of investing in Hanford Cleanup.”

As reported by the [Tri-City Herald on August 18](#):

A third aging underground tank at the Hanford nuclear site is suspected of leaking highly radioactive and hazardous chemical waste into the ground, the Department of Energy said Thursday.

“This is deeply concerning to the Washington (state) Department of Ecology and needs to be addressed with urgency,” said Ecology Director Laura Watson in a statement. The state agency is a Hanford regulator.

Heart of America Northwest does not see any “urgency” in how the state and USDOE are responding to the leaking tanks. That is why, in 2022, we appealed an agreement between Ecology and USDOE on response to the leaks from Tanks B-109 (leak reported April 2021) and Tank T-111 (leak reported 2013).

Our view: federal and state laws require removing leakable liquids from leaking tanks as soon as practicable.² Studies have shown that much of the leakable liquid portion of wastes in these tanks can be removed with “enhanced salt well pumps.” When this is coupled with a small ion exchange resin to remove Cesium before leaving the tank, the removed liquid is so low in radiation that it can be pumped into a container on a truck to be driven to a Double Shell Tank or to a nearby treatment facility to be solidified and disposed.

Contamination from tank leaks moves through soil to the groundwater, which flows to the Columbia River. Even if a groundwater “pump and treat” system could remove all the contamination that reaches the groundwater, it would have to be operated for thousands of years to protect the River and groundwater from contamination moving through the soil column.

² The federal and state hazardous waste regulations are the same for responding to a leaking tank: “[i]f the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment.” WAC 173-303-640(7)(b)(i).

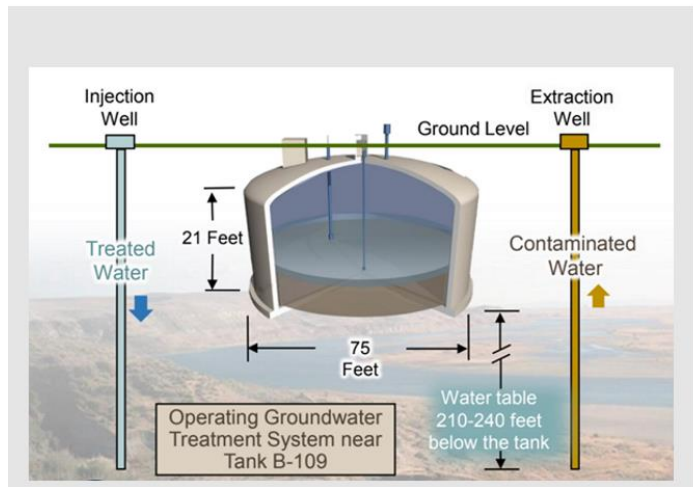
The following three slides are from [our July 2024 workshop](#) on the Tank Waste Agreement that illustrate the threat to the groundwater focusing on the leak from Tank B-109:

Leaking Tank B-109

123,000 gallons of High-Level Nuclear Waste with an estimated 15,000 of pumpable liquids

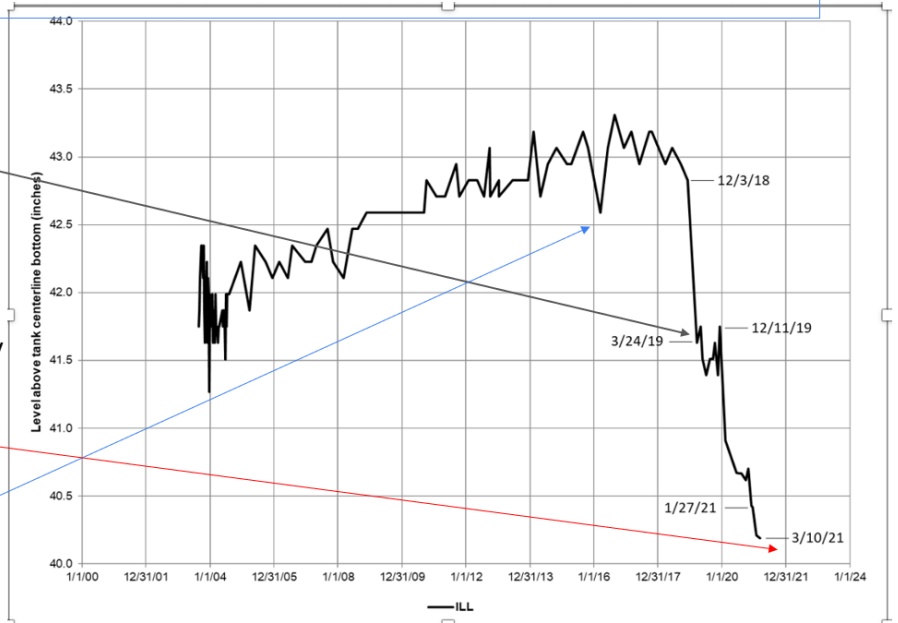
USDOE:

- “no increased health or safety risk,” so NO effort to remove waste to stop the leak
- Can rely on pumping and treating groundwater after the contamination moves through the soil column.
- Contamination likely to start reaching groundwater in around 25 years, and would keep contaminating it for thousands of years



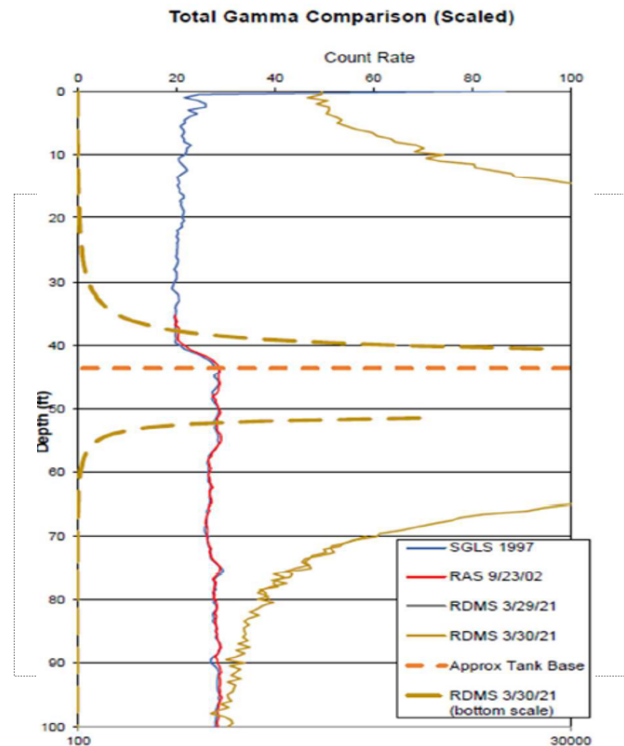
Failure to Report the Leak: USDOE’s monitoring of Interstitial liquid level showed clear evidence of leak

- The precipitous drop in Interstitial liquid level from December 2018 to March 2019 required USDOE to report the evidence of this leak immediately to EPA & Ecology and removal of waste. Loss of 4.09 gallons / day, > 120 gallons/month.
- USDOE reported 4-29-21
- Drop in liquid level March 2016 should have triggered review if not report of suspected leak



How fast is contamination from the B-109 leak moving to groundwater that flows to the Columbia River?
Gamma borehole logging shows leak serious and was already a third of way to groundwater in 2021:

- “The gamma activity count rates at this drywell were elevated for nearly the entire length of the drywell, with peak count rates occurring at 41 ft. (~41,000 cps) and at 51.5 ft. (~21,000 cps) below the top of the casing. Between these depths, the detector was saturated, indicating count rates greater than 55,000 cps and a potential leak from Tank B-109.”
- Contamination already > 50-65’ below top
- Groundwater approximately 200 foot below



Gamma radiation from the leak from B-109 was so high down to nearly 70 feet below surface that it exceeded the equipment’s ability to count. This monitoring of boreholes in March 2021 is the only monitoring done as of 2024 around B-109. Gamma emitting contaminants are not the fastest moving contamination from a tank leak in the soil column. The groundwater is approximately 200 feet below the surface.

Federal and state hazardous waste laws require removing leakable liquids from leaking hazardous waste tanks:

- “[i]f the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment.” WAC173-303-640(7)(b)(i).

Where is the “urgency” in responding to leaking tanks in the Tank Waste Agreement?

The leak from T-101, which is now the third tank admitted to be actively leaking, “needs to be addressed with urgency,” said Ecology Director Laura Watson in a statement” as reported by the Tri-City Herald on August 18 and reprinted in the Seattle Times.

- The agreement does not accelerate retrieval of waste from tanks in the T or B tank farms, which are where the three leaking tanks are.
 - The agreement calls for waste to be retrieved from 22 tanks in three tank farms in the 200 West Area by 2040, but T-Farm is not one of the three.
 - Join us in asking: Why aren’t leaking tanks prioritized for retrieval of wastes?
- “Removal” of leakable liquids is far less complex, far less expensive and takes far less time than full “retrieval” of all the sludges and saltcakes in tanks.
- In June 2020, USDOE was required to issue a report on technologies for responding to leaking tanks, including “removing drainable liquids from the SSTs”.³ One of two recommendations was to use “enhanced salt well pumping” for removal of the leakable liquids (interstitial and supernate liquids).
- The Agreement does not require USDOE “at the earliest practicable time remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment.” (quoting Washington State hazardous

³ 20-TF-0032, June 12, 2020 USDOE transmittal of report RPP-RPT-62098 to meet TPA Milestone M-045-93. The report, as stated in the Executive Summary, was required to

“Submit for Ecology’s review and approval, as a Primary Document, a report that includes the following: (1) a description and analysis of each alternative method and technology for removing drainable liquids from the SSTs; (2) a proposed selection of the preferred liquid removal method and technology for each SST identified in the SST Liquids Report; (3) a proposed sequence for removing drainable liquids from the SSTs identified in the SST Liquids Report.”

USDOE’s report summarized its recommendations for removing ‘drainable’ (or leakable) interstitial liquids:

“For drainable interstitial liquid removal, the top scoring technologies were Technology 5 – Enhanced Saltwell Pumping and Technology 9 – Ventilation or Recirculation with Interstitial Liquid Dispersion. These two technologies scored 20 points higher than the next technology. Enhanced saltwell pumping scored higher in the likelihood of success and design maturity criteria while ventilation or recirculation with interstitial liquid dispersion scored higher in ALARA as well as reliability and complexity.”

USDOE’s report was prepared prior to development of the “in-tank pretreatment system,” which reduces the radioactivity of liquids removed from the tank. This would give enhanced salt well pumping a further advantage over the other technologies evaluated because it reduces potential worker radiation dose as well as eliminating expensive transfer line infrastructure.

waste regulation WAC 173-303-640). Rather, as Heart of America Northwest has commented, the Agreement c

The Agreement does not extend the 2040 deadline in the Tri Party Agreement for retrieval of all waste from the Single Shell Tanks (SSTs) ... but it essentially eliminates it as an enforceable goal for obtaining funds from Congress or expectations. Here is what the proposed Agreement adds to the milestone:

“added a double asterisk ** to the due date of TPA Interim Milestone M-045-70, which states: “** Without excusing the DOE from any obligation to exercise due diligence toward satisfying this milestone obligation as expeditiously as possible (as that phrase is defined in Milestone M-062-45 with regard to SST retrievals), the Parties acknowledge that the current milestone due date must be revised. The milestone due date will be revised...” following negotiations which would occur “within 18 months after the start of hot commissioning” of the High Level Waste vitrification plant.⁴

Thus, the revision of the 2040 deadline for retrieval of all waste from Single Shell Tanks (SST) would not be negotiated and proposed until sometime in 2036 or 2037. If, as we fear, hot start-up of the HLW Vitrification Plant will take longer, then there won't be a new deadline for emptying all Single Shell Tanks until nearly the time at which they were all supposed to be emptied under the current TPA.

20 SSTs have had waste retrieved to meet TPA specifications.⁵ The TPA specified 7 additional tanks to be emptied by 5/1/2028 and the Agreement extended the deadline to empty A-103 from September, 2022 to September, 2028.⁶

Under the Agreement, an additional 22 SSTs in 200 West would have enforceable schedules for retrieval of all waste from the tanks by the end of 2040. Retrieval of these tanks would occur starting in 2028. However, under the proposed TPA milestone M-045-135, for any leaking Single Shell Tank (SST) that USDOE is required to retrieve prior to 2040, it may *reduce the obligation to retrieve one of the 22 SSTs in 200 West that it is otherwise supposed to retrieve by 2040.*

There are 149 SSTs. 20 have been retrieved. 8 are slated to be retrieved through 2028. The Consent Decree portion of the Agreement provides for Tanks A-104 and

⁴ Quote for negotiation schedule within 18 months after hot commissioning is from proposed M-62-45(7) in Change Form M-62-24-03.

⁵ Monthly Tank Farm Status Report for Period Ending June 30, 2024, Table I-I. Public release July 31, 2024.

⁶ M-045-15

A-105 to be retrieved. The Agreement adds 22 to be retrieved in the 200 West Area by 2040 as currently required or for USDOE to substitute two other tanks if retrieval of those two tanks by 2040 is deemed impractical.⁷

The TPA deadline has been to have all SSTs retrieved by 2040.

The bottom line: instead of an enforceable commitment to retrieve / empty the waste from all Single Shell Tanks by 2040, after 2040 there will still be 97 Single Shell Tanks with all their waste remaining to be retrieved!!! (That is – all the waste in 97 tanks minus the waste that leaks from the tanks in the next 26 years).

Our comment: 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.

⁷ Consent Decree B (2) and Appendix B-4 address tanks A-104 and 105.

Heart of America NW comment: The agreement utterly fails to stop current leaks from High Level Nuclear Waste tanks:

The agreement fails to honor commitments to propose and adopt enforceable permit conditions for a leak response plan for the leaking Single Shell High Level Nuclear Waste Tanks - as required by RCRA and HWMA.

Under the proposed agreement, High Level Waste tanks that are leaking today will continue to leak without any response for years – indeed decades - to come!

Instead of meeting commitments to propose a RCRA permit condition for responding in a timely manner to leaking Single Shell High Level Waste Tanks (at least 2 of which are leaking currently, and possibly as many as 6 are leaking), Ecology agrees in M-045-136 (pdf page 65) for USDOE to convene yet another advisory panel to review IF saltwell pumping may be used. This ignores that the TPA already required USDOE to do this analysis and that USDOE found that saltwell pumping was an appropriate technology to respond to tank leaks (June 2020).

The panel will have no Ecology representation and no expert on legal requirements for responding to leaking hazardous mixed waste tanks. This disregards extensive prior input. Even if a panel were a legally appropriate and policy appropriate approach (which we do not), any panel must either be appointed by the regulator or be truly independent to be credible. And, it must be open to public observation and input to be credible.

This provision is Ecology enabling USDOE to continue to violate the legal requirements to remove leakable liquids from any leaking tank as soon as practicable.

The agreement, and its reliance on convening yet another panel to review technology related to removal of leakable liquids and response to leaks does not meet the legal requirements under RCRA and HWMA for Ecology to determine and order when and how leaks will be responded to.⁸

Another year will go by just for theoretical analysis of technology for responding to leaks, while the tanks leak.

⁸ If the panel were limited to review of retrieval of wastes it would not be violative of RCRA and HWMA requirements relating to responses to leaks. Retrieval refers to full removal of wastes. Removal refers to removing drainable / leakable liquids (supernate and interstitial). However, our comments on credibility of such a panel apply to any panel reviewing retrieval technology as well as removal options.

The review fails to include any consideration of the potential for use of In Tank Pretreatment System (ITPS) to strip the Cesium and Strontium from the liquid prior to liquids being pumped out of the tank, which would eliminate the need for infrastructure in tank farms and which would greatly speed up the removal of leakable liquids. This was documented by Dr. Steven Agnew, the independent expert nominated by Heart of America Northwest who participated in the review that has already occurred in 2023 for SST retrieval.

For currently leaking tanks, response using the technology of enhanced saltwell pumping (already recommended by USDOE itself in 2020) is delayed for another two years or more pending yet another review and leaving the choice of whether to remove leakable liquids from leaking tanks up to USDOE (who has fought this effort) in the new M-045-137. Leaking tank response, however, is a RCRA/HWMA enforcement matter that was not supposed to be subject to these holistic TPA change negotiations. ***Ecology cannot give away its regulatory authority to determine what is practicable and require the use of equipment to stop leaks from tanks!***

RCRA does not allow the response to stop a leaking tank to be determined on the basis of a "cost-benefit" analysis as the agreement would allow (M-45-037). The laws are clear: leaks to the environment from hazardous waste tanks must be stopped by removal of leakable liquids immediately or as soon as practicable. "Practicable" is a legal standard meaning that USDOE must utilize equipment or processes as soon as they may be deployed, not based on USDOE deciding that the costs of stopping a leak outweigh the benefits. Congress has already determined that leaks from tanks must be stopped, not allowing polluters to say costs outweigh benefits of preventing further contamination of the soil and groundwater.

Liquid radioactive hazardous 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:

An Environmental Impact Statement (EIS) is required on the proposal to ship millions of gallons of liquid waste for disposal unless Washington State adopts conditions to “mitigate” against this risk by requiring the waste to be treated and solidified before being shipped through our communities

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 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.

For the next phase of the Test Bed Initiative, USDOE will ship 2,000 gallons of liquid radioactive hazardous waste from Hanford’s tanks to the Texas and Utah facilities for them to demonstrate their capabilities to treat and dispose of the wastes.

USDOE will be trucking those liquid wastes before the end of 2024 through Spokane.

The State of Oregon and the **Confederated Tribes of the Umatilla Indian Reservation** (CTUIR) have both written that they have strong concerns and objections to transporting millions of gallons of 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.

Oregon’s Governor Kotek wrote USDOE and Governor Inslee: “Oregon has significant concerns about the inherent risk of transport of liquid waste.”

The CTUIR wrote Secretary Granholm and Senator Murray that the, **“CTUIR does NOT support shipping Hanford liquid waste of any hazard level within the Columbia River Basin.”** on October 30, 2023.

If the tests succeed in demonstrating that treated solidified waste can meet the legal standards for disposal at the WCS site in TX and Envirocare in UT, as we expect they will, under the proposed Agreement and related USDOE plans, millions of gallons of liquid radioactive waste might be shipped by rail or truck through Spokane or Oregon for disposal.

USDOE’s response was to quietly shift the plan to truck the next 2,000 gallons in the Test Bed Initiative through Spokane instead of through Oregon.

At the public meetings in July, USDOE and Ecology responded to concerns about the lack of environmental review PRIOR to the agencies taking action on the proposals by entering into the agreement and committing resources to its schedule revisions and programs by repeatedly stating that USDOE would conduct a “supplement analysis” (SA). This SA, it was represented by the USDOE, would only be available months after adoption of the program by “early” in 2025.

Ecology and USDOE stated that there would be some undefined public engagement regarding the SA. Below, in our SEPA and NEPA portion of comments, we discuss:

- a Supplement Analysis (SA) is not a “Supplemental EIS”. Yet it was presented to the public as if it has similar in-depth environmental review, public notice

and comment opportunities. However, it is merely a review of whether further analysis of environmental impacts and alternatives is required under NEPA. And USDOE's rules do not require any notice, public meetings or comment on an SA.

- Ecology's legal obligation to review USDOE's determination under the SA and duty to require mitigation (i.e., only transporting treated solidified wastes rather than liquids as a reasonable and available safer alternative) if, as we expect, USDOE seeks Ecology to adopt a finding that an EIS is not required.

This would be Ecology's adoption of the equivalent of a Determination of Non-Significance (DNS) under SEPA. Ecology can not do so because there are potential significant impacts that have never been considered, significant changes in circumstances and science since USDOE's 1997 WMPEIS, and significant cumulative impacts from related actions that have never been considered (e.g., USDOE's adoption of a program to transport "secondary" liquid and solid wastes originating from Hanford's tanks along the same routes for treatment and disposal. USDOE adopted that program in January 2023 with only a Supplemental Analysis, without any public notice, without public comment, without any analysis of potential impacts for specific transport routes.

We repeat and support **Oregon's comments** on this Agreement, especially:

"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, 2024, 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."

- “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(sic DOE) 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.”

State of Oregon comments, August 27, 2024, cover letter pages 1 and 2.

In response to Oregon’s prior letter to USDOE and Washington, USDOE responded on July 26, 2024:

The holistic agreement acknowledges DOE needs to complete applicable regulatory processes, such as those associated with the National Environmental Policy Act (NEPA). NEPA requires Federal agencies to assess the reasonably foreseeable environmental effects of proposed major Federal actions, prior to making decisions. The Department has initiated but not yet completed the development of a Supplement Analysis, which will be used to determine whether a supplemental or new Environmental Impact Statement should be prepared, pursuant to the Council on Environmental Quality and DOE NEPA regulations. The Department intends to complete this NEPA analysis and a business case analysis towards the end of the year. This will inform our path forward.

USDOE’s response includes the legal obligation to assess environmental effects (and alternatives) “prior to making decisions.” However, USDOE then proceeds to stick with the process of adopting the entire program by entering into the Agreement prior to completing even the very first step of a threshold determination under

NEPA as to whether a supplemental or new EIS is required. As we document extensively and provide notice to the agencies, adopting the program and beginning to implement it, i.e., in new Hanford Five Year Strategic Cleanup Plans, Budget requests and resource allocations, violates the requirement that the environmental review be completed “prior to making decisions.”

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?***
 - 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").***

Ironically, any cost differential between shipping Hanford's tank wastes as a liquid instead of a solid is likely to be minor. At the public meetings on the Agreement, USDOE's spokespeople repeatedly stated that the decision on how to ship the waste would be based on USDOE's "business case analysis."

In our view, the decision must first be based on safety, not a “business case analysis,” and the only way that a decision can be made without first conducting a full EIS is if USDOE is using the safest mode of transport and documents that it has adopted all reasonable mitigation measures.

Despite requests for public meetings about the agreement to be held in Spokane, Portland and Seattle, Ecology did not ensure that the public in these areas had an opportunity for meetings.

USDOE and Ecology have stated that USDOE will complete a NEPA Supplement Analysis (SA) by sometime in early 2025 – which is after the agencies have said they will formally sign and begin implementing the Agreement.

NEPA is the National Environmental Policy Act. NEPA requires an EIS disclosing the potential impacts and all reasonable alternatives for any major federal action which has the potential to have a significant adverse effect on human health or the environment.

SEPA is Washington’s State Environmental Policy Act. SEPA requires an EIS if a state agency is taking an action meeting that standard. Ecology will have to issue permits for the implementation of this agreement. Under SEPA, Ecology has “substantive authority” to require mitigation – such as use of a safer reasonable and readily available alternative of trucking solid wastes instead of liquids.

It is our view that SEPA applies if Ecology is committing to a program in an agreement with USDOE or any regulated entity, not just down the road when Ecology is considering permits under such an agreement. The commitment to the program is being made in the agreement which the agencies intend to sign in the coming months. Once the agreement is in place, funding and decision paths begin to be locked in along with the potential impacts, while reducing the ability to move to adopt safer alternatives.

If USDOE does not do an EIS under NEPA, but adopts a Finding of No Significant Impact, it is Heart of America Northwest’s legal view that Ecology would have a legal duty to require mitigation under SEPA – reducing risks by requiring use of available alternatives such as requiring solidification before waste is shipped – in order for Ecology to utilize USDOE’s Finding.

Under USDOE’s rules and past practice for Supplemental Analyses (SAs), there is no rational basis for Ecology to expect that USDOE will hold any public hearings along the possible truck or rail routes for the wastes. Nor do we expect USDOE will hold

a public comment period. Unlike a Supplemental EIS, an SA is not a detailed substantive review of potential environmental impacts and reasonable alternatives.

Indeed, USDOE's own response to Oregon's formal letter urging an EIS and public meetings ahead of adoption of a program to transport wastes clearly indicates that USDOE has not committed to meaningful public engagement, including meetings, along the transport route. On July 26, 2024, Candice Trummell Robertson Senior Advisor for Environmental Management responded on behalf of USDOE to Oregon Governor Kotek about the transport of wastes under the Agreement:

“The Department’s NEPA analysis associated with these activities will include an analysis of transportation impacts from both normal transportation and accidents and will be made available to the public.”

What is notable is that USDOE's sole commitment to public engagement is that the analysis “will be made available to the public” after it is completed. This, as we detail in our comments, is the minimal standard for an SA under USDOE's rules. USDOE chose not to commit to public notice and comment on any draft USDOE analysis.

It is disturbing to Heart of America NW that Washington State continues to ignore USDOE's clear lack of any intent to have meaningful public and Tribal engagement in this review, and instead defers to USDOE in telling the public that there will be meaningful engagement.

USDOE's adoption of a Supplement Analysis finding that it will not do any substantive environmental review of transport of liquid and solid “secondary tank wastes” (January 2023) without any public notice or comment – much less meetings along the transport routes – clearly shows that Washington's reliance on USDOE for public engagement is woefully misplaced.

USDOE is not likely to develop a supplemental EIS analyzing significant potential impacts, alternatives and route specific potential impacts. Rather, they will likely release a Supplement Analysis mirroring USDOE's January 2023 Supplement Analysis finding that no further environmental review was necessary for a related proposal to transport large quantities of liquid “secondary” wastes from Hanford's tanks. That SA was issued without public notice or engagement. It relied on out-of-date analyses from 1997 regarding risks and potential impacts of transporting USDOE wastes without route specific review of potential impacts and without considering the substantial updates in the science relating to risk from the projected radiation doses to the public along the transport route. Since 1997, substantial

medical and scientific consensus has emerged that low doses of radiation have far greater health risks – especially for women and children⁹ – than USDOE considered in its 1997 analysis.¹⁰

Each of these factors (27 year old data for routes and risks, dramatic changes in understanding of risks of low level radiation doses [particularly for women and children] along transport routes, lack of any route specific risk analyses and new environmental justice obligations, and the cumulative effects of transporting both direct removed tank wastes and secondary tank wastes along the routes) should trigger a new EIS to guide any decision on adoption of a program transporting liquid wastes for disposal.

NEPA and SEPA require that cumulative impacts of related decisions be considered in an EIS. The decision to ship liquid “secondary” wastes from Hanford’s tanks on the same routes for disposal is closely related and adds to the risks. An EIS should consider the cumulative risk instead of “piecemealing” the analysis.

In the early 2000’s, Washington State formally sought via legal actions route specific risk evaluation in an EIS for transport of waste to Hanford, including through Oregon or Spokane. **Now Washington is silent.**

Washington State’s silence is all the more deafening in light of Oregon State’s strong objection to shipping liquid wastes when a safer alternative exists. Join us in calling on Washington Ecology – which has substantive authority – to insist that either USDOE does an EIS before the agreement is adopted, or that Ecology will not accept USDOE’s NEPA determination without Ecology using its SEPA authority to add substantive mitigation measures ensuring that the waste is shipped only after being treated and solidified.

At recent public meetings on the Hanford Tank Waste Holistic Negotiation Agreement (Agreement), public interest groups and the public urged USDOE to prepare a supplemental Environmental Impact Statement (SEIS) and hold additional public meetings around the region prior to USDOE and Ecology signing the Agreement. Public comments reflect a belief that a new EIS is important and necessary for the public to offer informed comments and for the agency to make informed decisions regarding risks from transporting liquid waste thousands of miles

⁹ See National Academy of Sciences, Engineering and Medicine, “Biological Effects of Ionizing Radiation Report VII (BEIR VII). https://nap.nationalacademies.org/resource/11340/beir_vii_final.pdf and National Academies of Sciences, Engineering, and Medicine. 2006. Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11340>.

¹⁰ Waste Management programmatic EIS, USDOE, 1997.

as well as the impacts from, and alternatives to, allowing numerous tanks to continue or begin leaking for two to five decades.

USDOE and Ecology repeatedly responded at public meetings that USDOE is conducting a “**Supplement Analysis**” (SA) under NEPA to determine if additional NEPA documentation, including an SEIS, is required to consider the potential significant impacts arising from actions to implement the Agreement. The agencies intend to sign the Agreement in October 2024. USDOE and Ecology officials assured the public that USDOE will provide **further “public engagement” at some point**. USDOE stated that the Supplement Analysis would be completed either by the end of 2024 or early in 2025 – after the Agreement is signed.

USDOE did not even publicly commit to issuing an Environmental Assessment (EA) as part of the Supplement Analysis.

USDOE’s rules fail to require meaningful notice and public meetings around the region as part of the Supplement Analysis process or prior to issuing an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI). On the other hand, Ecology’s SEPA rules will require notice and a hearing for adoption of USDOE’s DNS. Ecology, however, responded in public that it does not anticipate any SEPA review until Ecology is processing permits under the agreement. This is long after the program is adopted (by signing the agreement) and funding and other resources are committed. SEPA and NEPA do not allow deferring an EIS until after the expenditures of hundreds of millions or billions of dollars.

Our SEPA and NEPA comments summarized, notice of violations and intent to challenge if not cured, with explanatory notes:

- I. 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

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.

- 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.

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.).

- 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 197-11-355.¹³

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 –

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 this¹⁵. After the public meetings held 7/9/24-7/11/24, it is evident that the public desires more robust public engagement from Ecology.

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>

- 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 notice¹⁸, 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

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*