

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
TANK WASTE COMMITTEE**

*May 7, 2014
Richland, WA*

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This is only a summary of issues and actions in 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.

Opening

Dirk Dunning, Tank Waste Committee (TWC) chair, welcomed the committee and introductions were made. Per the April meeting, the Tank Waste Characterization and Staging topic was expanded in the draft March meeting summary to provide more detail about the presentation and discussion; Dirk requested additional time to review and provide suggested edits. The committee tabled adoption of the March meeting summary. The committee approved the April meeting summary.

Announcements

Steve Hudson, Hanford Advisory Board chair, discussed the April Environmental Management Site Specific Advisory Board (EMSSAB) meeting, and noted that the proceedings introduced very informative graphics and topics, including an excellent presentation done on the disposition of waste and its associated problems. He noted that the Phoenix software used to develop 3-dimension graphics of tanks and of leaking materials should be incorporated into future TWC and River and Plateau (RAP) Committee meetings. Those interested can find the presentations, as well as preliminary 2015-2016 budget materials, at <http://energy.gov/em/downloads/chairs-meeting-april-2014>. Steve passed his compliments to Kim Ballinger, DOE-RL, and Sharon Braswell, MSA, for organizing the EMSSAB.

Steve continued by noting that the EMSSAB Charter was updated in April 2012, and the document is of interest as it provides the umbrella principles and guidelines pertaining to the workings of the EMSSAB.

Steve encouraged committee members to brainstorm topics for the Hanford Advisory Board FY2015 Work Plan prior to the June executive leadership retreat. He stressed that only the most important and pressing topics should be incorporated into the Work Plan, and he emphasized that anyone willing to introduce a new topic should also be willing to serve as an issue manager for that topic.

Dirk noted that Matt McCormick, DOE-RL Manager, had recently announced that he will retire in mid-June, and the committee passed along thanks to Matt for all of his great work over the years.

Update and Discussion on Proposed Changes to the Consent Decree*

Introduction

Bob Suyama, vice chair of the TWC, opened the Proposed Changes to the Consent Decree (CD) discussion by referencing April's TWC meeting, where DOE's positions on amendments to the document were introduced by Ben Harp, DOE-ORP. The purpose of the day's discussion was to receive an update from DOE and Ecology and discuss the need for potential advice. Dirk abstained from the discussion as a precaution, as Oregon DOE is involved in the issue.

Susan Leckband provided further background and information on the topic. She stated that Ecology has become increasingly concerned that DOE is not meeting various milestones, and they have expressed unease at the seeming lack of detail and transparency in DOE efforts. It is evident from the proposals that the State of Washington's is more lengthy, developed, and date-driven. DOE's proposal differs in that it is more milestone driven (i.e. "cleanup efforts will address X following the completion of Y"). Susan stated that a potential problem with Ecology's proposal is that it may be unrealistic— even if all projects were given ample funding and resources. As the HAB moves forward, it should work to reiterate core Board values and urge the parties to talk to one another directly, avoid excessive legalese, and honor their commitment to the people of the Pacific Northwest. Susan believed that the most impactful thing that the HAB could do is encourage parties to work through their differences by offering value-based, policy-level advice.

Agency Presentation

Erik Olds, DOE-ORP, stated that both DOE and Ecology have submitted proposals for updates to the CD, and, though the two proposals are different, it is important to recognize that both share a wealth of common ground. Both DOE and Ecology have triggered the 40-day dispute resolution process stipulated by the CD (the process will end on June 4). The next step for both parties is good faith negotiations. DOE-ORP is hopeful that these conversations will result in a shared understanding. DOE's proposal is available on the DOE website.

* Attachment 1: Transcribed Flipchart Notes

Regulator Perspective

Dan McDonald, Ecology, stated that Washington took steps to enter the dispute resolution process on April 23, 2014. If Ecology and DOE do not reach an agreement following the 40-day dispute resolution period, it may be extended for a further 30-days. Dan also noted that Ecology's full CD proposal is available online.

Committee Questions and Responses

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

Q. What happens after the 40-day dispute resolution period?

R. [DOE-ORP] If the dispute is not solved within the 40-day period, either party may petition the court to intervene. If an agreement is reached within the 40-day period, the parties will still need to take the resulting agreement to the courts. At the moment, the timeline for the legal process is unclear.

Q. When should the HAB weigh in on this process?

R. [DOE-ORP] The 40-day process is ongoing, and it will move forward regardless of the Board's input. The 40-day period may be the right time for the Board to weigh in; it may not be. The answer is unclear.

Q. If this matter goes to the Justice Department, could the court potentially reject both the DOE and the Ecology proposal?

R. [DOE-ORP] No comment.

R. [Ecology] No comment.

C. Both proposals seem to be working towards the same goals; the major differences between the two relate to milestones that likely cannot be reached regardless of time or resource investment (e.g. waste vitrification).

C. One thing that DOE's proposal is lacking is accountability; Ecology's proposal addresses this issue better. DOE needs to be accountable to an entity aside from their own internal bureaucracy; it is unacceptable for the agency to simply write themselves a blank check. A CD that does not have strict, built-in guidelines for accountability would frustrate the Oregon Hanford Cleanup Board and other interested parties.

R. If the HAB decides to issue advice and weigh-in on the proposed CD amendments, the topic of accountability needs to be addressed carefully. It could potentially start an argument that would be counterproductive to the Board's overall goals.

C. There has been an ongoing problem with rolling milestones at the Hanford Site, and it is frustrating to many observing the cleanup efforts. The state appears to be trying to put legally enforceable deadlines into the CD. Even if, in the future, milestones simply cannot be met because of technological limitations, etc., their incorporation into the CD may be helpful when it comes to legally enforcing cleanup efforts or procuring funding from Congress.

R. Just in relation to the WTP, DOE has missed so many court-ordered deadlines. Often, this is related to a lack of funding distributed by Congress or a lack of technical ability. The situation at the Hanford Site is complex, and simply adding more milestones and deadlines to the CD will not solve all of the ongoing problems and issues.

R. Ecology's proposed milestones are far-out and realistic. Milestones are vital to making this cleanup happen.

C. The HAB should use strong language on this matter to make a strong statement. The Hanford Site has leaking tanks and no capacity or infrastructure to address this issue. This is a very big problem, and enhanced accountability is an important way to address this (and other) ongoing concerns. Any advice that the Board releases needs to tell the parties that new tanks need to be constructed as soon as possible. The idea constructing new tanks is very much related to the CD topic.

R. It could potentially be problematic for the HAB to introduce any substantive statements on the matter beyond simply reiterating our core values. In the modern-day, heavily politicized climate, simply transmitting HAB values may be more constructive.

C. Ideally, DOE and Ecology would work together on this matter to address their differences and come to an agreement. It would be better for the parties themselves to make the big decisions, rather than pass along the decision-making power to the DOJ. If the conversation were to move into the courts, the HAB would no longer have any voice in the process, which will likely be lengthy.

C. A thought as we move forward—the parties need to look outside of the current box and think of potential ways to accomplish their respective missions beyond existing policy and procedures. Everyone is getting caught up in the minutiae and the details; all parties involved need to be receptive to alternative pathways to accomplish our goals.

Q. If the HAB were to issue advice on this topic, when would it need to go out?

R. It would need to be adopted soon; the June Board meeting is the next opportunity before September.

R. This piece of advice will not be easy to write. It will need to be crafted and written very carefully, and it will need to be well-framed. By the June Board meeting, the advice will need to be very complete, as the meeting will be busy and there will be little time to polish it. The HAB should move forward with advice as opposed to a letter, as advice will get a stronger response.

R. The advice needs to be kept at a very high level, and we need to keep it away from issues that we have previously addressed. The Board has been through that painful process already. Our best strategy forward is transmitting the core Board values in the form of advice.

R. The HAB should not choose one side over the other— the Board needs to be mindful of keeping its advice impartial.

The committee agreed it should develop draft advice regarding the CD negotiations, and that the advice should be simple with the HAB Values White Paper used as an attachment. The committee reached agreement on three advice points and several concepts for the background section around which the issue managers should develop draft advice. Issue managers were identified and will provide draft advice for distribution to the committee by mid-next week; the advice review and consensus process will take place over email in order to bring the draft advice to the June Board meeting.

Update on the Waste Treatment and Immobilization Plant*

Agency Presentation

Bill Hamel, DOE-ORP's Assistant Manager for the Waste Treatment and Immobilization Plant (WTP) Project, did not have a formal presentation or handouts, but described that he would discuss three key areas where initiatives are ongoing: (1) Low-Activity Waste Vitrification Facility (LAW), (2) The High-Level Waste Vitrification Facility (HLW), and (3) the Pretreatment Facility. Bill noted that there were many aspects of the HLW that he was unable to discuss with the committee at the time, but he could talk about the general goals of the project and how it is currently formatted. Teams working on WTP design completion consist of both DOE-ORP and BNI members, including leads from each of the two organizations. BNI has been tasked with finding technical solutions to WTP issues.

DOE-ORP has authorized a preconceptual design of the LAW. This design presents, at a high level, the direction in which the LAW is going to go, as well as what it will generally look like. In addition, DOE has requested a contract modification proposal, to bring the current contract into alignment with the efforts that have already occurred. This proposal allows DOE-ORP to take its baseline and state how the facilities are working together, and what should be build first. Once the preconceptual design is authorized, DOE can work with BNI on independent estimates to make sure that everything looks right. DOE can then move forward with that perspective; baseline changes from that proposal will be more detailed and come approximately 6-7 months afterwards.

Concerning the HLW, DOE is currently very actively authorizing a return to limited production engineering. BNI is doing engineering studies and evaluations that allow them to move to the next steps and return to poll construction engineering. It is important to both BNI and DOE-ORP to align safety basis and engineering design. It is also critical to ensure that the facility will fulfill its intended function. If it is not going to, DOE must look into avenues for changing the path forward. A group of independent experts was charged with answering this exact question, and their review demonstrated vulnerabilities and

* Attachment 1: Transcribed Flipchart Notes

potential recommended actions to remedy vulnerabilities. These actions must occur before DOE returns to construction.

Concerning the Pretreatment Facility, DOE and BNI recognize that there are vulnerabilities that need to be addressed.

Technical issues are currently a limiting factor, and they are affecting construction efforts in different ways. For example, construction on the HLW facility is ongoing around technical issues. This is not something that can occur at the WTP, where construction needs to be placed on hold until technical issues are ironed out. BNI is looking into the important issues and incorporating lessons learned from the HLW facility. BNI is also actively engaging in strategic and team-building sessions with DOE-ORP personnel.

Regulator Perspective

Dan McDonald, Ecology, thanked DOE for the informative comments.

Committee Questions and Responses

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

Q. It has been very difficult to understand the WTP design and construction process, and there appears to be little transparency to those existing outside of DOE. Have you come across any issues that are showstoppers?

R. [DOE-ORP] The process is very complex, with many layers of activities ongoing at all times. DOE and BNI are facing some difficult technical issues; there do not appear to be any that are wholly unsolvable, it is just a matter of timing, method, and funding. We are currently evaluating solutions to see which ones are the most feasible.

Q. Where are the independent expert reviewers of this process coming from?

R. [DOE-ORP] Many National Laboratories—not just PNNL—are involved in these efforts. DOE has been utilizing academia and private industry, as well. Other government entities are not largely involved in our efforts save for a NASA contractor that we have been working with.

Q. As the process for constructing the WTP continues, the public should have opportunities to review plans and provide insight. Will the public have access to the requirements for safe operation at the WTP or to the preconceptual design?

R. [DOE-ORP] The public will have an opportunity to access the requirements for safe operation at the WTP. As for the preconceptual design, there will be certain parts of it that will not be made available. Engineering rates, for example, are proprietary and confidential.

Q. One thing that has been lacking from this process is the guarantee that we can validate design verification and operational safety. How are DOE and BNI working to reconcile these two aspects?

R. [DOE-ORP] Both parties will utilize safety design review strategies in place beyond our normal working procedures. Both DOE and BNI will be conducting separate design reviews—each will focus on function, safety, and operability.

Q. There have been a number of reviews that have found a problematic breakdown of the quality assurance (QA) program. For example, a number of vendors destroyed their QA records after six years. The WTP is going to have to survive an Operational Readiness Review, and one of the first steps in that process is a review of QA documentation. Several commercial plants have been cancelled because of a lack of validation and verification pertaining to QA. What progress is being made on this issue?

R. [DOE-ORP] One thing that we have incorporated is a design operability review that is currently ongoing. Experts are coming in and looking at the facility. If there are any ongoing issues, they will find them. In regard to LAW, DOE has told BNI that we require a validation of the quality of their components, and BNI has been asked to validate all mission-critical equipment. These efforts are in addition to design verification, and this process is supplemental to, not in place of, pedigrees. These strategies do not address past problems, however. The matters referenced are important. If we cannot produce documentation demonstrating quality, then the DOE and BNI teams will have to do something different. This does not necessarily mean that components will have to be ripped out, though that may be the case in some instances. It is important that any problems that arise be looked at on a case-by-case basis. The ideas of both magnitude and significance will need to be looked into when examining WTP component pieces.

Q. Is there any hope of the WTP meeting CD milestones?

R. [DOE-ORP] The LAW is moving forward as quickly as possible, but there are some difficult issues that still need to be addressed. DOE cannot comment on scheduling at this time.

Q. What is a preconceptual engineering design review?

R. [DOE-ORP] A conceptual design would indicate that work has reached a certain point; however, to reach that point you have to have a certain level of design work already completed.

Q. When any of the National Laboratories generate a report, they incorporate a disclaimer in that states they will not fully stand behind any of the information or conclusions included within the report. Is this true for the work that they are accomplishing for the WTP?

R. [DOE-ORP] No, this disclaimer will not be present in the work done for the WTP project.

Dirk thanked Bill for the information, and suggested that the TWC revisit the WTP topic in the coming months. Dirk identified a group of issue managers from TWC, including himself, Kristen McNall, Bob Suyama, David Bernhard Tom Carpenter, and Richard Smith, to work on framing a future TWC/ DOE-ORP discussion.

Open Forum*

The committee discussed how best to use the Open Forum into the future, and what might make the Open Forum not as useful. It was generally agreed that, to date, Open Forum has been helpful for the TWC. The committee identified some ways Open Forum might be used into the future: for late-breaking or emerging topics; as a “buffer” for topics on agendas that might need a little extra time; time to frame a topic and its ultimate goals, including the “so what?” or “why?” of a proposed topic; and reflection time on the operation of the committee. It was noted that it is important to have the right people in the room for any discussion the committee wishes to have.

WTP

The committee continued conversation relating to the WTP. TWC members expressed concern that the entire WTP operation is not transparent to outsiders, and major topics like integration, erosion/corrosion, QA, and engaging WTP workers all need to be framed and addressed by the committee in the coming months. It was also noted that there has been an apparent lack of direct communication between DOE and Ecology concerning technical issues at the WTP, and the HAB could potentially work to comment on a systems plan to facilitate conversations between the agencies.

Double-Shell Tank (DST) Integrity Workshop

Dirk moved on with discussion pertaining to the DST workshop, noting that each tank at the Hanford Site is a unique case in and of itself. Some takeaway messages from the workshop included:

- AM, AP, and AW farms are in the best shape; AZ-102, SY-101, SY-102, and SY-103 are in questionable shape; AZ-101 and AY-102 are in bad shape; AY-102 has failed.
- There is some data suggesting that the second wall of AY-102 has failed.
- There is uncertainty relating to the effects that gamma radiation have on concrete (especially wet concrete).
- A to-be-released report will outline why the tanks have leaked and why no one expected it to happen.

HAB Assessment

Keith Klein, Longenecker & Associates, Inc., was introduced to the committee. Keith is working with DOE to help the agency better respond to HAB advice; he thanked the TWC for allowing him to observe the proceedings.

* Attachment 1: Transcribed Flipchart Notes

Committee Business

*Update 3-Month Work Plan ***

The committee updated its 3-Month Work Plan and will not request a meeting in June. Topics to be considered in the coming months include:

- A discussion with DOE-ORP Manager Kevin Smith concerning HAB Advice #271 Leaking Tanks and its usefulness (dependent on manager schedule availability).
- WTP Integration (a topic which needs to be framed appropriately and balanced with the work of RAP), including the idea of engaging the workforce and coordinating operations between Bechtel, contractors, and workers. This topic will require substantial advance issue manager framing work.
- AY102 Pumping Plan briefing, highlighting the associated challenges and dangers.
- DST integrity, including IM report-out concerning the state of the tanks.

*June Potential Meeting Topics Table**

The TWC will not meet in June. IMs are to prepare for a report-out for the June committee call on their work to-date for framing August topics.

*Identify FY2016 Budget Priorities**

Ed Revell led the discussion to identify TWC-related FY2016 budget priorities. Priorities from the discussion will be brought forward to the Budgets and Contracts Committee (BCC) as BCC develops draft FY2016 budget advice for the June Board meeting. Ed shared some budgetary perspectives from the previous day's RAP committee meeting. These perspectives included the dangers of prioritizing Hanford Site issues and the importance of passing along HAB values as opposed to specific, substantive budgetary goals.

The TWC identified several special areas of concern pertaining to the FY2016 budget:

- The resolution of WTP technical issues
- Constructing additional tank space
- Pumping AY-102 and T-111

* Attachment 1: Transcribed Flipchart Notes

* Attachment 3: Hanford Advisory Board FY2014 Work Plan with facilitator notes regarding the status of each topic (draft)

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In addition to focusing on HAB values for budget advice, the committee also recommended that the HAB refer to past advice to capture the identified substantive ideas.

Identify Potential Topics for the Executive Issues Committee (EIC) Leadership Retreat

The committee identified several potential topics for the EIC to discuss at the annual Leadership Retreat, as well as potential topics for the HAB FY2015 Work Plan:

- The impacts of ongoing litigation on the HAB's ability to function effectively
- Agency input on FY 2015 work plan and retreat
- Term limits for HAB members
- Initiative to seek volunteers to synthesize each committee's volume of advice

*Mid-Course Work Assessment**

The committee visited the Hanford Advisory Board FY2014 Work Plan to assess their progress and efforts. Hillary Johnson, EnviroIssues, will add additional highlights to the document (e.g. fruitful committee discussions, presentations, etc.) rather than just identifying at which level the topic had been addressed, and redistribute it to committee members via email. The committee noted that they had worked to address nearly all of the topics on their schedule.

Attachments

Attachment 1: Transcribed Flip Chart Notes

Attachment 2: Tank Waste Committee 3-Month Work Plan

Attachment 3: Hanford Advisory Board FY2014 Work Plan with facilitator notes regarding the status of each topic (draft)

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Attendees

Board members and alternates

David Bernhard	Steve Hudson	Gerald Pollet
Al Boldt	Pam Larsen	Ed Revell
Tom Carpenter	Susan Leckband	Dave Rowland (phone)
Shelley Cimon	Jeff Luke	Richard Smith
Dirk Dunning	Liz Mattson (phone)	Bob Suyama
Barbara Harper (phone)	Kristen McNall	Margery Swint
Rebecca Holland	Melanie Myers (phone)	
John Howieson	Maynard Plahuta	

Others

Kim Ballinger, DOE-RL	Dieter Bohrmann, Ecology	Alex Nazarali, CTUIR
Kristen Skopek, DOE-RL	Dan McDonald, Ecology	Rodney Skeen, CTUIR (phone)
William Hamel, DOE-ORP	Gail Laws, WDOH	Sharon Braswell, MSA
Erik Olds, DOE-ORP	Todd Nelson, Bechtel	Keith Klein, Longenecker & Associates, Inc.
	Robert Peterson, PNNL	Hillary Johnson, EnviroIssues
		Ryan Orth, EnviroIssues
		Brett Watson, EnviroIssues
		Mike Schmidt