



Hanford Advisory Board

FINAL MEETING SUMMARY

June 8-9, 2016

Richland, WA

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

Executive Summary

Hanford Advisory Board Action

The Hanford Advisory Board (HAB or Board) adopted one piece of advice regarding U.S. Department of Energy (DOE) Master Acquisition Planning. The Board also adopted two white papers: a Waste Treatment and Immobilization Plant (WTP) communications approach and an analysis of cesium management and disposition alternatives.

Hanford Advisory Board Business

The Board approved two DOE Office of Environmental Management (EM) Site Specific Advisory Board (SSAB) letters: one regarding funding for SSABs and one regarding community investment as a factor in contract proposal evaluations.

Presentations and Updates

The Board received the following presentations and updates:

- Tri-Party Agreement (TPA) agency program reports
- Board committee reports
- Introduction of the draft Fiscal Year (FY) 2017 HAB Work Plan and HAB calendar

Board members also engaged in a sounding board on safety culture.

Public comment

One public comment was provided.

HANFORD ADVISORY BOARD

June 8-9, 2016

Richland, WA

Steve Hudson, Hanford Watch and Board chair, called the HAB meeting to order. The meeting was open to members of the public and offered opportunities for public comment.

The Board meeting was audio-recorded.

Welcome, Introductions, and Announcements

Dawn MacDonald, DOE Office of River Protection (ORP) and co-Deputy Designated Federal Officer for the HAB, noted that the Board was meeting in accordance with the Federal Advisory Committee Act (FACA).

Cathy McCague, HAB facilitator, provided members with an overview of the meeting agenda and provided documents. She encouraged members to thoroughly review the draft advice, white papers, and draft letters prior to discussion. Cathy also directed Board members to the back of the meeting room, where members could place additional information that may be helpful to HAB work.

Steve confirmed the adoption of the April 2016 Board meeting summary, including the incorporation of minor edits proposed by a Board member and received within the FACA-stipulated 45-day time period.

Announcements

Dawn shared a [video](#) with Board members that highlighted bench-scale testing of technologies that Washington River Protection Solutions (WRPS) is studying for purposes of detecting and monitoring chemical vapor releases from Hanford Site tanks.

Tri-Party Agreement Agencies – Program Reports

U.S. Department of Energy–Richland Operations

Stacy Charboneau, Manager of DOE Richland Operations Office (RL), provided Board members with a presentation highlighting recent RL activities and progress. Stacy thanked everyone who participated in the recent Hanford forum in Leavenworth, Washington.

Stacy noted the following key points in her presentation ¹:

- Work is continuing on Plutonium Finishing Plant (PFP) demolition:

Attachment 1: Richland Operations Office Agency Update (DOE-RL presentation, June 8, 2016)

- CH2M Hill Plateau Remediation Contract (CHPRC) workers finished removing gloveboxes in advance of demolition. They are also readying the Americium Recovery Facility chemical tanks for removal, and the tanks are anticipated to be removed from the facility by the end of June 2016. Nearly all PFP work requiring a protective air suit is completed.
 - A readiness assessment for the start of demolition is planned to begin in July 2016, and open-air demolition is anticipated to begin later in summer 2016.
 - The U.S. Environmental Protection Agency (EPA) and the Washington Department of Ecology (Ecology) are currently evaluating a change in the completion date milestone for the demolition of PFP. The facility's initial demolition goal was September 30, 2016, but the work schedule has been slightly delayed due to unanticipated hazards, equipment breakdowns, and work re-sequencing. The new proposed date for PFP demolition to slab-on-grade will likely be in FY 2017.
 - The PFP demolition process will be reviewed for lessons learned as the DOE Office of Hanford Acquisitions (OHA) plans for upcoming contracts.
- Preparations for the movement of K Basin sludge to interim storage at T Plant are ongoing. Cold-commissioning of approximately 1,500 retrieval components is in progress at the Maintenance and Storage Facility. Sludge transfer and storage casks are currently in production (one is in-hand), and a recent Nuclear Quality Assurance Certification for these casks came back with no concerns. Retrieval of the sludge from the River Corridor is planned to begin in FY 2018.
 - At the 618-10 Burial Grounds, approximately 1,700 waste drums have been excavated, retrieved, and processed from trenches. Sixty Vertical Pipe Units (VPU) have been augered, and seven of those have been removed. All VPU augering is anticipated to be completed in FY 2016, and all work at the 618-10 Burial Grounds is anticipated to be completed at the end of FY 2017—one year ahead of schedule.
 - Hanford infrastructure updates are ongoing for the export water, high voltage distribution, and fire systems. RL is working with ORP to anticipate Site needs for the coming decades of cleanup.
 - Groundwater operations throughout the site are continuing. The 200 West Pump-and-Treat Facility was recently updated to evaluate the nature and extent of perched groundwater (which is contaminated with uranium, technetium, and nitrates) in the 200 East Area. Six characterization wells are in the process of being drilled at the 200-UP-1 Operable Unit (near U Plant).
 - The uranium sequestration pilot study within the 300 Area is continuing. The study's final report is anticipated in August 2016, and preliminary results indicate that the uranium sequestration strategy is potentially effective and useful in some remediation scenarios.

- Public Hanford tours have been very popular, and additional tours in summer 2016 are planned due to the high demand. RL is continuing to work with the U.S. National Park Service to plan for the public experience of the newly created Manhattan Project National Historic Park.
- RL-100 is the RL Project Baseline Summary (PBS) for community and regulatory support. Part of the funding within this PBS goes to the three Washington counties as Payment in Lieu of Taxes (PILT). For the remainder of FY 2016, RL may be unable to fully-fund these PILTs. DOE requested that the U.S. Office of Management and Budget reprogram the FY 2016 RL budget to allow cleanup funds to be transferred for use as PILT for the upcoming months, but it is unclear whether or not this will be possible. Tribal mitigation funds do not come from the RL-100 PBS, and tribal mitigation did not cause the funding shortfall that led to the PILT budget shortfall.

Finally, Stacy noted that EM is planning to undergo a change in its organizational structure that would allow line management to be streamlined within the Office. Stacy highlighted some of the changes and efficiencies that would be included in the potential new structure, and she said that she was proposed to lead the EM Field Operations.

U.S. Department of Energy–Office of River Protection

Bill Hamel, ORP, provided Board members with a presentation² highlighting recent ORP activities and programs. Key ideas that Bill covered included:

- Recent and ongoing activities at tank farms:
 - Construction efforts are ongoing at Single-Shell Tanks (SST) AX-102 and AX-104. Legacy equipment is being removed from both tanks, and extended-reach sluicer arms are anticipated to be installed within them in FY 2017.
 - At leaking SST T-111, approximately 5,700 gallons of water was removed by a portable exhauster. WRPS will move the portable evaporator to SST T-112 at the beginning of FY 2017.
 - For SST C-111, WRPS reached the limits of available retrieval technology (which included modified sluicing, high pressure water sluicing, and chemical dissolution) in March 2016. ORP expects to submit the retrieval completion certificate to Ecology in June 2016.
 - At SST C-105, WRPS is approximately 45% completed with retrieval (approximately 67,000 gallons of waste remain within the tank). In late summer 2016, WRPS will employ two extended-reach sluicers to assist with retrieval.
 - At leaking Double-Shell Tank (DST) AY-102, WRPS removed approximately 95% of the entire volume of waste within the tank and 75% of the sludge. Approximately 41,000

Attachment 2: Office of River Protection Agency Update (DOE-ORP presentation, June 8, 2016)

gallons of waste remain within the tank. Pumping is temporarily suspended as four extended-reach sluicer arms are installed to facilitate waste retrievals, which are anticipated to resume in summer/fall 2016.

- At DST AY-101, WRPS is monitoring the tanks' continuous air monitor filter on a weekly basis. No waste has been found in the tank's leak detection pit or within the annulus, and air monitoring data has returned to historic levels. ORP determined that no release of radiological material has occurred, and another video inspection of the tank is planned for July 2016.
- The 242-A Evaporator has run six campaigns since its return to service in September 2014. It freed approximately 300,000 gallons of DST space with two campaigns in April 2016.
- The Effluent Treatment Facility (ETF) was restarted in May 2016 after being taken offline in 2014 for upgrades. This facility removes radioactive and hazardous constituents from effluents (from the 242-A Evaporator, for example). The ETF will manage some of the effluents generated from the LAW facility.

Bill's presentation also included a slide that showed how the amended 2016 Consent Decree updated the milestones from the 2010 Consent Decree as well as a slide that highlighted WTP technical issues and progress. With regard to the WTP technical issues, Bill noted that ORP is currently focused on T1, T2, and T3, and he was hopeful that these issues could be closed by the end of the year.

Washington Department of Ecology

Alex Smith, Ecology's new Nuclear Waste Program Manager, introduced herself and her background. She provided the Board with an update on ongoing and planned Ecology work on the Resource Conservation and Recovery Act (RCRA) Sitewide Permit.

Alex covered the following key ideas in her presentation³:

- Ecology is working to get all areas where waste is stored at the Hanford Site under a single permit. Rev 8c, the current version of the Sitewide permit, does not include all of the existing units.
- Ecology compliance inspectors look at waste storage units across the Hanford Site and sometimes come across discrepancies between the RCRA implementation requirements and actual operations. In these cases, Ecology will initiate permit modifications to get operations and permitting into alignment. These modifications to Rev 8c will continue periodically in the coming year as the Sitewide Permit is updated. Responses to public comments are developed and released as identified issues are resolved.

Attachment 3: Washington Department of Ecology Nuclear Waste Program Agency Update (Ecology presentation, June 8, 2016)

- Updating the Sitewide Permit is an intensive process. Ecology has been developing Conceptual Agreement Packages for each portion of the permit. In addition, Major Theme Workshops are being held with DOE and Hanford contractors to communicate identified permit deficiencies.
- Ecology is continuing to work with EPA's RCRA program and the Ecology's Hazardous Waste and Toxics Reduction Program (Washington's RCRA program) on technical issues and decisions, as needed.
- The draft project schedule for updating the Sitewide Permit currently calls for having the permit out for public comment in late 2017, then working through public comments over the next year or two years.

U.S. Environmental Protection Agency

Dennis Faulk, Unit Manager of EPA's Hanford Project Office, updated HAB members on recent EPA activities:

- TPA agencies recently signed the final change package for updates to Central Plateau cleanup milestone series. The agencies also put together a responsiveness summary that demonstrated how public and Board comment were incorporated into the final change package.
- EPA is working to update the process for releasing comments on Superfund documents (e.g. Remedial Investigations/Feasibility Studies). Current practices are lengthy and inefficient when moving from a draft to a final document. Updates in procedure should provide Board members with a higher degree of certainty as they plan review and comment of these documents.

Dennis introduced Shintaro Ito and Marra Clay, two individuals who are temporarily working with EPA and who are interested in learning more about public engagement and involvement. In other EPA staffing news, Dennis said that Emy Laija is expected to return from her temporary detail in Washington, D.C. in June 2016 and that Chris Guizzetti would be leaving the Hanford Project Office for another position within EPA.

Board member questions and responses

Note: This section reflects individual questions, comments, and responses, as well as a synthesis where there were similar questions or comments.

Q. Does RL have a defined path to resolve the problems with the highly active waste that came out of the PFP's Plutonium Reclamation Facility?

R. [RL] The reports came back from both Pacific Northwest National Lab and an independent review, and it was determined that all of this waste had fully reacted—which was good news. Therefore, this waste will be packaged in the same way as other transuranic (TRU) waste. It is currently moving to the Central Waste Complex inventory, and the waste may be sent to Perma-Fix Northwest for size reduction. RL determined that that waste did not pose any further hazard.

Q. Would it be possible for Board members to get an electronic copy with updated positions, titles, and proposed staff?

R. [RL] Yes. RL will distribute this information as it becomes available.

Q. There is waste leaking into the space between the primary and secondary tanks of DST AY-102. This presents the challenge of removing waste from both the primary and the secondary tanks. Is there a plan to get the secondary tank emptied and to remove waste from underneath the insulator pad?

R. [ORP] ORP is working on this and will release additional information as it becomes available.

Q. Will storage canisters for the K Basin Sludge be sealed tightly, or will they have a pressure release?

R. [RL] They will have pressure release.

Q. The RL update did not mention the 618-11 Burial Ground nor the cesium and strontium capsules at Waste Encapsulation and Storage Facility [WESF]. What work is being done on waste at these two sites?

R. [RL] The 618-11 Burial Grounds will likely not begin remediation anytime soon. The recent change package included a 2021 milestone for 618-11 remediation, but RL will continue to work with the Nuclear Regulatory Commission and Energy Northwest to determine when the best time to begin this work will be. At WESF, the ventilation upgrades are continuing, and RL is preparing to grout some of the hot cells at the facility. The capital asset project to get cesium and strontium into dry cask storage is still in progress, and it is currently at the Critical Decision One phase.

C. Hanford Communities is creating a video on the cesium and strontium capsules at WESF. This video will likely be available by July 2016, and it will help to demonstrate the need for moving this waste into dry storage. The video could be used by speaker's bureaus as needed.

Q. How will the EM reorganization provide more decision-making authority to the field offices?

R. [RL] The intention of the organizational structure changes was born from a number of recommendations that came to EM from internal and external sources and they seek to represent truer line management and recognize that the field is where much of the real cleanup work is actually being done.

Q. Is it an inopportune time to conduct a major restructure of EM, as there are only five months left until a new Presidential administration takes office? Once that shift occurs in the executive branch, presidential appointees will be transitioned out, and any progress may be lost.

R. [RL] There is only one political appointee in EM, the Assistant Secretary for Environmental Management. It can take some time to get this appointment approved. Therefore, the opportunity of currently having an engaged and active Assistant Secretary is an opportune time to begin an EM restructuring effort.

C. Now that the Consent Decree issues have been resolved, the Tank Waste Committee (TWC) is interested in being briefed on the resolution of the WTP technical issues and the anticipated schedule for the resolution of these issues.

Q. The presented milestones for the amended Consent Decree dates show a large time gap between 2024 and 2033. What will happen during this period? Will waste be processed during this timeframe?

R. [ORP] The period between 2024 and 2033 will provide ORP with the opportunity to resolve technical issues at the Pretreatment facility, conduct construction and engineering work at the High-Level Waste (HLW) facility, modify contracts, and baseline both the Pretreatment and HLW facilities. During this period, the Direct-Feed Low-Activity Waste (DFLAW) initiative is planned to process the Low-Activity Waste from tanks.

Q. What are the preliminary results of the pulse-jet mixing tests?

R. [ORP] The testing is looking to determine the sizing and the arrangement of the pulse-jet mixers. A lot of technical detail for WTP components has been determined by these tests.

Q. What is most concerning about Hanford cleanup today? What is giving you the most hope?

R. [RL] The most concerning thing about Hanford is the extended timeline for completing cleanup. Funding drives the timeline to an extent, and the TPA agencies need to ensure that they are prioritizing work effectively to protect human health and the environment. The strong working relationship that the TPA agencies have is the component of cleanup that is most hopeful—there are many opportunities that dialogue and discussion open.

R. [Ecology] Tank waste is the most concerning aspect of Hanford, especially its storage in aging tanks. There are a lot of efficiencies that the agencies can bring to bear on the cleanup processes that can save money and time. There have been many successes at the Hanford Site, and that is hopeful.

R. [EPA] The lengthy schedule to complete cleanup is challenging. Hanford needs more funding and efficiency for on-the-ground cleanup. The cleanup of the River Corridor is a success story—TPA agencies are doing the best possible job to remediate the area. The 200 West Pump-and-Treat Facility is also a great achievement.

R. [ORP] The relationship that is reopened between Ecology and ORP is very encouraging. Progress is being made, and the coming years represent a shift from construction to operation at the WTP. TPA agencies need to maintain this relationship, and that needs to continue into the future.

Q. What conversation is ORP engaged in regarding the quality assurance of WTP components that have already been installed in the facilities?

R. [ORP] ORP has always been focused on quality assurance. The agency is taking a two-phased approach to address quality assurance by (1) ensuring the appropriate programs and processes

are in place to procure and install equipment correctly and (2) ensuring that all installed equipment meets established requirements (and where there are gaps in the requirements, that ORP can demonstrate quality through other means).

C. There is a lot of work that is coming up at T Farm. The infrastructure is not good—employees have safety concerns about the small change trailer. Workers must wear Self-Contained Breathing Apparatuses while in T Farm; and there is nowhere for workers to change tanks or cool down while working. Flaggers are also needed at T Farm, as parking is across the road from the work area. Workers have spoken to management, but we have been told that there is no funding to mitigate these issues.

R. [ORP] Those situations are not ideal, and ORP and WRPS work together to do what we can to address worker concerns. ORP takes worker concerns, such as these, very seriously.

Draft Advice: Master and Acquisition Plan for Proposal for the Future Hanford Cleanup Contractors

Jerry Peltier, Budgets and Contracts Committee (BCC) Chair and issue manager, said that draft advice on the DOE Master Acquisition Plan for Future Hanford Cleanup Contractors emerged from a Committee of the Whole meeting in March 2016, where the Board received a briefing from the OHA on the overall timeline for identifying upcoming contract needs and the release of Requests for Proposals (RFP). Jerry highlighted that the draft advice⁴ broke the complex topic of master acquisition planning into seven overarching categories: (1) number of contractors, (2) contract duration, (3) contract type, (4) contract scope, (5) community commitment clause, (6) contract selection process, and (7) transitioning to new contractors.

Mike Korenko, lead issue manager, provided Board members with a history of the advice development, providing particular attention to ideas that were not incorporated into the draft advice due to lack of committee consensus.

Agency Response

Dawn MacDonald, ORP, thanked Board members for authoring the comprehensive draft advice. She noted that the included ideas would be helpful to OHA as they plan for the next generation of Hanford contracts.

Board member questions and responses

Note: This section reflects individual questions, comments, and responses, as well as a synthesis where there were similar questions or comments.

I – Number of Contractors

Attachment 4: Hanford Advisory Board Draft Advice on Fiscal Year 2017 and Fiscal Year 2018 Budget Priorities

C. In support of the eventual integration of RL and ORP—RL is tasked with cleanup of groundwater and the deep vadose zone. ORP is tasked with managing tank farms. Contamination sometimes crosses outside of tank farm boundaries, but ORP confines vadose zone surveys to tank farm fence lines. This sometimes arbitrary Office division is not fiscally responsible. If the vadose zone process was integrated with the tank farm control, it would be a more effective and efficient way to characterize vadose zone contamination.

Q. In the last paragraph of the background, what does “fundamental public governmental decisions” mean? The terminology is unclear.

R. This is a commonly used term in public policy—it notes that there are fundamental decisions that are governmental in nature, and that they should not be made by a private contractor. These decisions need to be made by representatives who are accountable to members of the public.

R. [EPA] These are public policy decisions that need full-vetting from agencies.

R. This point is fine to clarify in the background, but the related advice point should be removed. The contractor should not have a role in making any decisions associated with future land use. If OHA releases a draft RFP at a later date and there is a clause regarding future land use, the Board should revisit this idea in potential future advice on the draft RFP itself.

C. In the background, the One System Program can be used as an example to illustrate a clearer accountability for delineation between site activities.

C. There are some benefits to having more contractors working at Hanford, as opposed to fewer. The division point between contracts needs to be mindfully set; if this is correctly done, more contractors working on site may be more effective.

R. Theoretically, it seems like fewer contractors performing work would increase efficiency, but it also seems like it may have unintended side effects.

2 – Contract Duration

C. There are fundamental problems with a five-year initial contract with three five-year performance-based renewal options. The Board issued past advice recommending shorter contract duration (five-years plus a one-year extension option). Longer contracts could undermine DOE’s management capability. Longer-term contracts also do not allow DOE to effectively adapt to contracting strategies, management strategies, performance incentives, and cost and scheduling incentives. This section should be removed from the draft advice. This advice should simply recommend that DOE reference the Board’s previous advice on the subject of contract length and DOE oversight.

R. The contract changes are one of the most inefficient aspects of Hanford Site cleanup work. These inefficiencies translate into increased costs and schedule delays. Looking into the future, there should be contractor incentives in the form of longer contracts. Putting a bid together in response to an RFP represents a tremendous cost to contractors. If a contractor is performing, there is no reason to transition to another contractor.

C. Contractor changes do delay work by months, and the cost must be tremendous. Has DOE ever done a Lean Six Sigma evaluation of contracting mechanisms?

R. [ORP] A Lean Six Sigma Evaluation may not have been done. ORP does develop lessons learned from contractors and reviews these as new contracts are formulated.

C. To remedy member disagreement, the advice could be made more vague with regard to optional renewal years (e.g. not mentioning a set number of years).

R. There is evidence that going longer than a five-year contract with a five-year extension is not appropriate. The U.S. General Accountability Office keeps a list of the highest-risk government agencies, and EM has been at the top of this list for over a decade.

R. This is a good compromise. Contractors invest an incredible amount of resources into bidding on a major Hanford Site contract, and the length needs to be long enough that it is worth their time and their best staff members. If contract duration is too short, then contractors will not be able to provide their best service.

C. Contractors expend significant amounts of money and effort bidding on Hanford contracts and transitioning into cleanup work. Sometimes, the RFP is challenged once a contractor is selected, as well. The entire process is time-consuming and complicated for all parties, and to go through it once every five years is not using resources wisely—especially if an established contractor is high-performing.

C. Are there provisions within a contract that allow ORP to remove a contractor?

R. [ORP] DOE does have the ability to remove a contractor if they are not working to the agency's expectations. The issue is that it takes time to then re-bid the contract.

3 – Contract Type

C. In the second advice point, the advice should specifically identify a need for both “certified project managers” and “registered professional engineers.”

C. The section background should note that there are environmental health and safety issues driving cleanup in addition to legal obligations.

C. How can the advice recommend incentivizing cost and schedule without also jeopardizing safety and quality? How can the advice be framed to demonstrate support for employees as they raise these safety and quality concerns?

R. The fee in the third advice point is standard, and the advice currently works to highlight how important that is to the HAB. The intent of the advice point is to support employees as they raise safety, health, environmental, and fraud concerns.

Q. Is it appropriate to include fraud in the list of concerns? Are employees able to accurately identify fraud?

R. There are government contracting rules in place that pertain to waste and fraud. It is appropriate to include this idea.

4 – Contract Scope

Q. What does the fourth advice point mean with regard to grandfathering current benefits into contracts?

R. In some cases, new contractors cut costs by taking away benefits that workers accrued under a previous contractor. The advice notes that these worker benefits should remain constant to benefit the worker community.

C. The advice does not recommend or track funding that may be needed to continue employee training. This is an idea that should be added.

5 – Community Commitment Clause

C. There is a lot of concern about the meaning of the term “community.” The draft advice should make an effort to highlight that this denotes the regional community, including tribes and underrepresented communities. PILT covers only the local county governments, but the Hanford Site impacts the broader region and the state, as well.

R. Within this advice, it is not appropriate to reference PILT. This is not a matter that is built into DOE contracts.

7 – Transitions

C. There should be an advice point addition that recommends a well-defined project plan with well-defined objectives. Fixed price contracts are often negative, because fixed-price contractors are often hesitant to do any work that is outside of their defined scope.

After incorporating agreed upon revisions and minor wording changes, the Board approved the advice. Members agreed to send the advice to local DOE Managers, as well as a CC to DOE Headquarters, EPA, Ecology, and the Oregon and Washington congressional delegations.

Sounding Board: Perspectives on Safety Culture

Cathy McCague introduced the HAB sounding board process. Each Board seat was provided with up to four minutes to respond to two framing questions, round-robin style. These framing questions were:

1. What does safety culture mean to you?
2. Given the information provided at the April Board meeting, are there any situations that DOE can improve upon by better emphasizing and developing its safety culture?

Steve noted that sounding board responses do not represent the consensus perspective of the Board. He reminded members that the sounding board process provides issue managers and agency representatives

with the opportunity to hear the full diversity of opinions espoused by Board member seats. Steve said that safety culture issues managers would review sounding board responses as they considered potential follow-up steps and strategies for future Board work on safety culture. Board members were provided with an introduction to safety culture created during past Board conversations⁵.

Richard Bloom, City of West Richland and issue manager, encouraged Board members to consider their perspectives on DOE safety culture from both an internal and external perspective. For the second framing question specifically, Richard encouraged members to think about situations such as work planning, equipment design, design review, scheduling, safety basis preparation, etc.—activities where Board members believed that there was a weakness in safety culture attention as opposed to a focus on an instance of safety culture failure.

Transcripts of Board member responses to both questions are attached⁶.

Agency Reflections

Ed Parsons, RL, and Brian Harkins, ORP, thanked Board members for their thoughts and perspectives on safety culture. Brian noted that safety culture conceptualization and implementation involves the entire Hanford community; as such, he noted that all of the feedback provided was valuable as DOE plans for the future.

Dawn MacDonald, ORP, thanked Board members for their noted concern about working conditions at T Farm. Dawn said that she had connected with Becky Holland, Hanford Atomic Metals Trade Council, following her earlier comments about concerns at T Farm to get more specific information, and that she was already working to follow up with WRPS and address the highlighted safety concerns.

Waste Treatment Plant Communications Approach

Bob Suyama, Benton County, TWC chair and issue manager, provided Board members with an introduction to the WTP communications approach white paper⁶, and he reminded members that the document was originally provided for Board review and comment at the April 2016 Board meeting and that it specifically covered DFLAW and the HLW facility Authorization to Proceed. He retold members that the white paper represented a collection of Board member ideas, and he noted that not all information contained within it represented the consensus view of the Board.

Liz Mattson, Hanford Challenge and issue manager, briefly highlighted changes that were incorporated into the WTP communications approach following previous discussions with the Board.

Agency Perspective

Kim Ballinger, ORP, thanked members of the TWC and the PIC for their work on the WTP communications approach.

Attachment 5: Introduction to Safety Culture (v2, 3/21/2016)

Attachment 6: Transcript of Sounding Board comments

Attachment 7: Waste Treatment and Immobilization Plant Communications Approach (v2, 5/31/2016)

Regulator Perspectives

Suzanne Dahl, Ecology, noted that the table included within the white paper did an exceptional and comprehensive job of identifying the different audiences that may be interested in WTP.

Board member questions and responses

Note: This section reflects individual questions, comments, and responses, as well as a synthesis where there were similar questions or comments.

C. The paper characterizes public beliefs and concerns in the “Board Perception of HLW and DFLAW Projects” section. The Board should only convey its own beliefs and perceptions, as opposed to characterizing those of the public.

C. PIC members suggested bringing information from the table into the text that recommends holding regional public meetings that include discussions as to how ORP responds to WTP input from the HAB and the public.

C. Members of the public are generally concerned about their own safety. The document does not reference other public concerns, and therefore it should recognize a more comprehensive list of the chemical and radioactive hazards that exist on the site.

R. TWC discussed these other hazards, but it was not incorporated into the final document because the scope of the white paper was limited to the HLW facility and DFLAW. However, the included list of hazards was not comprehensive, and recognizing these hazards will help to make the list of risks more comprehensive.

C. The document should more explicitly note that ORP needs to strive to be an active participant in actively initiating contact and engaging with the media and actively releasing social media.

Board members adopted the white paper, following the incorporation of minor changes and additions. The HAB chair planned to author a cover letter providing additional context for the communications approach and then forward the document to ORP with a CC to Ecology.

Cesium Management and Disposition Alternatives

Bob Suyama, Benton County and TWC chair, provided an introduction to the Cesium Management and Disposition Alternatives white paper⁸, and he reminded members that the document was originally provided for Board review and comment at the April 2016 Board meeting. He highlighted that ORP requested that the Board look into potential alternative pathways for cesium pulled out of tank supernatant as it was prepared for DFLAW treatment. Bob noted that the guiding questions for the document were

Attachment 8: Cesium Management and Disposition Alternatives for the Low Activity Waste Pre-treatment System (v2, 5/25/2016)

included as bullets on the first page of the white paper and that details on explored disposition pathways were summarized in a figure on page three and a table beginning on page four.

Bob reminded members that the white paper represented a collection of Board member ideas, and he noted that not all information contained within it represented the consensus view of the Board.

David Bernhard, Nez Perce and issue manager, provided Board members with an overview of the changes made to the white paper following the Board's previous review.

Agency Presentation

Steve Pfaff, ORP, thanked issue managers for their work on the white paper and said that the Board's work exceeded ORP's expectations. Steve was impressed that the document represented the original work of the HAB, and he noted that this degree of originality made the white paper even more valuable than he had originally hoped. Steve was pleased that the conclusions presented in the white paper represented a level of community consensus on the path forward for cesium management.

Regulator Perspective

Suzanne Dahl, Ecology, thanked the Board for vetting all potential cesium management alternatives, and she was glad that the review was conducted outside of the TPA agencies. She highlighted that the document was very helpful.

Board member questions and responses

Note: This section reflects individual questions, comments, and responses, as well as a synthesis where there were similar questions or comments.

C. The white paper should more clearly recognize where the Board is expressing its opinions as opposed to fact. There are many instances of this misrepresentation in the "Legal/Regulatory" column of the table on page four presents. The information included within that column is not adequately cited, and it is not sufficiently backed up within the text itself. The white paper is sound as a technical document, but the regulatory analysis clouds the document's usefulness.

R. We could add citations for the Nuclear Waste Policy Act into the column, and then the text could be enhanced with wording that provides backup information regarding the legal and regulatory framework.

R. The word "potential" may be added into the column title to demonstrate that it is helpful information that may not be wholly comprehensive.

R. [Ecology] ORP requested that the Board conduct a quick review of the legal and regulatory framework that cesium would exist within.

R. [ORP] The information included within the column is important, and it could be backed up by a brief discussion in the text. Work on the Hanford Site needs to be permitted, and, therefore, the legal and regulatory framework needs to be recognized.

R. [EPA] The table could also include a footnote that it does not represent or constitute a comprehensive regulatory review.

R. The three alternatives (4, 5, and 5A) that are noted as requiring storage permits—would those permits be required?

R. [Ecology] Yes, storage permits would be required for those permits, assuming that they are mixed waste.

R. This point is not clarified within the text; therefore, it should not be included within the table. It is very important that the information in the summary table is thoroughly explained within the text itself.

Q. Could the technical analysis be passed by the Board now, and then the regulatory framework could be further discussed and then adopted at a future Board meeting?

R. The regulatory overview and the technical analysis should remain together. It is important to recognize both the technical and regulatory aspects in order to address the realities of cesium management and ORP's request.

C. Option three gets waste off the Hanford Site within the next ten years, which is preferable. If the barrier is the Nuclear Waste Policy Act, then DOE should take that on for defense nuclear waste. The source-based definition for HLW is challenging.

R. [ORP] If any of the other alternatives become more feasible in the future, the Low-Activity Waste Pretreatment System (LAWPS) is designed so that it can be adapted.

C. Are other radioactive elements being removed from the tank supernatant prior to treatment at the LAWPS facility?

R. [ORP] Cesium and strontium are the two major radioactive constituents. Strontium settles to the tank solids, while cesium remains suspended in the supernatant. Any suspended solids (including strontium and any TRU elements) will be filtered out of supernatant.

Board members adopted the white paper, following the incorporation of minor changes and additions. The HAB chair planned to author a cover letter providing additional context for the cesium management analysis and then forward the final document to ORP with a CC to Ecology.

Board and Committee Reports

Budgets and Contracts Committee

Jerry Peltier, City of West Richland and BCC chair, thanked members of the Board for their comments on the Master Acquisition Plan advice.

Jerry remarked that BCC members would continue to track OHA work and look for opportunities for the Board to provide meaningful input on the creation of upcoming contracts and RFPs. Jerry was hopeful that the Board could find time at the upcoming Board meeting to conduct a sounding board or a discussion on the Hanford end state vision.

Some Board members supported the idea of discussing the end state vision at an upcoming Board meeting, while others noted that the topic would likely require more extensive framing and discussion before it was ready to come to the Board. Members noted that if end state vision were to be discussed further, it would likely be a better fit for a Committee of the Whole discussion as opposed to a BCC-lead.

Health, Safety, and Environmental Protection Committee

Becky Holland, Hanford Atomic Metal Trades Council and Health, Safety, and Environmental Protection Committee (HSEP) chair, noted that she attended the May 2016 HAB leadership workshop and proposed committee topics for FY 2017. Becky anticipated a TPA agency response to HAB Advice #286, Transportation Infrastructure Updates Safety Considerations, soon.

Becky encouraged HSEP member to join a committee call on July 13, 2016. She noted that the committee planned to review the safety culture sounding board feedback and determine what next steps the Board should take.

Public Involvement and Communications Committee

Liz Mattson, Hanford Challenge and Public Involvement and Communications (PIC) chair, noted that the recent committee meeting included the TPA Quarterly Planning Meeting, and TPA agency liaisons were able to review the public involvement calendar and review the 2015 Hanford Public Involvement Survey. Liz also recognized that the meeting continued to apply focus to the 100 D/H Question and Answer document and the potential need for an overarching piece of public involvement advice. Liz closed by noting that there were several interns in attendance at the PIC, and she highlighted a very fruitful discussion with them regarding strategies for engaging millennials.

Liz anticipated a committee call in August 2016 and a committee meeting in September 2016.

River and Plateau Committee

Pam Larsen, City of Richland and River and Plateau Committee (RAP) chair, said that the committee has been discussing PFP demolition, ERDF vertical expansion, and HAB leadership workshop preparation.

Pam said that the RAP committee would meet in June for a tour of the site, including stops at the 200 West Pump-and-Treat Facility, ERDF, 300 Area uranium sequestration site, 618-10, and PFP. Pam noted that the committee would then discuss the Hanford Sitewide RCRA Permit and the final Central Plateau milestone series change package.

Tank Waste Committee

Bob Suyama, Benton County and Tank Waste Committee (TWC) chair, said that recent TWC work included briefings on the Effluent Management Facility (associated with DFLAW) and preparations for

the HAB leadership workshop. Bob also noted that the committee would likely begin work on a white paper examining risk-based tank waste retrieval in the coming months and potentially discuss tank integrity and learn more about tank vapors. He recognized that it was a big job to get the two white papers finalized, and he thanked committee members for their assistance.

Bob said that TWC would hold a committee call in July 2016.

Executive Issues Committee

Steve Hudson, noted that the Executive Issues Committee (EIC) consists of the chair, vice-chair, national liaison, and committee leadership. Steve provided the Board with a brief review of the 2016 HAB Leadership Workshop. Steve noted that David Borak, EM SSAB DDFO, Stacy Charboneau, RL, and Kevin Smith, ORP, all provided EIC members with useful briefings and recommendations, and Steve was very appreciative that all three were able to attend.

Steve noted that the EIC would hold a call in June 2016.

Environmental Management Site-Specific Advisory Board

Steve provided Board members with a brief overview of the recent EM SSAB chairs' meeting in Oak Ridge, Tennessee. He said that the group received a briefing on the status of New Mexico's Waste Isolation Pilot Plant (WIPP) and the challenges associated with bringing the facility back online and ready to accept waste. Steve said that WIPP is anticipated to have adequate space to accept Hanford TRU waste, despite the Site being at the bottom of the queue for waste shipment. Steve also stated that the EM newsletter was recently retooled to be released twice monthly. He encouraged Board members to look at these newsletters and see if there are any communications lessons that the Board can garner from EM's outreach strategies.

Steve noted that he and Susan were working to prepare a statement on EM SSAB priorities and values for a transition packet for the new administration. Steve said that he and Susan will also be working on recommendations for EM strategic planning and communication for future cleanup, and best practices for transferring from a nuclear cleanup Site to reuse or reindustrialization. Steve encouraged members to send along any topics that they would be interested in carrying forward to a future EM SSAB meeting.

Public Comment

Jean Vanni provided public comment, noting that she was interested in hearing more information about the availability of PILT in FY 2016. Jean said that she was concerned that there were some members of the community who believed that this money was not available for surrounding communities because it had been paid to impacted Tribes as mitigation funds. Jean noted that Tribes did not receive these funds. In addition, Jean requested both Board and public briefings from ORP on progress that has been made on WTP technical issues and from Ecology on the upcoming DFLAW permit. She also hoped that the agencies could share recent efforts to identify a national deep geological repository to store HLW.

Board Business

Draft Letter from Site-Specific Advisory Board Chairs on Community Investment Clauses in Contractor Packages

Board members reviewed and approved of supporting a letter recommending that the DOE should consider community investment as a factor contract evaluation process, originally introduced at the HAB's April 2016 Board meeting.

Draft Letter from Site-Specific Advisory Board Chairs on Board Funding

Board members reviewed and approved of supporting a brief EM SSAB chairs' letter recommending that SSABs be funded to a level that allows them to fulfill their obligations and commitments.

Review of Preliminary HAB FY 2017 Work Plan and Calendar

Steve provided Board members with the draft HAB Work Plan for FY 2017, which contained 21 topics collaboratively determined by EIC members and agency representatives during the May 2016 leadership workshop. Steve encouraged members to review topics, framing questions, timing, and committee assignments in anticipation of adopting the HAB Work Plan at the upcoming September 2016 Board meeting.

Steve also presented the HAB's FY 2017 calendar—another product produced at the May 2016 leadership workshop—for Board member review in advance of adoption at the September 2016 Board meeting. He highlighted that the Board meeting schedule was currently set so that there were four HAB meetings—one each quarter of the FY.

Board member questions and responses

Note: This section reflects individual questions, comments, and responses, as well as a synthesis where there were similar questions or comments.

Q. Many of the HSEP topics are joint with other committees. In such cases, is there a lead committee denoted?

R. Yes. Lead committees are marked with an asterisk.

C. The proposed FY 2017 Work Plan topic of heat stress mitigation/worker monitoring is not a RAP or TWC topic—HSEP should be the only committee assigned to it. It is too challenging when you have three committees working on the same topic, and the subject is most pertinent to HSEP members.

Q. RAP committee has often been involved in permitting conversations. There are several permitting processes that RAP is not involved in on this draft Work Plan, and it should be updated so that RAP is an assigned committee on all permitting topics.

R. [EPA] The “streamlining regulatory/permitting processes” is an ORP addition to the work plan, and EPA is not involved in supporting future conversations. Therefore, this topic likely does not go to RAP.

C. The topic of end states should be added to the FY 2017 Work Plan.

C. The Board needs to be fully funded for the recommended six HAB meetings each year. As the Board continues to do more work using less funding, members are setting a risky precedent. The decision to only have four Board meetings was budget-driven. Board members will likely be unable to deliver the same quality products if the number of meetings is cut so dramatically. The HAB is an advice-board, so white papers should be cut from the FY 2017 scope if there is not enough funding to support Board activities.

Q. The FY 2017 Work Plan provides a heavy scope for HAB work, and there are only four scheduled HAB meetings. Do Board members believe that there is adequate time to get all of the Board work done in these four meetings?

R. The schedule could allow for a Committee of the Whole meeting that could substitute for a Board meeting that would focus on a single topic.

R. Looking at the products that fall into the different quarters is a way to conceptualize what the workload at each Board meeting may look like. Board meetings may be longer than they have been in order to cover more review and discussion on Board products.

R. The current schedule tasks the Board with ten topics and six products for the June 2017 Board meeting, with only one week of committee meetings to discuss and prepare materials. The schedule will likely need to be staggered to accomplish this amount of work.

Q. How is DOE and the Board evaluating how “meaningful” our public involvement is? Is the HAB still as meaningful as the number of Board meetings falls so dramatically? At what point does the Board slip below what is required by the law?

R. [EPA] The work is driving the number of meetings. For RL—money is tied up in three to four major projects. This translates to agency updates on these large projects, and it hones the Board’s focus.

Preliminary September 2016 Board meeting topics

Cathy reviewed the following tentative meeting topics for the September 2016 Board meeting:

- Annual agency program reports
- Review and potential adoption of the 100 D/H Proposed Plan advice
- Adoption of HAB FY 2017 work plan and calendar
- A potential discussion on end-states with a review of needed HAB actions

- A potential review of the HAB charter as it relates to upcoming changes in Board leadership
- Open nominations for HAB leadership and national liaison positions
- Committee reports

Closing Remarks

Steve thanked Board members for their attendance, thoughts, and decisions. The meeting was adjourned.

Attachments

Attachment 1: Richland Operations Office Agency Update (DOE-RL presentation, June 8, 2016)

Attachment 2: Office of River Protection Agency Update (DOE-ORP presentation, June 8, 2016)

Attachment 3: Washington Department of Ecology Nuclear Waste Program Agency Update (Ecology presentation, June 8, 2016)

Attachment 4: Hanford Advisory Board Draft Advice, Master and Acquisition Plan for the Request for Proposal for the Future Hanford Cleanup Contracts

Attachment 5: Introduction to Safety Culture (v2, 3/21/2016)

Attachment 6: Transcript of Sounding Board comments

Attachment 7: Waste Treatment and Immobilization Plant Communications Approach (v2, 5/31/2016)

Attachment 8: Cesium Management and Disposition Alternatives for the Low Activity Waste Pretreatment System (v2, 5/25/2016)

Attachment 9: Draft Environmental Management Site Specific Advisory Board Recommendation Letter on Community Investment as a Factor in Contract Proposal Evaluation Process (4/21/2016)

Attachment 10: Draft Environmental Management Site Specific Advisory Board Recommendation Letter on Board Funding

Attachment 11: Hanford Advisory Board Fiscal Year 2017 Draft Work Plan

Attachment 12: Hanford Advisory Board Fiscal Year 2017 Draft Calendar

Attendees

HAB MEMBERS AND ALTERNATES

Antone Brooks, Member	Floyd Hodges, Member	Jerry Peltier, Member
Don Bouchey, Member	Becky Holland, Member	Gerry Pollet, Member
Jan Catrell, Member	Steve Hudson, Member	Bob Suyama, Member
Sam Dechter, Member	Pam Larsen, Member	Gene Van Liew, Member
Earl Fordham, Member	Susan Leckband, Member	Dawn Wellman, Member
Tom Galioto, Member	Liz Mattson, Member	
Gary Garnant, Member	Melanie Myers, Member	
David Bernhard, Alternate	Dale Engstrom, Alternate (phone)	Edward Pacheco, Alternate
Richard Bloom, Alternate	Alex Klementiev, Alternate	Emily Peterson, Alternate
Amoret Bunn, Alternate	Mike Korenko, Alternate	Jean Vanni, Alternate
Garry Busselman, Alternate	Larry Lockrem, Alternate	Helen Wheatley, Alternate
Shannon Cram, Alternate	Rudy Mendoza, Alternate	
Dirk Dunning, Alternate	Emmett Moore, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Stacey Charboneau, DOE-RL	Dennis Faulk, EPA	Todd Nelson, BNI
Mark Heeter, DOE-RL	Marra Clay, EPA (intern)	Staci West, BNI
Kristen Holmes, DOE-RL	Melinda Brown, Ecology	Dale Mckenney, CHPRC
Ed Parsons, DOE-RL	Suzanne Dahl, Ecology	Noah Cruz, CHPRC
Kyle Rankin, DOE-RL	John Price, Ecology	Padraic Fox, DNFSB
Joe Voice, DOE-RL	Alex Smith, Ecology	Jennifer Colborn, MSA
Ben Vannah, DOE-RL	Ginger Wireman, Ecology	Jennifer Copeland, MSA
Kim Ballinger, DOE-ORP	Tom Rogers, WDOH	Dieter Bohrmann, North Wind/DOE-ORP
Bryan Harkins, DOE-ORP		Sharon Braswell, North Wind/DOE-ORP (phone)
Zara Guzman, DOE-ORP (intern)		Brian Mathis, SN3
Bill Hamel, DOE-ORP		Kelsey Shank, SN3
Samantha Harting, DOE-ORP (intern)		Steven Shepard, WRPS
Carrie Meyer, DOE-ORP		Tammie Gilley, EnviroIssues
Joanne Grindstaff, DOE-ORP		Cathy McCague, EnviroIssues
Ellen Mattlin, DOE-ORP		Brett Watson, EnviroIssues
Dawn MacDonald, DOE-ORP		
Steve Pfaff, DOE-ORP		
Nicole Schuller, DOE-ORP		
Taylor Spence, DOE-ORP (intern)		

MEMBERS OF THE PUBLIC

David Bolingbroke, Hanford History Project	Alyssa E. Dyck (phone)	Joy Shoemake (phone)
Paula Call (phone)	Jillian Gardner-Andrews, Hanford History Project	Michael J. Turner (phone)
Dylan Cardoza, HOANW	Sarah Johnson, HOANW	Tony Umek
Annette Cary, Tri-City Herald	Elinor Lake, Hanford History Project	Jean Vanni, YN
James Cheadle	Phillip Lemley, City of Richland	
Joyce Cheadle	Signe Lindquist, Hanford Challenge	

List of Acronyms

BCC – (HAB) Budgets and Contracts Committee	LAW – Low-Activity Waste
BNI – Bechtel National, Inc.	LAWPS – Low-Activity Waste Pretreatment System
Board – Hanford Advisory Board	OHA – DOE Office of Hanford Acquisitions
CAP – Conceptual Agreement Packages	ORP – DOE Office of River Protection
CHPRC – CH2M Hill Plateau Remediation Contract	PBS – Project Baseline Summary
DDFO – Deputy Designated Federal Officer	PFP – Plutonium Finishing Plant
DFLAW – Direct-Feed Low Activity Waste	PIC – (HAB) Public Involvement and Communications Committee
DOE – U.S. Department of Energy	PILT – Payment in Lieu of Taxes
Ecology – Washington Department of Ecology	RAP – (HAB) River and Plateau Committee
EIC – (HAB) Executive Issues Committee	RCRA – Resource Conservation and Recovery Act (1976)
EM – (DOE) Office of Environmental Management	RL – DOE Richland Operations Office
EM SSAB – Environmental Management Site- Specific Advisory Board	TWC – (HAB) Tank Waste Committee
EPA – U.S. Environmental Protection Agency	WESF – Waste Encapsulation and Storage Facility
FY – Fiscal Year	WRPS – Washington River Protection Solutions
HAB – Hanford Advisory Board	WTP – Waste Treatment and Immobilization Plant
HLW – High-Level Waste	TRU – Transuranic Waste
HSEP – (HAB) Health, Safety, and Environmental Protection Committee	VPU – Vertical Pipe Unit
ISMS – Integrated Safety Management System	