



MEETING MINUTES

HANFORD ADVISORY BOARD (HAB, Board)

Full Board Meeting

September 10 and 11, 2024

Hybrid Meeting: In-person and via Microsoft Teams

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This is only a summary of issues and actions discussed at this meeting. It may not represent the fullness of represented ideas or opinions, and it should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Opening

Lindsay Somers, US Department of Energy (DOE) representative and Deputy Designated Federal Officer (DDFO), opened the meeting in accordance with the Federal Advisory Committee Act (FACA). She also reminded the Board that quorum would be required for decision items.

Josh Patnaude, HAB Facilitation, provided an administrative review and notified participants that the meeting was being recorded. He invited the participants to introduce themselves.

Susan Coleman, Public at Large representative and HAB chair, welcomed participants and provided opening statements, leading with recognition and thanks for HAB members whose service on the Board was concluding. Those members included:

- Steve Anderson, Grant and Franklin Counties
- Dan Strom, Benton-Franklin Heath District,
- Tracie Arnold, Non-Union, Non-Management Employees
- Aaron Ashley, Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
- Mason Murphy, CTUIR
- Patrick Toby, CTUIR
- Jeff Wyatt, Oregon Hanford Cleanup Board
- Michael Mays, Washington State University

Additionally, she noted that the meeting would be observed by affiliates of the Fairchild Air Force Base Restoration Advisory Board, who may utilize information learned from the HAB's operations in expanding their own board.

Draft FY25 Work Plan and Calendar

Lindsay Somers introduced the draft Fiscal Year (FY) 2025 work plan and calendar (*Attachment 2 and Attachment 3*). Questions and comments were invited.

Susan Coleman mentioned that tribal holidays had not been added and her request to have the words "action," "advice," and "informational" defined was not complete. Lindsay commented that DOE was waiting for tribal holiday dates from the Hanford Tribal Office and that the agency was also still working on her requested definitions. Both, she said, would be added at a later date.

The committee members mentioned that the two Committee of the Whole (COTW) meetings were not on the calendar. Lindsay confirmed that they were not and suggested that the facilitation team could add an indication on the calendar that those dates would be added when they were confirmed.

Susan voiced apprehension around the last quarter of the calendar. She was concerned about holding another full Board meeting in September, noting that it was a busy month for many and was likely to see low attendance. She suggested moving the full Board meeting identified in the month of September to August and, for FY26, holding a full Board meeting in October to line up with new member orientation.

Lindsay clarified that part of the reason for the presented arrangement was for committees to have an opportunity to pass advice out of committee in August ahead of the September HAB meeting, which occurred for some of the advice the Board would review later that day. However, if the Board was interested in pursuing Susan's suggestion, she would need to follow up on that to confirm that it could be supported by the Tri-Parties.

Rebecca Holland, Hanford Atomic Metal Trades Council (HAMTC) noted her support for the proposal, but suggested that the work plan and calendar could be adopted as presented before the possibility of a

date change was confirmed. Chuck Torelli, City of Kennewick, and Pam Larsen, Benton County, agreed with that path forward. Larry Brandt, Public at Large, supported the proposal, but suggested that it should be resolved quickly so it did not impact members' planning.

Chris Sutton, Public at Large, recalled that HAB leadership initially suggested holding subcommittee meetings in October with the specific goal of having members sign up for committees at orientation and immediately getting them involved in committee work.

Lindsay, to confirm, agreed to take back a proposal for full Board meetings August and October with subcommittees meeting in September 2025, if the Board supported that proposal.

The Board was invited to confirm its support of the draft FY25 work plan and calendar with the understanding that Tri-Party Agencies (TPA) would have a discussion around the potential of changing those meeting dates.

Board Decision

The HAB adopted the FY25 work plan and calendar by consensus.

Draft Advice on Traffic Safety

Richard Bloom, City of West Richland, gave a quick introduction to the draft advice (*Attachment 4*). He explained that the LIDS, following a previous committee that covered safety, had been considering traffic safety for years. Following the issuance of [HAB Advice #301](#), a [road study](#) was conducted and recommendations were made. The draft advice being presented supported some of the recommendations in that study, in addition to addressing safety issues concerning the 300 Area fire station.

Jeff Wyatt noted that the draft advice discussed transportation of liquid waste off the Hanford Site for grouting, which implied to him that the HAB supported that potential path forward. For the OHCB and other seats, he clarified, that was not true. He would not support the advice as presented.

Following discussion, the draft was edited to remove references to offsite grouting, instead referencing shipment of tank waste without specifying form.

Additional details and wording were discussed, with edits and clarifications made around dates, projections, and checkpoint-related delays.

Larry Brandt shared his concern with not getting a positive response to this type of advice in the past. Additionally, while he felt this advice was a strong starting point, he felt there were additional traffic safety matters to consider. He suggested that the HAB may consider future advice related to the expected increase of semi-trailers operating on site starting in 2028.

Board Decision

After all points of clarification were resolved, the Board was invited to confirm their support of the advice with the edits implemented (*Appendix A*). The advice was adopted by consensus.

Draft Advice on Public Comment Response

Tom Sicilia, Oregon Department of Energy (ODOE), introduced the draft advice on public comment response (*Attachment 5*). He explained that it was focused on instances where public feedback was sought, but the feedback provided was not clearly acknowledged, potentially leaving those that provided the feedback feeling that they were not heard or paid attention to.

Board Decision

Without any questions, comments, or concerns voiced from the Board, the advice was adopted by consensus.

Draft Advice on Alternates' Role

Miya Burke, Hanford Challenge, introduced the draft advice on the role of alternates (*Attachment 6*). She noted that this advice was unique in that it was addressed to DOE Headquarters as well. She invited questions from the Board.

Steve Anderson was interested in DOE's perspective on seat representation. Lindsay Somers replied that the DOE had made their stance clear in the appointment letter. She did mention, however, that Kelly Snyder proposed the Board submit advice if they wanted the definition of alternates to look different.

Richard Bloom had a question regarding the draft advice language where leadership eligibility was defined. He asked if it was intended as only one member per interest group that could be in leadership and if it could be the primary or alternate member in that role. Miya confirmed that they were saying that either the primary or alternate member would be eligible to serve in leadership, but not simultaneously. The seat could only serve in one leadership position at a time.

Jeff Wyatt wanted to know how virtual meeting attendance would be handled where not everyone was "around the table." His example was: if the member was sitting at the table physically and the alternate was online, could the alternate ask questions or submit information? Tom Sicilia confirmed that was the Issue Manager (IM) team's intent with the draft advice. Lindsay confirmed that presently, as defined in the appointment letters, when the primary member was in attendance, the primary provides seat representation while the alternate member would participate as a member of the public. She said DOE sees it as "one seat, one voice." However, she did mention in the current structure, they were trying to set aside the last five minutes of Board discussions for the alternates to speak. She stated that since not all seats had an alternate, they were attempting to make things fair for everyone while acknowledging that there are limitations.

Steve wanted to make sure it was also clear in the advice that there was still only one vote per seat even with the primary and alternative both having a voice. Miya confirmed this was defined in bullet point number one.

Chris Sutton spoke up to explain that the definition of the alternate member serving as public was one of the key objections heard. He thought the advice needed to make it clear that the alternate does not act as a member of the public when offering their input. Miya pointed out that this is clearly defined in bullet point number four. To emphasize the point, the bullets were reordered to make that point more prominent and appended to further clarify the intent.

The resulting edits are provided in *Appendix B*.

Board Decision

With all concerns addressed, the Board adopted the advice by consensus.

Tri-Party Agreement Agency Updates

US Department of Energy

Brian Vance, DOE, began by expressing his gratitude to the HAB for the opportunity to speak. He wanted to emphasize that this was a truly exciting time on site.

Starting his presentation (*Attachment 7*), he went over the first slide which included Hanford's mission, key site activities, and DOE leadership team focus areas. While DOE was engaged in a wide variety of activities on and around the Hanford Site, he felt it was important to focus on DOE's central mission: safely and effectively treating tank waste and delivering environmental remediation. This was always the number one priority chosen when it came to things they are trying to support.

When talking about the wide range of activities DOE engaged in, he suggested thinking of the site in three different product lines: the tank waste stewardship treatment disposition, risk reduction (the traditional demolition/remediation soil, groundwater program), and base operations and infrastructure. He mentioned that all three were important, but operations and infrastructure especially so. If they did not have the right base operations and infrastructure, they could not accomplish the other product lines. He said they were making sure to look at the overall investment profile across the site to ensure they are prioritizing the work and funding in the right areas to continue moving the mission forward.

He stated that the focus areas identified in his presentation proved effective in leading the transformation of the site that they have executed over the last several years and continued to be helpful in enhancing the confidence of the stakeholders, tribes, and the team.

He discussed the DOE's funding/budget history and explained the increasing budgets each year represented a validation of confidence in the DOE contractor team and the regulatory partners to move the mission forward.

Moving onto tank waste treatment, he discussed recent and upcoming activities for the product line. The installation of shield doors in the high-level waste (HLW) facility was recently completed and the team would be focusing on 90% design completion for the HLW facility by the end of 2027. He said they have applied a lot of lessons learned from the past to de-risk and optimize the way ahead for the HLW facility associated with Direct-Feed Low-Activity Waste.

He said there is limited construction (low risk rework/weathering in the facility) going on presently, but full construction was anticipated to begin in 2028. By that time, they would be working in a weathered-in facility which will make construction easier and more efficient.

One of the pictures on his presentation showed the Direct-Feed Low-Activity Waste (DFLAW) control room where they were monitoring tuning feed being added to Melter 1. The next batch of feed would be added to Melter 1 within the following two weeks. He explained Melter 2 was going through a process called plenum conditioning, which is a prerequisite for tuning feed. He believed that Melter 2 would receive tuning feed within the next two weeks as well. Once these melters are being fed, DOE would be marching their way down the path to the cold commissioning management assessment. He believed that assessment would start at the end of September or first week of October, which set them up for cold commissioning in the first week of November.

The Tank Side Cesium Removal System (TSCR) was on its eighth batch, having produced over half a million gallons of compliant feed ready and staged in Tank AP-106 for the Waste Treatment Plant. DOE had a goal staging 800,000 to a million gallons before starting tank waste treatment the next year.

The Effluent Treatment Facility was on track to start its first batch the following month, with numerous upgrades having been completed to make sure it was ready for DFLAW. The operational acceptance testing was completed, identifying a few repairs that need to be done prior to being registered. He said all of the systems were coming together for the Waste Treatment Plant and with the help from Stephanie Schleif, Washington State Department of Ecology (Ecology), and the Washington State Department of Health (DOH), they now have completed the final 77 out of 77 permits within the last two weeks. He said this was a huge deal about ten years in the making, worthy of celebration for DOE, its contractor partners, and regulatory partners.

Brian moved on to talk about the Test Bed Initiative (TBI) mentioning that all of the equipment was installed to treat 2,000 gallons of tank waste starting in October for staging and sampling, before shipping it out next March or April. He said they will have all the feed in Department of Transportation (DOT)-compliant containers, ready to go once the sampling process was complete. DOE was working with Texas and Utah to make sure they are ready to receive the waste when the time comes.

In tank retrievals, AX-101 was finished, completing AX Farm in all but the paperwork process. Retrieval of A-101 started within the last 30 days, which would continue on into the next year. Parallel to that, DOE was going through the process to bring the evaporator back online. The readiness assessment process started, identifying work that needed to be done by Washington River Protection Solutions (WRPS) prior to being able to move forward with the facility. He said DOE was giving them time to complete that work, then reenter the readiness assessment process in the January/February time frame before starting evaporator campaigns.

He mentioned that DOE was a little bit “waterlogged” with retrievals so they needed to create space to continue to retrieve waste. He expected they would be able to get 70-80% of A-101 retrieved with some manipulations they could do within the tanks they have now, but wouldn’t be able to progress until they get the evaporator up and running again to create more space.

Next he discussed an announcement DOE made in August about the T-101 leaking about 200 gallons per year in the T Farm. He stated that the leak rate of 200 gallons per year in comparison to the 380,000+ gallons assessed as leaked in T Farm, plus the millions of gallons discharged throughout the national security mission, represented no change in the risk to the workers, community, the Columbia River, or overall risk profile of the site. DOE was working with Ecology on a way ahead.

Moving on to risk reduction, he said that these are really exciting times at the Waste Encapsulation Storage Facility (WESF). Their mockup was fully populated in the Maintenance and Storage Facility (MASF) itself and they were going through things like procedure development and testing. The facility equipment upgrades were almost installed as well, and the automatic welders installed in the gantry cranes are in and about 85-90% through testing. He said this means that they are on track to start moving the first capsule from WESF next year.

He said there was good news in 100-K. In July, the basin was dewatered and in August it was grouted; now, the risk is effectively reduced and they were on track for the 100-K West reactor to go cold and dark by the end of September.

The groundwater program continued to perform well. They treated over 2 billion gallons that year and were almost to the 2.2 billion mark. He said this would be the 10th year in a row they achieved that goal. The 200 West pump and treat recently received an upgrade, raising throughput from 2,500 gallons per minute to 3,400 gallons per minute, accelerating the Central Plateau groundwater program. He mentioned there is still demolition work going on at Reduction-Oxidation Plant (REDOX), Plutonium Uranium

Extraction Plant (PUREX), and 100-K. DOE continued to work with EPA through the Focused Feasibility Study before continuing with 324 Building decommissioning.

Talking about base operations and infrastructure he discussed a picture of a 200-foot tower in the Central Plateau, one of 30 meteorological towers on site. He explained that they all support the site and project operations in various ways. In the Central Plateau Water Treatment Facility, he explained, they were going through the cleaning and disinfecting process for the water tank, one of the final steps before the plant would be construction complete. He anticipated the plant commissioning process would begin either late 2024 or early 2025, putting it on track for operations in early 2026 or sooner.

Next he talked about the North Loop being about 95% complete. Bonneville Power Administration (BPA) was supporting that work through a shared agreement with DOE. This means they are on track to have that circuit energized in May 2025, in alignment with a planned Columbia Generating Station (CGS) refueling outage. The north loop was put in place to enhance reliability, connecting the Waste Treatment Plant to CGS for emergency power to ensure the melters would stay hot through their operational life. He stated this project has been a great success for DOE.

He said they were continuing work through other road, water, power, sewer, information technology, and cybersecurity projects. He stated that the Hanford Mission Integration Solutions (HMIS) team does a phenomenal job with the cybersecurity challenges they have. He explained that this was an evolving, unfunded mandate they have for the site with constantly changing requirements. The cybersecurity and site teams work together to optimize the overall risk, accounting for cybersecurity alongside chemical, radiological, industrial, and traffic safety risk, alongside others.

Moving forward, Brian talked about Integrated Site Services, discussing emergency exercise programs, which provide realistic scenarios that stress the resources they have on site. The latest sitewide drill happened in May and included things like injured and deceased personnel, contamination, and power interruptions. He said, besides this drill, each of the facilities in each area are also doing drills routinely so that they can continue to train the workforce. Many of the areas consisted of 50% or more new workers having been employed within the last five years. He said it was important to make sure the new teammates are ready to support the mission and react to situations on site appropriately.

Next, he recognized the work the Hanford Fire Department, Hanford Patrol, and HAMMER Training Facility do on their behalf. These all are vital to the health and safety of Hanford's workforce and the standards DOE and their contractor partners place on the health and safety as a top priority to the site. He mentioned three fires on site that year, which were effectively handled by the fire teams. Also mentioned was that the standard fire system maintenance program has been rebooted and refocused over the last couple of years and has been doing well to support safe operations at the site.

The public meetings that were held on the holistic agreement in July were discussed, with the associated public comment period having ended on September 1. Within the last week he said that DOE had consultation with Yakama Nation on the holistic agreement, who also provided public comment, and DOE expected to consult with the Nez Perce Tribe within the next few weeks. He said that they take everyone's input seriously and will continue to work with Ecology and EPA on evaluating and responding to the public comments.

Brian went over numerous upcoming public outreach dates including:

- National Cleanup Workshop, Sept. 16-18
- Pasco City Council, Oct. 7
- HAB meeting, Nov. 6-7

He said DOE is always looking for other opportunities to get the message out to individuals and groups that care about what is going on at Hanford and he appreciated the help given by the HAB.

Lastly, Brian again mentioned that FY24 had been a great year for them. Looking toward FY25, he pointed out many things to look forward to including:

- Richland Operations Office (RL) and Office of River Protection (ORP) will be the Hanford Field Office as of October 1
- Vitrifying tank waste
- Completion of TBI and application of its lessons learned to the holistic agreement and future tank retrievals
- The 242-A Evaporator back in service
- Continuation of the HLW Facility design and construction
- WESF capsules moving to dry storage
- 100-K going cold and dark, with the 324 Building progressing toward cold and dark
- Groundwater going for year 11 of 2 billion gallons treated. He noted that DOE may focus on mass removal, rather than gallons treated, going forward.
- Transuranic program ramping up to start shipping in 2028. A “stretch objective” for DOE is to have the first shovel in the ground for Super Cell 11 at the Environmental Restoration Disposal Facility (ERDF) to prepare for future demolition.
- North Loop’s completion
- Energization of the new water plant.
- A stretch objective of having the shovels in the ground to build a new fire station in the 200E Area, closer to the treatment plant, and retiring one of the older stations.
- Integrated Tank Disposition Contract award and initiation

With many changes underway in the federal and state governments, DOE is looking to capitalize on those opportunities. He emphasized that he hoped for the HAB to continue to focus on the future, rather than that of the past, and thinking about how it can operate to support the current and future Hanford mission.

Washington State Department of Ecology

Stephanie Schleif, Ecology, shared that in March of this year she started her new position as the Nuclear Waste Program Manager and then began her presentation on Ecology’s Updates (*Attachment 8*). She explained that a lot of her information mirrored what Brian had just discussed and proceeded to discuss information on the following topics:

- **Recruitment:** She said they have gone from 31 vacancies in July 2022 to currently only 11 and shared a [link to their website](#) for anyone interested in applying.
- **Outreach And Education:** Ecology supported 11 events in 2024, including Leadership Tri-Cities Hanford Day and a visit from Kazakhstan delegates, reaching more than 1,237 people. She invited HAB members to reach out should they be interested in having Ecology come to talk to their organizations as well.
- **Hanford Site Funding:** FY24 Hanford site budget was a record \$3.04B, which was an increase from \$2.84B in FY23 and \$2.7B in FY22. She said they were advocating for FY25’s budget. The President and House requested budgets are \$3.11B, with the Senate’s being \$3.35B.
- **Tri-Party Negotiations:** The holistic agreement was announced on April 29, 2024 with public comment being held from May 30 to September 1. Additionally, the Tri-Parties were presently updating the soil, groundwater, and facility milestones held in abeyance.
- **Tri-Party Agreement Compliance Activities:** The six compliance reports issued for Quarter 2 (May-July 2024) were discussed.

- **Compliance, Permitting, And Public Involvement Activities:** She talked about public comment periods for three different units that needed Class 2 Permit Modifications, as well as the NUCON Research, Development and Demonstration Permit and the Draft Renewal for the Perma-Fix Northwest Dangerous Waste Permit.
- **Hanford Sitewide Permit Update:** There is a 120-day public comment period scheduled for early 2025, with the date anticipated to be confirmed in October. She said the Revision 9A renewal permit is about 20,000 pages.

Other information provided was an update on the T-101 tank that was declared an “assumed leaker” on August 15. She said Ecology is working with DOE to update an existing agreed order, which covered the other two leaking tanks (B-109 and T-111), to include T-101. They are also trying to determine appropriate leak response actions, however, Stephanie agreed that this tank did not pose an immediate threat to workers or the public. She clarified that Ecology was working with DOE on a leak response plan that would cover all single-shell tanks (SSTs).

US Environmental Protection Agency

David Einan, EPA, wanted to highlight a couple of things that Brian had mentioned, giving DOE’s team credit and appreciation for several items, including getting the K-West fuel storage basin dewatered and grouted, soil remediation work, and some of the other demolition work going on around the K-Area. He said that EPA was in the process of reviewing the draft proposed plan for 100-K and anticipating public comment to be held early next spring.

In addition to radionuclides, a significant contaminant in the 100 Areas was hexavalent chromium. David explained that in August, EPA published a cancer slope factor for hexavalent chrome which was not expected. Even with it being a very low level for ingestion, they still needed to figure out what that means for the Hanford Site. He said there will be more discussion on that later when they have the details.

As Stephanie mentioned, he said they are continuing to work on the regulatory field support (RFS) investigation, characterization, and remediation milestones for both soil and buildings that have been in abeyance. He said they are still trying to figure out what the final package looks like and will also share that once they know more. He acknowledged the addition of Cass Galasso, a team member who joined their office in February, and the retirement of Craig Cameron, an EPA veteran, stating that would be a huge loss for the organization, as he concluded his update.

Board Questions

Dan Strom wanted to make a comment about the \$2.7B in October 2021 and \$3.0B in 2023 spent not being much of an increase, accounting for inflation over that same time period. He would like to see the appropriate inflation on those budget figures.

Richard Bloom said that this was a really good report and wanted to congratulate DOE on a great run that quarter.

Maxwell Woods asked Brian about what was going on with the HLW treatment currently and what the upcoming milestones were. Brian responded that they were laying out the design plan to reach 90% for all systems by the end of 2027. In the background he said they are working with Bechtel and applying lessons learned from DFLAW. They had a project peer review and independent cost review on site that week and were working with Mat Irwin’s team to analyze the present “state of play” to factor that into the contract with Bechtel for the HLW design phase.

From the programmatic perspective, he explained, DOE was working through the critical decision (CD) process that the department exercises for major capital projects. Brian said their goal was to have the CD 2/3 decision in 2028, which is the transition into construction following design completion. Presently, there were between 50 to 60 construction activities underway that were not impacted by the design progress in order to weather in the facility and be ready for that full transition to construction. From the financial perspective, he mentioned that they were working closely with Congress to create a funding profile that is sustainable. With all of these considerations, they are hoping to be in the position to be operating the HLW facility in direct feed mode in the mid 2030s.

Pam Larsen commented that the news about WESF was encouraging and she appreciated how well the TPA agencies were working together, especially the progress made on the Rev. 9A permit.

Timothy Kovis, Public at Large, asked if DOE was going to find efficiencies and budgets opportunities when RL and ORP merge into one. Brian said that was a good question and they are already seeing the benefits of a single field office, but he did not think he would see any “epiphanies” in the near term. Leading up to this, they reorganized to eliminate overlap between the two offices and eliminate barriers to communication among the staff that used to work separately, enhancing efficiencies. As a team, he said, they are always trying to put dollars back into cleanup.

Maxwell recalled Stephanie mentioning consultations with the Yakama Nation and wanted to know if there were consultations going on with the other tribes. Stephanie confirmed that there were, adding to Brian’s statements explaining that all of the tribes had been sent letters, resulting in comments received from each of the tribes, in addition to requests for consultation from Yakama Nation and the Nez Perce Tribe. They did not receive a request for consultation from the Confederated Tribes of the Umatilla Indian Reservation. They had already had a consultation with Yakama Nation on September 4 and were working to get a consultation set up with the Nez Perce Tribe.

Steve Anderson, noting that grout was used to stabilize the K Basins, asked if grout could stabilize the tanks or how that technique could apply to the tanks.

Brian explained that DOE was working with Ecology on a tank closure plan, which was a consideration for the far future, so it was too early to determine if or how grout might be used for that purpose. He did note, however, that grout was used successfully elsewhere on site for stabilization of other underground structures that represented similar risks and challenges. Steve also wanted to encourage transparency and thanked everyone for working together.

Larry Brandt said that he read the DOE Environmental Management (EM) Strategic Vision for 2024-2034, which stated that DOE, EPA, and the State of Washington reached an agreement on a safe and viable path forward for Hanford. Noting that there were multiple discussions about the holistic agreement, he wanted to know Ecology and EPA’s perspective on moving forward with the agreement. He was also interested in what the status of tank monitoring was.

Stephanie explained that the path forward was not determined yet. Ecology, DOE, and EPA were actively meeting to review the comments received over the course of their 120-day public comment period to determine if those would require changes to the draft agreement. Responses would go out before finalizing any of those changes. The goal was to have those out before the end of this calendar year.

Regarding tank monitoring, Brian replied that double-shell tanks (DSTs) and SSTs were both monitored under a robust tank integrity program. The structural soundness was monitored across all tanks through chemistry control, corrosion management, and visual inspection. Both SSTs and DSTs underwent regular

visual inspection to monitor potential changes. DOE would routinely submit the results to an independent tank integrity panel to make sure they are doing everything they can to manage the longevity of the tank.

Chris Sutton, Public at Large, wanted to know from EPA if the hexavalent chromium document that was referred to during EPA's brief could result in lower cleanup levels at least for groundwater entering the Columbia River. EPA responded in chat that no, the changes outlined in the hexavalent chromium document apply to the risk for human ingestion of hexavalent chromium. Therefore, it would likely apply to Central Plateau groundwater that could be ingested, and not necessarily apply to groundwater reaching the river. However, more work needs to be done to see what the impact will be on cleanup standards.

Per-and Polyfluoroalkyl Substances (PFAS) at Hanford

Duane Carter, DOE, introduced himself as a member of the Environmental Compliance Division. He supported Hanford for 9 years by that point. Prior to that, he worked at the Umatilla Chemical Agent Disposal Facility for 14 years. He provided a presentation on perfluoroalkyl and polyfluoroalkyl (PFAS) substances, EPA rule, and the effect on Hanford (*Attachment 9*).

He explained that PFAS are man-made chemicals and gave some background on how long they had been used in the industry, for what purposes, and what could happen during production and use of these substances. He informed the group that PFAS are a “forever chemical” due to the carbon fluoride bond and that they are virtually unbreakable except at high temperature incineration.

Pacific Northwest National Laboratory (PNNL), Pacific Northwest Site Office (PNSO), and Hanford are all doing research on different methods for treating PFAS. Hanford and PNSO are currently sharing research data regarding their results/findings. He said they are still working as “One Hanford.”

Per a new EPA rule issued in April 2024, there were numerous things to abide by:

- The public water systems must monitor PFAS and had until 2027 to complete the initial testing, which then is followed by ongoing compliance monitoring.
- The public must be provided information on the levels of PFAS in their drinking water.
- Solutions to reduce PFAS must be implemented within 5 years (by 2029) if the water levels exceed maximum contaminant levels.
- Beginning 2029, public water systems that have PFAS in drinking water that violate one or more maximum contaminant levels must take action to reduce those levels and provide public notification of the violation

Duane said that the Hanford Analytical Services Quality Assurance Requirements Document (HASQARD) did not include PFAS sampling protocols, so they were working on adding an appendix regarding PFAS. Once this is done, it will allow the contractors to develop their own sampling protocols. As of Dec. 11, 2019, Dec.14, 2022, and Jan. 25, 2023, Hanford Mission Integration Solutions (HMIS) and Central Plateau Cleanup Company (CPCCO) detected no PFAS in their groundwater sources and drinking water supply samples. These samples came from the 400 Area, 100 Area in K-basin, and the 200W Area. He said the 200W Area was the biggest drinking water source on site.

In December of 2022, he said they completed the Hanford-specific roadmap for addressing PFAS. He noted that DOE's nationwide PFAS roadmap, which was [publicly available](#), served as a template for Hanford's. At this time, DOE looked at sites that could have potential impacts with PFAS. 148,000 records were reviewed for uses of PFAS with 1,000 deemed significant. He went over the areas that were identified for further evaluation of potential PFAS releases. Included were the 100 and 200 Area fire stations and B Plant. He said they are building conceptual site models for all the sites mentioned, which

will be included in the preliminary assessment report being drafted for Ecology and EPA for clearance. These site-specific assessments will be given to the contractors so that they can stay consistent and develop their sampling and analysis plans.

Based on this report, the sample strategy document will be developed in FY25 and samples of environmental media will be collected beginning in 2026 to confirm presence or absence of PFAS where high volumes of PFAS releases may have taken place.

Duane mentioned that Michigan State Department of Environment, Great Lakes, and Energy developed and published a [PFAS sampling guide](#) that DOE reviewed and provided to their contractors as a starting point. This document goes through all personal protective equipment (PPE) that you can use, different sampling equipment, different sampling techniques, and even details such as insecticides in sunscreen that can be used.

The key takeaways that he wanted everyone to remember were:

- Hanford had tested the drinking water from all sources for site workers and no PFAS was detected. Bottled water is provided for areas where piping is not up to standard.
- Historical uses of PFAS at Hanford have been researched and results are still to come
- Focused site sampling is being planned to collect soil and groundwater samples where PFAS is most likely present based on previous research.

Regulatory Perspective

Alicia Boyd, Ecology, said that PFAS were a huge concern across the country right now, with regulations concerning PFAS chemicals currently being updated actively on a state and federal level. One of the federal regulation updates recently included the EPA drinking water standard. She said they are looking forward to working on the future sampling plans and see where they will go from there.

David Einan, EPA, said that he was looking forward to reviewing the records and sites of interest report. He was thankful that Hanford had lower levels than what other places have and DOE's methodical sampling process to get accurate information for the emerging contaminant.

Board Questions

Steve Anderson asked about Michigan's PFAS standards, how long they had been in adoption and what pushed Michigan to be ahead of the rest of the country. Duane answered that Michigan had a strong industrial base back in the day, especially when PFAS were prevalent, so they started doing sampling years ago.

Steve also wanted to ask about the international interest in PFAS: were we coordinating with other countries and how were other countries dealing with it as well? Duane said many other countries were working under ASTM International standards with some type of program in place for PFAS. He mentioned that PFAS are being found everywhere, including Antarctica, the Tibetan Plateau, China, and, per a [report that came out in August](#), at the Spokane International Airport.

Rob Parmelee, Non-Union, Non-Management Employees, asked why PFAS were dangerous to humans and what they do. Duane responded that they bioaccumulate in different diet sources and humans. New information was being released frequently, suggesting that they are a potential carcinogen and possibly related to low birth weight and cholesterol issues. He did not have more details available.

Rob also asked where the PFAS came from at the Hanford site and if there were any future restrictions. Duane said that each one of the canyons, B Plant, PUREX, T Plant and REDOX had glove boxes with

aqueous film forming foam (AFFF), which was PFAS based. When the canyons were shut down, he said, they basically just rinsed it out into the ponds, cribs, and ditches. A non-PFAS AFFF was used at the HAMMER Facility, but they still plan on testing the storm retention pond which he said would be the area it would go if there was any. As far as restrictions go, he said that the AFFF has not been in the Hanford Chemical Inventory since 2018.

Dan Strom asked how PFAS were measured: Are they laboratory or field measurements? How much would they cost? Duane replied it would cost a lot. He clarified that, up to that point, only Hanford's drinking water had been sampled at SW-846 (Methods [533](#) and [537.1](#)), which consisted of laboratory measurements looking at extremely low levels, down to parts per trillion. DOE recently received EPA's methodology guidance for soil and biological sampling ([Methods 1621](#) and [1633](#)), which would allow Hanford to complete its HASQARD.

Larry Brandt wanted to know what is coming into Hanford with potential PFAS. Do they need to be checking materials coming into Hanford and will they continue to monitor to see if the levels go up? Duane said that they maintain a chemical inventory system and not kept a stock of PFAS-containing materials on site since 2018. However, they could not monitor or restrict employee-owned equipment (such as water repellent clothing) as easily. As for the levels, he said they will continue to monitor the drinking water, as mandated. Additionally, several areas had been identified for further evaluation of PFAS releases, which would be modelled once the site investigation plan was made available to contractors.

Richard Bloom asked if the 400 Area wells were being testing, noting historical concerns around tritium contamination and the presence of an AFFF in the Fast Flux Test Facility. Additionally, he noted that the City of Kennewick detected PFAS above the drinking water standard. While there was no AFFF use confirmed for the 300 Area, it could have served as a potential source of the drinking water contamination. Duane stated the source of contamination in Kennewick's drinking water had not been verified, so he could not speak to that. For the Hanford Site, he explained that Hanford's drinking water came from the 100 Area. The 400 Area represented the only drinking water well system, each of which were sampled.

Richard asked about the overall goal of the sampling and analysis plans. Were they intended to find PFAS sources or ensure no one drinks contaminated water? Duane clarified that those contractor's sampling plans were being developed to analyze the identified areas of concern. For the 300 Area, there were no associated contractors. It was possible that PFAS sampling could be added to the 300 Area's post-closure plan following the HASQARD update.

Pam Larsen commented that the City of Richland draws its drinking water from the Columbia River, so she was glad to hear about those investigations. She said Duane indicated that they needed other testing criteria for other places that needed to be examined. She asked how certain they were that PFAS would be found in those locations. Duane said that PFAS contamination in those locations was only an assumption, which sampling would confirm. He clarified that, on Hanford, there were only three drinking water wells each of which were located in the 400 Area. The rest of Hanford's drinking water pulls from the Columbia River, way north of the Richland draw station.

Chris Sutton asked EPA if enough was known about the toxicity of PFAS to establish risk assessments and determine cleanup levels. David responded that for some of the substances, six or seven have toxicological data that would allow a specific number to be set and used in a risk assessment. Chris asked if they have resulted in maximum contamination levels (MCL) and David said yes. Due to that not really

being practical or efficient, he said, the national laboratories are doing research to find different remediation methods.

Maxwell Woods asked what the options were for treatment if contamination was found. Duane said that the one thing that breaks the carbon fluorine bond best is incineration. He did not know of any defined or approved treatment at the time.

Paraphrasing the Agency for Toxic Substances and Disease Registry's (ATSDR's) materials, Dan commented that "it's the dose that makes the poison." He said the risk from PFAS exposure seems to be threshold effects rather than non-threshold effects.

Round Robin Discussion

Susan Coleman introduced the round robin question for the HAB members: *What is your greatest concern with Hanford?*

Steve Anderson expressed that his biggest fear was funding and the operations themselves. He hoped that all the momentum from recent successes carried forward and Hanford would continue to find fair resolution in planning and execution.

Rob Parmelee's main concerns were the areas that still needed to be cleaned up and were awaiting resolution, such as the 324 Building. He was also concerned about comments about leaking containers. He was not sure where to find information on those containers, the extent of the leaks, what they stored, or what they planned to do about it.

Maxwell Woods asked for clarification on what might be done with the responses. Would it be used to scope future advice or was it just for sharing information? Susan answered, "all of the above." She also invited members to share potential solutions to the problems they identified.

Maxwell shared that there were a lot of critical activities coming up within the next year, such as hot commissioning for DFLAW and the WESF capsule transfer to dry storage. While the activities were important, he was concerned that they were high-risk projects in regard to safety of the workers, environment, and communities. He recognized the challenges those critical projects represented in funding, management, worker training, and elsewhere, as well as the cooperative effort those represented, requiring "buy-in" from Congress, the state of Washington, EPA, and the site stakeholders, including the HAB. He hoped for the Board members to keep an eye on the bigger picture to help the mission move forward in a positive way, while continuing to ensure their voices were heard.

He also provided the Oregonian perspective. Governor Kotek was engaged on the matter of Hanford's offsite shipment and disposal of tank waste following the holistic agreement announcement. Her comment—which Maxwell agreed with—was that Oregon supported offsite shipment of tank waste but did not support offsite shipment of *liquid* tank waste. Instead, the perspective was that it should be grouted before shipment. Further, he stated that community awareness was a concern and those communities near the Utah and Texas disposal locations should be educated on those plans. He clarified that Oregon made its position known to the TPA agencies.

Dan Strom prefaced his statement by clarifying his background in public health, which consisted of disease prevention and health promotion. His main concern with Hanford was how much money is being spent. While he recognized its impacts to the local economy and communities, he expected that the projected cost to clean up Hanford, with the goal of eliminating punitive risks associated with radiation and chemicals, could have much greater impact to public health if spent elsewhere. He clarified that was a

perspective specific to the framing of cleanup as a public health or radiation protection activity. With an end state goal of returning the land to the Tribes, for example, he stated that may be money well spent.

Larry Brandt said that safety was his main concern, specifically noting the concerns he voiced in relation to the traffic safety advice. He does not think that the roadways would be safe enough to account for the increase in traffic from large vehicles transporting waste and materials upon DFLAW commissioning. He voiced additional concerns about the timeline with cleanup at Hanford and wanted to find ways to accelerate the schedule, particularly in regard to removal of toxic and radioactive materials, without risking the safety of workers and the public.

Richard offered two perspectives, the first as a representative of the City of West Richland. The greatest concern of the public he represented was leaking tanks. While he understood it would have little reduction on the insult to the environment, he expected that it would be an improvement to the public perception if there was a program in place to proactively manage the liquid flushing in or out of the tanks. He stated that another public perception was that of no progress, though his opinion differed. The final public concern he heard, was the perception that the site was unsafe to live near, a concern heard most frequently from those outside the region.

Richard's personal concern was related to maintaining a functional workforce and improving the workforce culture. He hoped that the previous day's advice would serve as a step toward that.

Timothy Kovis agreed with the previous comments made in regard to funding. He recognized the political challenges of funding a project of that magnitude, stressing the need for continued public support that indicates that the project has value to its stakeholders. Similarly, he felt that continued progress would be essential to maintain that funding.

Amber Waldref, Heart of America Northwest (HOANW), said that the SSTs and the waste that is still sitting there was very concerning to her. She expressed that HOANW wanted a future with no impact from radiation and no waste reaching the river. She was also concerned that the State of Washington was not looking at safety, especially when it came to shipping liquid waste rather than on-site solidification before transport.

Pam Larsen worried about merging the DOE Hanford offices, stating that, originally, they established the two offices to help get funding to sustain cleanup. Regarding shipment of liquid tank waste, she saw an opportunity for DOE to implement lessons learned from previous waste shipments made to the Waste Isolation Pilot Plant, such as those related to public education and waste pre-treatment. Additionally, she had concerns with the length of time it will take to get the HLW facility online.

Susan's main concern, as a citizen stakeholder, were the constant delays in the schedule for WTP construction and commissioning, for one reason or another. On the other end of that, she was concerned that there was no established disposal location for high-level waste. She believed that someone at a higher level needs to be having a conversation about the need for a geologic repository.

Rob Davis, City of Pasco, said that he had deep concerns about project delays. He felt, from an engineering standpoint, that there were a lot of falsehoods and exaggerations concerning the risks to transporting low-level waste. Another big concern he wanted to mention was the potential "surprise" where one of the domes on the SSTs could partially collapse, releasing into the environment. He felt Hanford was not ready to handle that so they need to get the waste out of those tanks as fast as they can to avoid this possible surprise.

Laurene Contreras, Yakama Nation, shared her concern with milestone dates that do not get met. She thought that there was a need for stronger communication and to allow the tribes to work alongside everyone to come up with solutions. This included a higher level of participation from HQ as well. She said that the tribal community was concerned with wildlife and natural resources.

Chris Sutton relayed his concerns for funding and scheduling. He believes that the funding will become an issue and the schedule will continue to get pushed out further past already established deadlines. He also shared his concern with being able to have operational process control consistency 24/7 for 40 years in order to meet the schedule for glass vitrification and disposal.

Jim Conca, Tri-City Development Council (TRIDEC), said that everyone keeps over-inflating the risk at Hanford when there really is none. He believed that by doing this it will continue to drive fear of Hanford, resulting in higher costs.

Chuck Torelli, City of Kennewick, biggest concern was the ability to communicate well in the future. He hoped for the HAB to take that to heart as well, encouraging members to educate without berating one another.

Kermit Mankiller, Nez Perce Tribe, believed that the timeline and the process needed to restore the site to its original state were significant concerns. It was important for him to gain a clearer understanding of the actual processes involved and the issues the tribe needed to be aware of. He emphasized the importance of building a skilled workforce and ensuring that the Tribe could acquire the technical knowledge necessary to understand and potentially influence decisions in a meaningful way, both now and in the future for co-stewardship.

Michelle Holt, Benton-Franklin Council of Governments (BFCOG), stated that, as the metropolitan planning organization for the region, her organization's biggest concern was the flow of traffic related to Hanford operations and employee commuting.

Simone Anter, Columbia Riverkeeper, was concerned with decisions that are being made now that may not be in the best interest of future generations and protection of treaty rights. She also mentioned concerns with the holistic agreement, which seemed to assume a path forward of shipping liquid waste without communicating with the communities it would be transported through, and further seemed to assume that grout would be the future of Hanford tank waste treatment. Columbia Riverkeeper was concerned that the holistic agreement set Hanford up for a landfill closure of tank farms, which it did not expect would be protective of groundwater, the river, or future generations.

Tom Sicilia was concerned that DOE will not be able to—largely due to funding—meet their legal and moral obligation to complete the cleanup activities at the site. He expected funding would be more challenging as other EM sites closed. Additionally, once cleanup was complete, he was concerned about the need for perpetual funding to meet the Legacy Management monitoring needs.

Rose Ferri, Yakama Nation, mentioned her concerns were regarding legal and financial obligations. She believed that congressional support for finances could become an issue. She also shared the concerns expressed by Amber and Simone regarding how future generations could be affected by the cleanup and contaminants finding their way to the river, expressing that Yakama Nation had a cultural stake at Hanford.

Committee Reports

Tom Sicilia, Cleanup and Risk Mitigation (CaRM) Committee chair, mentioned that the last CaRM meeting, held in August, included a tour of the WESF mockup in MASF and the HAMMER training

facilities, as well as a discussion on the M-15 and M-16 Milestones, each of which were amazing. He also mentioned the next upcoming meeting would be during orientation week in October, date and information still to be determined.

Rob Davis, Tank Waste Stewardship and Treatment (TWST) Committee chair, explained that the most recent TWST meeting included presentations from Ecology regarding the NUCON thermal oxidation system, intended to reduce the risk of tank vapors, and the Environmental Performance Demonstration Test (EPDT). The committee discussed the progress of the Grout IM team during the committee business portion of the meeting and decided to put the team on hold until the committee can receive a factual presentation on the topic so that they were better informed to write advice on this matter.

Richard Bloom, Land Use, Infrastructure, Waste Disposition and Safety (LIDS) vice chair, discussed the committee's joint meeting with CaRM where they went through the traffic engineering study and the new 200 Area fire stations, which influenced the traffic safety advice adopted that same meeting. Looking forward, he hoped for the committee to consider shipment of liquid waste, noting potential challenges and tradeoffs between liquid and solidified waste transport. Considering what he heard in the round robin discussion, he also hoped for LIDS to promote a workshop for everyone to come in and talk about Hanford's real and perceived risks to put a list together to see which ones could be brought forward as possible advice.

Michelle Holt, Community Outreach and Engagement Committee (COE) vice chair, stated that the COE recently finalized its FY25 workplan requests and was getting regular updates from all of the public affairs officers. She said they were looking forward to welcoming new HAB members and helping them become productive members of the committee.

Pam Larsen, HAB National Liaison, provided the National Liaison Report. This report is included as *Appendix A*.

Board Business

Lindsay Somers announced that the response to HAB Advice #316 would be available by the end of that week.

Susan Coleman asked about the status of the request for a land acknowledgement statement. Lindsay confirmed that it is still being worked on through the Hanford Tribal Office. No timeline was available.

Lindsay said [proposal from the May 2024 HAB meeting](#) regarding the extension of the Chair, Vice Chair, and National Liaison terms was still being worked on among the TPA agencies. She expected to be able to report back at the November meeting. As part of that decision, she clarified that they wanted to ensure all members were offered the opportunity to serve. Lindsay asked if anyone in the room or online wanted the opportunity to serve as Chair, Vice Chair, or National Liaison. Laurene Contreras said she would be interested, but did not know to what capacity yet. She would let Lindsay know after she talked to her leadership.

Josh Patnaude provided a review of the upcoming meetings, noting that more information would be distributed through HAB Happenings in the coming weeks.

Public Comment

Day 1 Comment

There were no public comments given on Day 1.

Day 2 Comment

Lisa Brown, Mayor for City of Spokane, provided comment on her concerns with the liquid waste being transported through Spokane. She read her letter addressed to Governor Inslee, Secretary Turk, and the EPA Regional Administrator Sixkiller expressing that she wanted liquid waste transport plans to be cancelled, providing reasoning and support for her concerns. She requested further risk assessment prior to this plan going through.

Dan Solitz, member of the public, shared his concerns with the possibility of high-level waste glass becoming orphan waste if it has nowhere to go. He felt it would be a good idea for the HAB committee to get the Nuclear Waste Administrative Act from 2019, which would establish a new federal agency to manage nuclear waste, so that agency could get started on deep geological repositories.

Gerry Pollet, public representative for HOANW, said that he, on behalf of HOANW, was disappointed with Ecology for not holding a public meeting on the holistic agreement in Spokane. He mentioned that no consultations had been done with Spokane on Hanford's decision to ship liquid waste through Spokane, while there were other alternatives available. He noted that, in the early 2000s, consideration of shipping waste to Hanford through Spokane required an Environmental Impact Statement (EIS) to consider the route-specific impacts and alternatives.

He felt that the State of Washington was silent on the matter, particularly in comparison to the concerns expressed by the State of Oregon, exemplified [in a letter](#) from Governor Kotek to Governor Inslee, Secretary Turk, and the EPA Regional Administrator Sixkiller on the matter. He stated that Oregon was not alone in those concerns; the Confederated Tribes of the Umatilla Indian Reservation have expressed very strong concern about shipping liquid waste through Spokane as well.

He clarified that HOANW was strongly supportive of moving Hanford's waste offsite in the interest of protecting groundwater and the Columbia River. He stated that the proposed Utah and Texas locations were suitable locations to ship waste to, but only after it was solidified. He stated that it was Washington's obligation not to accept a determination of non-significance with no EIS, and to demand public meetings and consultation with Spokane.

He recommended the HAB advocate for public involvement/meetings in Spokane as well as a commitment for an EIS or for Ecology to exercise its authority to ensure full risk mitigation, including consultation with Spokane.

Meeting Recording

Day 1: <https://www.youtube.com/watch?v=T47ZbqLokTg>

Day 2: https://youtu.be/SL_-ID7HAD0?si=2rllzw_C0N1WGG4j

Attachments

Attachment 1: [Meeting Agenda](#)

Attachment 2: [Draft Fiscal Year 2025 Work Plan](#)

Attachment 3: [Draft Fiscal Year 2025 Calendar](#)

Attachment 4: [Draft Traffic Safety Advice](#)

Attachment 5: [Draft Public Comment Response Advice](#)

Attachment 6: [Draft Alternates' Role Advice](#)

Attachment 7: [DOE Update Presentation](#)

Attachment 8: [Ecology Update Presentation](#)

Attachment 9: [DOE Presentation – PFAS, EPA Rule, and Effect on Hanford](#)

Meeting Attendees

Day 1

Board Members: Primary (P) and Alternate (A)

Simone Anter (A), Columbia Riverkeeper	Matt Hendrickson (A), ODOE	Tom Sicilia (A), ODOE
Steve Anderson, Grant and Franklin Counties*	Rebecca Holland (P), HAMTC*	Daniel Strom (P), Benton-Franklin Health District*
Richard Bloom (A), City of West Richland*	Michelle Holt (P), Benton-Franklin Council of Governments	Chris Sutton, Public at Large
Larry Brandt, Public at Large*	Pam Larsen (P), Benton County*	Amber Waldref (P), Heart of America NW*
Miya Burke (P), Hanford Challenge	Micheal Lee (P), Columbia Basin College	Maxwell Woods (P), ODOE*
Susan Coleman, Public at Large*	Kermit Mankiller (A), Nez Perce Tribe	Jeff Wyatt, Oregon Hanford Cleanup Board
James Conca (P), TRIDEC	Rob Parmelee (P), Non-Union, Non-Management Employees*	
Timothy Kavis, Public at Large*	Chuck Torelli (P), City of Kennewick	

Others:

Kaylin Burnett, DOE*	Annagrisel Alvarez, Ecology*	Dieter Bohrmann, CPCCo
Duane Carter, DOE*	Alicia Boyd, Ecology	Dana Cowley, HMIS
Lindsay Somers, DOE*	Ambika Chakravartty, Ecology	MaryAnne Wuennecke, HMIS*
Geoff Tyree, DOE*	Dave DeSimone, Ecology	Patrick Conrad, HMIS
Brian Vance, DOE*	Catherine Glick, Ecology*	Laura Caulfield, Katmai*
	Edward Holbrook, Ecology	Padraic Fox, Defense Nuclear Facilities Safety Board
	Dan McDonald, Ecology	Jack Mapes, AFCEC
	Daina McFadden, Ecology	Erin Braich, Public/BFCOG
	John Price, Ecology	Bethany Close, Public/TRIDEC
	Ben Pruitt, Ecology	Matt Lynch, Public/Nez Perce Tribe
	Stephanie Schleif, Ecology*	Gabe Bohnee, Public/Nez Perce Tribe
	Roberto Armijo, EPA	Dan Solitz, Public

	David Einan, EPA	Wayne Barber, Weapons Complex Monitor
	Geoff Schramm, EPA	Annette Cary, Tri-City Herald
	Jane LePage, DOH	"Smith"
	Earl Fordham, DOH	"Brian"
		Hollis Higgins
		Chandra Flores, HAB Facilitation*
		Josh Patnaude, HAB Facilitation*

Day 2

Board Members: Primary (P) and Alternate (A)

Simone Anter (A), Columbia Riverkeeper	Timothy Kovis, Public at Large*	Chuck Torelli (P), City of Kennewick
Steve Anderson, Grant and Franklin Counties*	Rebecca Holland (P), HAMTC*	Amber Waldref (P), Heart of America NW*
Richard Bloom (A), City of West Richland*	Michelle Holt (P), Benton-Franklin Council of Governments	Maxwell Woods (P), ODOE*
Larry Brandt, Public at Large*	Pam Larsen (P), Benton County*	
Susan Coleman, Public at Large*	Kermit Mankiller (A), Nez Perce Tribe	
James Conca (P), TRIDEC	Rob Parmelee (P), Non-Union, Non- Management Employees*	
Laurene Contreras (P), Yakama Nation	Tom Sicilia (A), ODOE	
Rob Davis (P), City of Pasco	Daniel Strom (P), Benton-Franklin Health District*	
Rose Ferri (A), Yakama Nation	Chris Sutton, Public at Large	

Others:

Kaylin Burnett, DOE*	Annagrisel Alvarez, Ecology*	Dieter Bohrmann, CPCCo
Lindsay Somers, DOE*	Catherine Glick, Ecology	Dana Gribble, HMIS
Geoff Tyree, DOE*	Dan McDonald, Ecology	Patrick Conrad, HMIS
	Ben Pruitt, Ecology	MaryAnne Wuennecke, HMIS*
	David Einan, EPA	Laura Caulfield, Katmai*

	Tom Rogers, DOH	Bethany Close, Public/TRIDEC
	Jane LePage, DOH	Lisa Brown, City of Spokane
		Dawn Kinder, City of Spokane
		Jack Mapes, AFCEC
		Gabe Bohnee, Public/Nez Perce Tribe
		Matt Lynch, Public/Nez Perce Tribe
		Bradford Sharpless, Defense Nuclear Facilities Safety Board
		Aaron Siefken, Public
		Gerry Pollet, Public
		Dan Solitz, Public
		Wayne Barber, Weapons Complex Monitor
		TSmith
		Jessica Sleight
		Chandra Flores, HAB Facilitation*
		Josh Patnaude, HAB Facilitation*

* Denotes that the individual signed in or was otherwise noted as attending the meeting in-person.

Note: Meeting participants were asked to sign in with their name and affiliation. Some participants may not have shared that information. The attendance list reflects what information was collected at the meeting.

Appendix A: Traffic Safety Advice, as Adopted

Version #: 6

Date Revised: 08/06/2024

Update the version number and revision date with each iteration.

Color: Pink Yellow Green Buff Purple Blue Goldenrod

Letter Heading:

To: [This is who the letter is directed to; Add names, titles, and organizations, as appropriate]

The CC list is separate and provided at the end of the template.

Subject: [Advice Title]

Background

The Hanford Advisory Board (HAB or Board) recognizes the Tri-Party Agreement (TPA) agencies' commitment to safety and the timely, cost-effective cleanup of the Hanford Site (Site). The Board also recognizes that the daily commute to and from the Site represents an impediment to attracting and retaining Hanford workers, as well as being one of the greatest physical risks to the workers. Over the last several years the number of vehicles commuting to the Hanford Site has increased dramatically. Workers may face stress and a potential for vehicular accidents, resulting in injury or even death during their commute.

In 2016 (Advice #286¹) and again in 2019 (Advice #301²), the Board issued advice recommending improvements to Route 4S and Route 10 on the Hanford Site, as well as highlighting other traffic related issues. As a follow-up to the advice response the Board received for the previous advice and concerns that there continue to be unnecessary risks to the workers at the Hanford Site, the Land Use, Infrastructure, Waste Disposition, and Safety (LIDS) committee received briefings on June 3, 2024. The Committee was briefed on of a 2020 Road Study for Routes 2S, 11A, and 4S³ that outlines recommendations for reducing congestion at the Wye Barricade and potential improvements to Routes 4S and the plans for a new fire station in the 200 Area.

With the startup of the vitrification plant ~~expected to start making glass by November 2025~~, the Board feels improvement to Route 4S needs greater consideration and priority. ~~The 2024-2028 Five-Year Plan does not indicate any road improvement projects to be initiated or completed. Further, it~~ is the Board's understanding that current planning does not anticipate road improvements to be initiated until 2030 or beyond. This is likely too late. Hanford's employment at the 200 East and 200 West Areas is projected to grow ~~by 1.018% by 2029~~³, and shipment of glass canisters to locations on the Hanford Site for interim on-site storage will commence.

In addition, if the TPA agencies decide to ship tank waste off-site ~~to be grouted~~, this will increase the number of large, heavy transport vehicles on the existing roadway. Thus, road improvements are currently planned to begin years later than necessary. The Board believes improvements to Route 4S and the Wye Barricade, which are considered “mission-critical” for support of the Waste Treatment Plant and Tank Farms, should be prioritized and expedited.

The HAB supports the recommendation of the road study to expand Route 4S to a divided four-lane road. A divided four-lane road would reduce delays at the Wye Barricade, ~~especially during peak badging delays~~, which can be as long as 7.5 minutes. The existing physical condition of Route 4S indicates that resurfacing of the roadway will be needed soon. Ideally, a separate parallel roadway could be constructed, as recommended in the road study, before the resurfacing disrupts the commute. Ideally, a separate parallel roadway could be constructed before the resurfacing disrupts the commute. The Board also recognizes that such an effort is a multi-year process, requiring extensive evaluation of potential environmental and cultural impacts of a proposed path prior to actual construction. The Board recommends that funding of the project should begin sooner rather than later with a goal of completing the project before repairs to the existing Route 4S are required.

As discussed in Advice #301, the intersection of SR240 from SR225 to Route 10 represented a significant safety issue. The recent roundabout at the intersection is a great safety improvement, but unfortunately it causes backup of traffic on SR240. An increase in traffic flow to Route 10 via SR240 is likely due to planned development activities in the City of Richland and the City of West Richland. The HAB suggests working with the Washington State Department of Transportation (WSDOT) to either extend the slip lane for Route 10 off of SR240 or consider the resurrection of an abandoned cutoff road from SR240 to Route 10.

As discussed in Advice #301, the Hanford Fire Department is restricted from using the merge lane leaving the 300 Area and must travel through an area with vehicles and pedestrians with lights and sirens going. This has caused increased response time as well as the potential for pedestrian and or vehicle accidents. Since the delays in activity at the 324 Building, it is the HAB’s understanding that the station will remain open, and the problem will persist.

Advice:

1. The Board advises the U.S. Department of Energy (DOE) to be proactive in improving conditions facing workers commuting to the site.
 - The Board advises DOE to pursue expedited funding to expand Route 4S to a divided four-lane roadway and reduce delays at the Wye Barricade.

- The Board advises DOE to explore alternatives in preparation for the resurfacing of Route 4S.
 - The Board advises DOE to engage with the WSDOT to improve traffic flow from SR240 to Route 10.
2. The Board advises DOE to address the emergency vehicle pedestrian safety issues in the 300 Area specific to the 300 Area fire station, which will remain operational for an indeterminate period of time.

References:

1. Hanford Advisory Board Consensus Advice #286, Transportation Infrastructure Updates Safety Considerations, February 4, 2016: https://www.hanford.gov/files.cfm/HABAdv_286.pdf
2. Hanford Advisory Board Consensus Advice #301, Traffic Safety Advice, September 19, 2019: https://www.hanford.gov/files.cfm/Advice_Traffic_Safety_9_25_19.pdf
3. HNF-ENG-64724 Road Study for Routes 2S, 11A, and 4S, September 2020: <https://pdw.hanford.gov/document/AR-28877>

CC/BCC:

Mark all applicable names/organizations to be included as advice recipients.

TPA Agency Representatives

- Ike White, DOE-EM
- Todd Shrader, DOE-EM
- Brian Vance, DOE
- Stephanie Schleif, ECY
- David Einan, EPA
- Lindsay Somers, DOE
- Roberto Armijo, EPA
- Ryan Miller, ECY

Site-Specific Advisory Boards

- Savannah River Site Citizens Advisory Board
- Nevada Site Specific Advisory Board
- Northern New Mexico Citizens Advisory Board
- Paducah Citizens Advisory Board
- Oak Ridge Site Specific Advisory Board
- Idaho Cleanup Board
- Portsmouth Site Specific Advisory Board
- Kelly Snyder, DFO

OR/WA Congressional Delegations (to Chief of Staff)

- Sen. Patty Murray, WA
- Senator Maria Cantwell, WA
- Rep. Suzan DelBene , WA-01
- Rep. Rick Larsen, WA-02
- Rep. Jaime Herrera Beutler, WA-03
- Rep. Dan Newhouse, WA-04
- Rep. Cathy McMorris Rodgers, WA-05
- Rep. Derek Kilmer, WA-06
- Rep. Pramila Jayapal, WA-07
- Rep. Kim Schrier, WA-08

- Rep. Adam Smith, WA-09
- Rep. Marilyn Strickland, WA-10
- Sen. Ron Wyden, OR
- Sen. Jeff Merkley, OR
- Rep. Suzanne Bonamici, OR-01
- Rep. Cliff Bentz, OR-02
- Rep. Earl Blumenauer, OR-03
- Rep. Peter DeFazio, OR-04
- Rep. Kurt Schrader, OR-05

Write-in/Additional

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Requests to Receive Advice

- Jessica Keys, Staff to Sen. Merkley

Appendix B: Alternate Role Advice, as Adopted

Version #: 4

Date Revised: 07/25/2024

Update the version number and revision date with each iteration.

Color: Pink Yellow Green Buff Purple Blue Goldenrod

Letter Heading:

To: Kelly Snyder, Brian Vance, Stephanie Schleif, and David Einan:

The CC list is separate and provided at the end of the template.

Subject: Advice on Role of Alternate HAB Members

Dear Ms. Snyder, Mr. Vance, Ms. Schleif, and Mr. Einan:

Background:

The Hanford Advisory Board (HAB or Board) was founded in 1994. Over the past 30 years, the Board has issued 316 pieces of advice to the Tri-Party Agreement (TPA) agencies. The HAB is an Environmental Site-Specific Advisory Board (EM SSAB) comprised of diverse regional interests, as specified in the Memorandum of Understanding¹. Primary and alternate members have served on the Board since its creation and have actively, and freely, participated in all Board and committee meetings.

Alternates have not and do not hinder the Board’s ability to conduct business or issue advice. Rather, the HAB is more informed and prepared because of its alternate members. Primary and alternate members fuel fruitful discussions and provide a rich variety of perspectives, knowledge, and expertise—which in turn produces strong, actionable advice. Alternates provide the breadth and depth of subject matter expertise on the Board and substantively increase the Board’s abilities. Alternate members who actively participate and ask questions during meetings are indispensable to the success of the Board.

The Department of Energy’s (DOE’s) changes regarding circumstances when alternate members may participate on the HAB can only be found in the appointment letters to the alternate members. The FY 2025 appointment letters to alternate members read, “When the primary member is not able to attend a Board meeting, the alternate member may participate in their stead.” This language is not included in any of the HAB’s operating documents—Federal Advisory Committee Act², EM SSAB Charter³, EM SSAB Policies Desk Reference⁴, DOE Manual 515.1-1⁵, 41 CFR Part 102-3⁶, or the HAB Operating Ground Rules⁷. Primary and alternate members, nominated by the interest they represent, follow the same membership approval process through DOE headquarters, and therefore are not to be considered members of the public.

The Board sees the role of an alternate member as a representative of their seat/constituency on the Board. During formal Board consensus decision-making, each seat/constituency represented on the HAB is counted once. The Board agrees with the following language about the role of primary and alternate members in the HAB's 2008 Operating Ground Rules⁷,

"It is the expectation of Board members and/or their alternates that their fellow members and/or alternates will:

- attend and participate actively in meetings, read and come to meetings prepared to comment on documents, and be available for work between formal meetings; and
- represent information, especially information contained in draft documents, accurately and appropriately, consult with their constituencies, and keep their constituencies well informed."

Advice:

The Board believes that the full participation of alternate members is essential, as is reflected in the following advice to be effective in the membership packet with a term beginning October 1, 2025. The Board requests a point-by-point response to this advice from the Designated Federal Officer (DFO) and each of the TPA agencies.

- The Board advises that the DFO and DOE headquarters amend the appointment letters to alternate members to remove references to alternate members only being able to participate when the primary member is "not able to attend a Board meeting". Instead, the alternate appointment letters should read, "one member from each organization/interest represented on the EM SSAB at Hanford is counted during formal Board consensus or voting actions. During full Board meetings, only one person, the primary or alternate, may represent a seat at any one time."
- The Board advises that the DFO and TPA agencies refer to alternate members as members of the Board, not members of the public, in all communications including the appointment letters to alternate members. This includes full participation as members in Board discussions.
- The Board advises that the DFO and TPA agencies **continue** to allow alternate members to fully and freely participate as Board members during HAB committee (aka EM SSAB subcommittee) meetings.
- The Board advises that the DFO and TPA agencies allow the Board to return to pre-pandemic operational norms, in which primary and alternate members physically swap seats if both are present at full Board meetings. This allows balanced participation from all primary and alternate members and increases the overall knowledge of the Board.
- ~~The Board advises that the DFO and TPA agencies refer to alternate members as members of the Board, not members of the public, in all communications including the appointment letters to alternate members.~~

- The Board advises that the DFO and TPA agencies recognize that both primary and alternate members are appointed to the Board, and the Board elects members to leadership positions. As such, both primary and alternate members are eligible to run for elected leadership positions (e.g. HAB Chair and Vice Chair, National Liaison, and HAB Committee Chairs and Vice Chairs) provided that only one member per interest serves in leadership at a given time.

If you have any questions or are interested in discussing the implementation of this advice in membership appointment letters, we welcome the opportunity to discuss this further.

Sincerely,

References:

1. Memorandum of Understanding Among the U.S. Department of Energy, the Environmental Protection Agency, and the Washington State Department of Ecology regarding the Hanford Advisory Board; June 20, 2008
Link: https://www.hanford.gov/files.cfm/HAB_MOU.pdf
2. Federal Advisory Committee Act
Link: <https://www.gsa.gov/system/files/FACA-Statute-2013.pdf>
3. Environmental Management Site-Specific Advisory Board Charter; April 8, 2022
Link: <https://www.hanford.gov/files.cfm/EM-SSAB-Charter-2022-Renewal-signed.pdf>
4. Environmental Management Site-Specific Advisory Board Policies Desk Reference; April 2023
Link: <https://www.hanford.gov/files.cfm/EM-SSAB-Policies-Desk-Reference-April-2023-FINAL.pdf>
5. Advisory Committee Management Program, DOE Manual 515.1-1; October 22, 2007
Link: <https://www.directives.doe.gov/directives-documents/500-series/0515.1-DManual-1/@@images/file>
6. Federal Advisory Committee Management, 41 CFR Part 102-3; July 19, 2001
Link: <https://www.ecfr.gov/current/title-41/subtitle-C/chapter-102/subchapter-A/part-102-3>
7. Operating Ground Rules Hanford Advisory Board; July 15, 2008
Link: https://www.hanford.gov/files.cfm/HAB_OpGroundRules.pdf

CC/BCC:

Mark all applicable names/organizations to be included as advice recipients.

TPA Agency Representatives

- Ike White, DOE-EM
- Todd Shrader, DOE-EM
- Brian Vance, DOE
- Stephanie Schleif, ECY
- David Einan, EPA
- Lindsay Somers, DOE
- Roberto Armijo, EPA
- Ryan Miller, ECY

Site-Specific Advisory Boards

- Savannah River Site Citizens Advisory Board
- Nevada Site Specific Advisory Board
- Northern New Mexico Citizens Advisory Board
- Paducah Citizens Advisory Board
- Oak Ridge Site Specific Advisory Board
- Idaho Cleanup Board
- Portsmouth Site Specific Advisory Board
- Kelly Snyder, DFO

OR/WA Congressional Delegations (to Chief of Staff)

- Sen. Patty Murray, WA
- Senator Maria Cantwell, WA
- Rep. Suzan DelBene , WA-01
- Rep. Rick Larsen, WA-02
- Rep. Jaime Herrera Beutler, WA-03
- Rep. Dan Newhouse, WA-04
- Rep. Cathy McMorris Rodgers, WA-05
- Rep. Derek Kilmer, WA-06
- Rep. Pramila Jayapal, WA-07
- Rep. Kim Schrier, WA-08

- Rep. Adam Smith, WA-09
- Rep. Marilyn Strickland, WA-10
- Sen. Ron Wyden, OR
- Sen. Jeff Merkley, OR
- Rep. Suzanne Bonamici, OR-01
- Rep. Cliff Bentz, OR-02
- Rep. Earl Blumenauer, OR-03
- Rep. Peter DeFazio, OR-04
- Rep. Kurt Schrader, OR-05

Write-in/Additional

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Requests to Receive Advice

- Jessica Keys, Staff to Sen. Merkley

Hanford National Liaison Report - September 2024

WEST VALLEY Demonstration Project (WVDP) N.Y.

DOE Environmental Management (EM) crews at [WVDP](#) are working to demolish the [Main Plant Process Building](#), one of the last major facilities at the site. Its successful deconstruction will further reduce environmental risks and position the site for the next phase in cleanup. The demolition is expected to be completed in fiscal year 2025.

During a visit from DOEHQ staff West Valley team members discussed cleanup topics such as project-phased facility decommissioning prior to viewing cleanup projects. Tour stops included the Main Plant deconstruction area, Remote-Handled Waste Facility, waste storage areas, the Sewage Treatment Plant, and disposal areas licensed by New York state and the U.S. Nuclear Regulatory Commission.

Jennifer Dundas, assistant director of WVDPs Office of Technical Services, thanked Sosson for visiting the site and observing the dedicated team that continues to perform work in a manner protecting workers, the public and the environment.

Without our incredible workforce, there would be no cleanup or risk reduction for our communities and the environment, Dundas said.

EMs Newly Updated 'By the Numbers' Add up to Cleanup Progress

WASHINGTON, D.C. The U.S. Department of Energy [Office of Environmental Management](#) (EM) has updated its popular [By the Numbers](#) feature, illustrating cleanup progress at EM sites through crisp, succinct infographics.

EM's progress is the direct result of the expertise of the people of EM and their continued commitment to the cleanup program's mission its workforce, community and industry partners, tribal nations, and congressional and intergovernmental partners. Through collaboration, EM has achieved another year of successful cleanup and is poised for continued success.

Facts and figures on each major EM site can be found on the EM website. New to the graphics this year is an interactive feature that allows readers to take a deeper dive into some statistics. By clicking on the plus icons in each graphic, users can explore additional photos, [EM Update articles](#) and videos of some of EMs most significant accomplishments across the complex.

As the largest environmental cleanup program in the world, EM has been charged with the responsibility of cleaning up 107 sites across the country whose area is equal to the combined area of Rhode Island and Delaware. EM has made substantial progress in nearly every area of nuclear waste cleanup and has [completed cleanup](#) at 92 of these sites. There are [15 sites](#) where cleanup work is currently ongoing.

Waste Isolation Pilot Plant Marks Milestone 14,000th Shipment

CARLSBAD, N.M. The U.S. Department of Energy (DOE) [Office of Environmental Management](#) (EM) recently crossed a major milestone: the 14,000th shipment of defense-generated transuranic (TRU) nuclear waste was delivered to its [Waste Isolation Pilot Plant](#) (WIPP) and emplaced in the underground repository.

This marks an important milestone in our mission to clean up the country's legacy waste dating back to World War II and Cold War eras. Achieving 14,000 shipments is the result of the hard work and dedication of the WIPP employees, as well as the staff at all the cleanup sites, said Mark Bollinger, EM [Carlsbad Field Office](#) manager. It also reflects DOE's continued focus on safely and compliantly cleaning up the environment for future generations.

EM has successfully cleaned up TRU waste from 22 nuclear production sites across the U.S., reducing risk for millions of Americans and the environment.

[TRU waste](#), a byproduct of the nation's nuclear defense program, consists of materials like clothing, rags, tools, gloves, debris and residue leftover from handling items with radioactive properties. At the generator sites, these items are packaged and then secured inside TRUPACT containers, which are solid, shielded vaults. The waste is then transported to the WIPP underground repository and emplaced in perpetuity.

Every WIPP shipment meets all U.S. Department of Transportation requirements, and must pass an inspection to ensure the shipment is fully free of defects when it departs the generator site. WIPP's driver teams are highly trained and must meet stringent requirements prior to transporting a shipment. Shipment protocols were developed through cooperative efforts with states, tribal governments and DOE. All shipments are monitored and tracked using a satellite tracking system. To date, WIPP drivers have logged more than 16.5 million safe loaded miles.

U.S. Fish & Wildlife Service Recognizes Hanford Site for Giving a Hoot

RICHLAND, Wash. The U.S. Department of Energy (DOE) [Office of Environmental Management](#) (EM) [Hanford Site](#) is this year's recipient of the Presidential Migratory Bird Federal Stewardship Award, in recognition of the site's migratory bird protection and artificial burrow systems for burrowing owls.

The award from the U.S. Fish & Wildlife Service [Council for the Conservation of Migratory Birds](#) honors the Hanford team for noting a negative trend for the western burrowing owl population and taking steps to reverse it.

Taking action, the team created artificial burrows, increasing opportunities for breeding. To date, the team has installed and updated more than 70 burrow systems, leading to a tenfold increase in the number of active nests. This made 2024 the year that [Hanford](#) recorded the largest count for breeding pairs of western burrowing owls.

The annual award recognizes an action conducted by, or in partnership with, a federal agency, which meets the intent and spirit of [Executive Order 13186](#) by focusing on migratory bird conservation. The council oversees implementation of the executive order.

The environmental team with EM contractor Hanford Mission Integration Solutions produced highlights of the project for this year's nomination.

The collaborative effort has produced a program of avian protection, sensitive species conservation, education and habitat improvement that far exceeds the expectations of the executive order, making Hanford a leader in migratory bird protection and conservation across the DOE complex.

Source of information – DOE EM publications