

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
TANK WASTE COMMITTEE**

*August 7, 2012
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. The committee approved the May 9 and May 10 meeting summaries with minor edits for clarity and readability.

Susan Hayman, EnviroIssues, reminded everyone that there will be a Committee of the Whole (COTW) meeting the following day in order to review the Site-Wide Permit draft advice. She encouraged all Hanford Advisory Board (Board or HAB) members and agency representatives to attend.

Suspect Water Intrusion in Hanford Single-Shell Tanks*

Agency briefing

Jeremy Johnson, U.S. Department of Energy–Office of River Protection (DOE-ORP), gave a presentation on possible water intrusion of the single-shell tanks (SSTs) (Attachment 2). He also supplied a handout illustrating the 21 tanks with the highest rates of possible water intrusion (Attachment 3). Tanks T-102 and T-112 are not included because those tanks are above interim stabilization criteria and are not showing signs of increase. Jeremy noted that the somewhat erratic readings might indicate an instrumentation issue rather than a true increasing trend, although some tanks do appear to be trending upwards over a significant timeframe.

Regulator perspective

Nancy Uziemblo, Washington State Department of Ecology (Ecology), said Ecology has been following the water intrusion issue and is reviewing data with DOE. Ecology agrees that it is time to examine the tanks to determine what might be causing the potential water intrusion, especially since it can be done in conjunction with SST integration planned for next year. A priority for Ecology is to remove waste as soon as possible from all SSTs. Nancy added that the new investigation may allow them to identify the best treatment technology.

Nancy said that she hopes DOE will inform Ecology about issues like this in a more timely manner. She said it is still early in the prioritization process and at least 12 tanks will be examined next year.

Committee Questions and Response

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

Q: What qualifies a tank as a leaker? Principally, tanks that leak would be considered leakers. If DOE is also concerned about the structural integrity of tanks there might be additional classifications for leakers.

R: [DOE] Historically, tanks that are considered leakers have material moving through the liner.

Q: If the volume in the tank is trending upward, why are those tanks classified as being sound? Why aren't they labeled as a suspected leaker?

R: [DOE] Tanks are classified as leakers depending on the integrity of the liner. Historically, intrusion is seen to come from above the dome or through the still liner. DOE does not know for sure at this point where the leakage might be coming from, but it does not generally occur through a lower liner.

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Q: One element not often recognized is that tanks are 20-30% caustic by weight. Tanks will naturally pull moisture and carbon dioxide out of the air if there is air flowing through the tanks. The charts appear to show annual oscillations where there are changes in the atmospheric moisture level. Is anyone investigating this phenomenon? Clearly, some tanks have more moisture coming in than could be accounted for by atmospheric effects.

R: [DOE] DOE is not specifically examining whether moisture from the atmosphere is causing the increased levels, although there has been some speculation that this is occurring.

C: A report is issued every month on SST and double-shell tank (DST) status. Over the last year of reports, there is no information on possible water intrusion.

R: [DOE] Since DOE does not know whether the increasing water volume is a trend or not, that information has not been updated in the volumes. If there truly is a trend of increasing water volumes, DOE will update the information.

Q: DOE's plan seems to be to gather more information on the 12 specific tanks identified and then verify whether there is intrusion or not. What is DOE's plan after obtaining the data?

R: [DOE] DOE's next steps are highly dependent on the data that will be obtained. DOE will take the appropriate action if there is active intrusion in the tanks, but that action has yet to be determined and DOE is unsure of the outcome at this point. Actions to stop intrusion may affect how retrieval is prioritized.

Q: Why are 12 tanks being investigated instead of all of them?

R: [DOE] DOE chose those 12 tanks to further investigate because that is the number that can feasibly be examined with the resources available.

Q: A Washington River Protection Solutions (WRPS) report showed pre- and post-pictures of the tanks that illustrate increases in the liquid volume that can be seen through observation alone. It appears from previous discussions that the tanks are not sealed very well. How could penetration from the top of the tank seals be reduced?

R: [DOE] DOE has already completed the work of sealing pits from above. Water intrusion is likely not a result of ineffective seals above the tanks. Intrusion prevention above-grade would require extensive additional work.

Q: How did DOE select which 12 tanks to inspect given the limited resources?

R: [DOE] DOE considered a number of factors. The tanks to be inspected this year were prioritized based on the possibility of having real intrusion and a need to validate whether that is the case or not. DOE examined the rate of increase and if a tank was assumed to have leaked in the past or not. Past leakers are given higher priority for investigation.

Q: What does Ecology think about the decision to only inspect 12 tanks?

R: [Ecology] Ecology would like to see all 149 tanks inspected. Ecology is trying to determine priorities with DOE. If there does appear to be an intrusion trend, Ecology may ask that more tanks to be inspected. There are time constraints and it is important to do the best possible work using the available resources.

Q: Why is DOE still using ENRAF (Enraf-Nonius Series 854) when there are likely better technologies that could be used?

R: [DOE] DOE believes ENRAF is the best technology currently available. Many tanks were recently upgraded under the American Recovery and Reinvestment Act to incorporate ENRAF monitoring. The technology may need to be re-evaluated if the investigations do not show any evidence of intrusion while ENRAF is indicating there is intrusion.

Q: Can DOE provide some clarification on SST ventilation? Any moisture in the air enters the tank when air pressure drops inside the tanks. That is one route for moisture to enter the tanks and a potential area for action if this source of moisture is a serious issue. There could be a dry air system installed that would only allow dry air to enter the tanks.

R: [DOE] Tanks are passively ventilated and only use active ventilation during retrievals.

Q: The presentation seems to indicate that DOE knew there was a history of water intrusion dating back as far as the 1980's. Is that really the case?

R: [DOE] There were a number of reports that identified water coming into the tanks as an issue.

C: Due to SST leaks there are dry wells around most or all of the tanks. There was a discussion recently that the dry wells have liquid in them; in some cases the wells contain liquid all the way to surface. The question is why the dry wells aren't dry and where the liquid is originating from. There have been discussions about whether dry wells can be extended and a companion question is whether the water or waste can go sideways.

R: [DOE] Historically, dry wells can be filled with water when caps are dislodged or broken. There are methods to pump the wells.

C: Given the apparent water level increase in the tanks, it would be interesting to investigate if the same thing is occurring in the dry wells. If the dry wells are also experiencing water intrusion, there might be some generic phenomena occurring beyond any DOE activities.

Q: There are several tanks in C Farm that have suspected intrusion. Is there an opportunity once the performance analysis (PA) returns that this issue could be examined through the C Farm to combine data and get a better understanding of what is occurring? There are a lot of assumptions being made.

R: [DOE] The PA might not be the best avenue for determining why water might be intruding, but it would be good to include the issue in the PA.

Q: Can a heater be used to promote evaporation?

R: [DOE] DOE has used heaters for evaporation, such as at S-102. That tank was interim stabilized using a ventilation system.

Q: What is the risk associated with the tanks that are termed leakers? Has there been an investigation of the possible consequences?

R: [DOE] The purpose of tank stabilization in the past was to remove waste to alleviate risks of releasing more waste into the environment. If a tank is known to have leaked in the past, there is a higher risk of increasing liquid levels. DOE has been working with the SST Integrity Group to examine the subset of tanks that are not necessarily assumed leakers but likely did leak because of breaches in the liner.

C: DOE should have one or two physical chemists examine the intrusion issue since it is not just occurring in one tank; the issue is present in lots of tanks. There is enough data to allow some work to begin, although it is also reasonable to continue analyzing the situation.

The committee decided to keep tracking this water intrusion issue as more information becomes available and will request another briefing from DOE in three to six months. DOE said the full set of investigation results will probably not be available until August 2013, although there will probably be preliminary results for some of the tanks that can be shared with TWC in the interim.

Progress on Technical Issues at the Waste Treatment and Immobilization Plant*

Agency briefing

Rob Gilbert, DOE-ORP, introduced himself as the Program Manager for Start-Up Operations at the Waste Treatment and Immobilization Plant (WTP). He provided an update on the technical issues at WTP (Attachment 4).

Regulator perspective

Dan McDonald, Ecology, said he would like TWC to understand the technical issues just described within the context of the larger WTP issues. He listed 14 items of particular concern: mixing in the pulse jet mixer (PJM) system, corrosion/erosion issues, the mixing of fluid to be transferred, actual process flow,

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

capital project additions, LSTT, flowsheet modifications, blending of the waste, waste feed delivery, recommendations, operations, funding alternatives, authorization basis and design issues, and other vulnerabilities. Dan suggested TWC consider all the issues in total. Dan said Rob provided good information about corrosion concerns with the PJMs, but there are also corrosion/erosion issues in other areas.

Dan said the classic design of WTP currently recognized will be 'fed' waste in a specific way. However, if the WTP is going to be fed under the other initiative being considered, there will be a whole new feed characterization and associated costs. There are large lifecycle issues for processing the waste, which include transporting waste to WTP. Dan said the logical deliverables will likely change given what is occurring. TWC has some time to decide on an approach for discussing the issues.

Dan said Ecology's real concern is the question of whether DOE can secure the funding necessary to advance its initiatives on a sensible timetable. If DOE has to build capital improvements, the agency will need to go through a critical decision process that includes funding and design. The entire process may take anywhere from five to seven years to complete.

Committee Questions and Response

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

Q: What are some of the problems that have been observed with the mixing test?

R: [DOE] DOE does not want any material to accumulate in the vessel from batch to batch. There is a certain concentration of contaminants in the batches and the concentrations in the heel should be equal to or less than that of the batches. The mixing tests attempt to demonstrate that material will not accumulate after repeated use.

Q: What will be the duration of these tests?

R: [DOE] DOE will need to conduct multi-batch tests in order to investigate questions such as the amount accumulation. Test plans still need to be written and reviewed by the Defense Nuclear Facilities Safety Board (DNFSB).

Q: What is the vessel diameter at full scale?

R: [DOE] The biggest vessels are about 40 feet in diameter. Testing is done on a 14 foot scale, which is full scale for some of the vessels.

Q: Can DOE provide some clarification on where the technical issues have an impact on low-activity waste (LAW)?

R: [DOE] There will not be an impact to LAW in terms of the technical issues DOE mentioned during the presentation.

Q: What would the impact be in terms of LAW if DOE does not complete pretreatment and requires another approach to feed LAW into the WTP in addition to managing the effluent from LAW vitrification?

R: [DOE] DOE has the cesium ion exchange capability and solid/liquid separation capability, which will take a few years to put into place. Those decisions are being discussed within DOE. At one point DOE went out for proposals to move forward with making LAW glass. The objective originally given was 2017, although since there has not been funding or further pretreatment capability in the tank farm that date is moving. There is no definite date right now.

Q: When is the decision process going to be made with LAW?

R: [DOE] 2014 is the approximate timeframe.

[Ecology] According to the Tri-Party Agreement (TPA), DOE is required to put together supplemental treatment by 2014 if the agency decides not to go with the originally stated treatment. The choice of which alternatives to consider needs to be made in 2014.

Q: Are Dr. Chu's team taking a separate high-level look or will their actions have bearing on these decisions?

R: [DOE] Dr. Chu's team is examining the black cell design concept and asking questions such as what might happen if the concept fails, how you might recover, and if there is something that could be done today to help restore intervention.

Q: Being able to scale up from 14 feet to 28 feet is not a given. There is a risk in taking this approach. Is DOE going to stress relay the vessel to determine how all the PJMs are suspended at the end of the pipe in terms of localized corrosion? There will be 40 years of rhythmic stress on the PJMs. A stress relay should be the first thing done.

R: [DOE] DOE will use qualified procedures and appropriate feeding of the wells.

C: There was an examination of feeding directly from LAW to the tank farms at least at a fairly high level. When considering the System Plan Rev. 6, the Board suggested that DOE consider expanding the capability to be able to feed the entire system, not just one system and running everything with a different matrix. DOE's response was that they had already completed that effort and were not going to do it again, which was not an accurate statement. There appears to be a high level of resistance to any possible change, such as suggested changes to the medium used for the glass matrix.

R: [DOE] DOE conducted a workshop examining alternatives such as direct feed, high level vitrification and tanks that cannot go through pretreatment. Ecology and DOE-Headquarters participated in the process along with DOE-ORP. The three agencies are evaluating the options right now and will be issuing a report that will be produced between Bechtel and DOE.

Q: The Washington State Department of Health issued a radioactive air emissions license, but has not issued an operations license. What are the new estimates for air emissions with the feed characterizations? Does the new baseline for air emissions that was supposed to be released this year account for the feed characteristics based on full plant operations?

R: [DOE] Air emission standards would be based on full operations.

[Ecology] At this point the community is running on the baseline emissions standards until a different alternative is decided upon.

Q: Under a best case scenario, what year will DOE start operation at WTP?

R: [DOE] WTP could be operational in the 2017 timeframe. However, there must be something to feed the plant. The current numbers for building LAW pretreatment capabilities are realistically in the 2018-2019 timeframe if funding is available soon.

[Ecology] The question of funding is huge. Everything is predicated on funds becoming available at a certain time. The current best case scenario is that the tank farms will be about 24-30 months behind WTP if LAW is the decision.

C: The greatest concern is the scaling for modeling non-Newtonian fluids. With all these issues, are there any impacts on schedule and cost? If LAW is fed directly and there is no pretreatment, what provisions are made for HLW?

R: [DOE] All of that is currently conceptual, as agreed to in discussions with the Nuclear Regulatory Commission (NRC). There needs to be a solid/liquid separation and then vitrification for consideration under LAW. The current plan is for a cesium ion exchange coupled with other technologies. The feed from LAW is expected to resemble the feed from WTP. Bechtel is developing methodologies for all of the approaches and testing will prove the viability of these approaches.

TWC will continue following WTP issues. The IMs will pursue a discussion of alternative glass forms and then bring that information back to the committee. The committee also noted that the seeming agency resistance to change might be a good topic for TWC to explore.

Committee Business*

Review the 2013 Priorities/Work Plan

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Susan H. said she worked with Dirk to fill in some of the empty fields for the 2013 HAB Priorities Table for topics pertaining to TWC (Attachment 5). She said this document is still in draft form and committee input would be appreciated.

C: The five leading topics given to TWC by DOE to address in 2013 continue to be brought up. The Board does not necessarily need to provide advice on all these topics, but the topics at least need to be addressed. By the end of the year, the Board should have a position paper or piece of advice to give to DOE on each of these topics under the Tank Waste heading.

C: It would be helpful to get better definition from the agencies on some of the topics under TWC.

C: A good starting point for the integration topics would be to have members of the integration team talk with TWC members about the issues they are dealing with.

R: [Ecology] The contractors set up an integration team and DOE is lagging a bit in setting up their own infrastructure support. A focus on infrastructure may not be the best way to understand integration. TWC could put in a request through DOE to start understanding the integration protocol. Ecology has requested DOE provide information on what their process looks like and is waiting to see this documentation. It is important to have a functional process flow through the tank farms and WTP. The System Plan might be relevant for considering the baseline, but it does not provide the functional look at integration that Ecology hopes to receive from DOE.

C: What would the agencies like the Board to comment on in terms of waste feed delivery?

R: [Ecology] The waste blend and feed needs to be appropriately treated and brought to LAW. Waste needs to be in the right configuration to meet the waste acceptance criteria throughout the entire waste stream. The interface control document might need to be redone if the contractor is re-directed to deliver waste to LAW. Once DOE has made their decision, it might be appropriate for HAB to request the associated documentation and potentially offer advice.

The committee further reviewed the Program of Work and added additional details on the policy level issue, relevant documents and other information currently available. Susan H. said this material is still in draft form and will be reviewed again during the September Board meeting. The agencies will further refine the table to clarify more of their expectations for the board.

Hanford Dangerous Waste Permit (Site-Wide Permit)*

Issue Manager introduction

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Vince Panesko, TWC Issue Manager (IM) for the Site-Wide Permit, said the Permit is regulatory driven by the Washington State Administrative Codes (WACs) that address hazardous wastes. The laws apply throughout the state; not just at the Hanford Site. Vince said it would be helpful for Ecology to clarify where they can and cannot make changes because the Permit must be structured by the codes. The DST unit is one of the better operable units because the Permit was set up to address the types of issues found in the tanks and there are more applicable conditions. There are other areas of the Hanford Site that have fewer applicable conditions.

Liz Mattson, co-lead IM for the Site-wide Permit, reminded people that the Board was asked by Ecology to comment on the Permit by unit and to comment on the conditions. She said Board advice of 19 pages is not unprecedented; the Board issued advice of that length for the Tank Closure and Waste Management (TC&WM) Environmental Impact Statement (EIS), which was a document half the length of the Site-Wide Permit.

Jean Vanni, co-lead IM, said there is also a background document that accompanies the advice, which will be attached based on Ecology's request to help better understand the thought process behind the advice points.

Susan H. provided an excerpt of the advice document pertaining to TWC issues (Attachment 6). She suggested the committee talk through the advice points to prepare for the COTW meeting the following day to further refine the draft advice.

Regulator perspective

Dan said Ecology has very general comments at this point. He suggested there are some areas where the Board could provide more references to the WAC in order to better support and verify the recommendations. The Board should also remember that Ecology does not have a contractor relationship with DOE or their contractors. Some of the advice points might be better vetted under other avenues, such as through the DOE contract conditions.

Cheryl Whalen, Ecology, said there is some flexibility in the WAC that can be used when writing the Permit. If there is an issue of great concern, Ecology can document that concern and go to a Hearings Board if necessary. She used the example of the SST unit where Ecology established a logical reason for why they asked for provisions not normally found in the WAC. Cheryl said the Board should provide a basis for any recommendations that are beyond what the WAC calls for. Ecology can write a condition that is not in the WAC as long as there is a basis.

Committee Questions and Response

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

C: The Board will consider adding the comments into the advice points, but it will be difficult to add all the notes back into the comments and will lengthen the advice substantially. Board consensus would also

be incredibly difficult to obtain on every single point that would be included if the Board took this approach.

C: The notes would have to be approved by the Board regardless of whether they are included in the comments or not if they are to be a Board product. Board members that disagree with points in the notes should be able to challenge and discuss those points.

R: Susan H. said the procedural aspects of the advice development can be discussed during the COTW meeting the following day.

C: It would be helpful if there was a way for the Board to suggest that the code be modified. There are conditions which are very unique to the Hanford Site and there is not a lot of code written that is applicable to the site.

R: [Ecology] The Board should address any issues they see with the WACs and Ecology will ensure the appropriate people receive these comments. Ecology added that it is very difficult to change the WAC. Vadose zone monitoring in particular is always an issue since the WACs do not address this issue.

C: The Board should consider what the appropriate level of detail is for the advice.

C: The Board feels that Ecology's requirements did not fully comply with the WAC in certain areas so the Board is specifically asking for greater compliance. DOE responded to the earlier Permit by telling Ecology they feel the Permit imposes excessively prescriptive or ambiguous conditions. Ecology has said their position is not ambiguous – something either fulfills or does not fulfill the conditions.

C: There appears to be a lot of opinion in the advice and the advice should be factual. The Board needs to be in agreement. The permitting world is very flexible and conditions can vary greatly. Decisions made today may not be appropriate in a few years. Ecology can consider options, but those options should not become the WAC or part of the Permit.

C: There seem to be two different approaches to the advice. Some people would like to offer traditional Board advice and others would like to see the comments included or a white paper that outlines additional considerations regarding the Permit. The Board could offer a few overarching advice points and then issue the comments document separate from the official advice.

C: Board members should trust the IMs who have done the work to put together the draft Permit advice. The many people working on the advice have extensive technical expertise and the experience to recognize the issues.

Susan H. made tracked changes to the TWC advice excerpts document, and will have this available for the COTW tomorrow. Susan H. reminded the committee that the COTW is not equivalent to a Board meeting. The COTW will hopefully come to agreement on potential advice that will be brought forward

to the September Board meeting for consensus in order for the advice to be adopted. She added that WTP and SST related issues seem to be priority points for TWC.

Public Workshop: Single-Shell Tank System Closure Unit – Hanford Dangerous Waste Permit*

Review of Ecology's Proposals and public involvement opportunities

Cheryl provided some background information on the Site-Wide Permit for Hanford's Single-Shell Tanks (Attachment 7). She noted that the associated risks could be used to recommend conditions beyond what is required in the WACs. Cheryl also provided an outline of the SST-Unit Permit (Attachment 8) and Ecology's baseball card for the SST System Closing Unit (Attachment 9).

Overview of high level issues from the HAB's perspective

John Howieson, IM for the SST Permit Unit, said that since the SSTs are far beyond their design life, he believes that the Permit should be used to mandate the detection of and amelioration of leaks. He said more tank failures should be anticipated and a schedule should be required for tank closure as required by the consent decree.

Committee Questions and Response

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

Draft Advice Points - SST Unit

The Board reviewed the draft Permit advice points in the SST Unit section. Revisions were made to clarify several points and delete redundant points.

There was some confusion about the advice point recommending a revision to Permit Condition V.4.G.2.b.1 (a). Does the Board believe the WAC is impractical or insufficient? One Board member noted that the point might have been meant to ask Ecology to include more specifics.

R: [Ecology] Ecology follows a specific approach because when the WAC changes, other elements change as well. Ecology does point to the TPA milestones and meets Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)/RCRA requirements for closure. The Permit can only address RCRA requirements. Ecology has received some comments about not incorporating the TPA into the Permit, but the TPA has a completely different regulatory basis.

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

C: Documents should be referenced in a way that if they are changed, the entire permit would not need to be changed.

R: [Ecology] Ecology did attempt to do that in most cases. The section on tank retrieval requirements expands on what is already in existence. Ecology added more clarifying information on what they want.

Cheryl asked about the advice point that states it is premature to include a landfill until there is a Demonstration of Impracticability. The requirements for impracticability do not allow a demonstration until the landfill is being closed. Ecology is unsure how to respond to the advice point since the Board appears to want the conditions to remain without landfill closure discussed. If clean closure is not possible as the Permit indicates, an Impracticability Demonstration would be required to begin landfill closure. Ecology never moves directly into a landfill determination.

C: Any paragraph that references a WAC should be deleted and instead have one sentence stating that Ecology should ensure the WACs are being followed. Ecology is responsible for ensuring DOE complies with the WAC and the Site-wide Permit; not the Board.

C: The one part of the advice that was good was the recommendation to build more tanks. The major contamination in the tanks has not been addressed over the past 20 years. WTP will not take care of the major waste and there is no money to address the issue.

Ecology offered comments on specific advice points, specifically areas where the Board could provide more evidence to back up their recommendation or clarify what the Board is asking Ecology to do.

Note: Since no general members of the public attended this workshop, HAB members returned to other topics of the draft Site-Wide Permit advice beyond the single-shell tanks. This discussion is captured below.

C: The Permit includes references to DOE emergency planning, but there does not appear to be a lot of qualification events included that need to be planned for and have emergency plans for.

C: Emergency planning might be better suited to advice on contractual agreements than on the Site-Wide Permit. If the system is designed in a way that creates a specific hazard, there could be a re-design of the layout so the hazard cannot occur.

C: One committee member said they would have difficulty supporting the advice point on emergency planning because it does not appear to fit in the Permit advice. The Board should avoid offering advice on actions that are already required, like identifying chemical and radiological hazards. There are pages of comments recommending actions that are already being taken.

C: Items noted in the advice are not in the Permit. DOE will often say that if some action is not explicitly laid out in the Permit, it will not be supported.

C: The Board should consider whether the language in the advice would aid Ecology or whether it is neutral or negative. Dan may be able to address the question during the COTW meeting.

R: [Ecology] Ecology's response would likely be that the item is covered in the conditions or will be covered in the operating conditions. Ecology should be able to address all the points and would owe an answer to the Board if one cannot be found in the Permit.

C: The WTP is mostly designed and mostly built. Most of the 28 DSTs are already full and it is not necessary to wait 10 years for an analysis.

R: [Ecology] The Site-wide Permit will not be pointing to a safety analysis. RCRA requires having a robust design for a new facility that would meet normal process hazards and normal natural phenomena. Hazards analysis is built into the design process.

C: There is a linear process for building a plant where people examine how to address the potential hazards without considering a re-design that would eliminate the potential for that hazard.

C: The policy issue is whether the Site-wide Permit should be allowed to address the design of a brand new facility. It should be possible to ask under RCRA whether the design is robust enough to maintain control of hazardous material.

R: [Ecology] New facilities are required to show the design is robust enough to handle hazardous material. The Permit does address design.

C: This draft advice was written under the assumption that the Board values the Site-wide Permit as a tool for regulating cleanup at the Hanford Site and that the conditions are useful. The Board needs to ask whether this truly is the proper premise and if any Board members disagree.

C: Under RCRA, any hazardous chemicals brought into a building or disposed of must be tracked and managed. The same requirements apply to buildings from construction through disposal. The Permit should cover building design through operation.

R: [Ecology] WTP is still in the design phase and is not covered under an operational permit yet. The requirements will be different once it is operational. The permit for WTP continues to be issued for public comment because there have been major changes to the design.

Q: Why does the Board believe the Permit should include some of the items that would be included in the waste acceptance criteria or other Hanford Site documents? If there is a basis or regulation, why not put everything in there?

C: The permit is issued in order to give a permittee some direction on how to operate. There are different interpretations. Ecology can write a permit condition and the Board can respond by saying they do not believe the details provided meet the WAC.

C: The advice should correspond to HAB values. There seems to be disagreement about the redundancy of cleanup regulations. It would be helpful to have a roundtable discussion to further understanding of where the Board stands on regulation. The Board is asked to offer advice on a framework for how the Hanford Site should be regulated; the advice could be that the Board does not think the Site-wide Permit is useful.

C: The draft advice writers did attempt to incorporate HAB values into the document. The Board supports Hanford through CERCLA and the TPA. Since the Permit is linked to the TPA, it must be considered part of the Board values because of the RCRA/CERCLA integration.

C: Where does the permit for WTP align with the current permitting process? Perhaps there should be more information on the operations of WTP because of the separate permitting process and the construction aspect. Is the WTP permit further along than the current permit that is out for review?

R: [Ecology] The WTP permit is not significantly different than the version out for review. Permit modifications are required before moving forward at each step, requiring daily modifications to keep pace with all the activity. Big changes to the permit are always made available for public review.

C: The Board was asked to comment on the portion of the WTP Permit Unit that was frozen because the entire Permit is only available for review every ten years. The WTP Permit Unit modifications can be looked at separately.

Closing Remarks and Adjourn*

TWC requested to have an extended call in September to review the issue table and develop the six month work plan since there will not be any September committee meetings.

Dirk reminded the committee that there will be an SST Public Hearing following the TWC meeting at the Richland library where public comments for the record can be made. Cheryl added that there will also be public hearings in September and October.

Attachments

Attachment 1: Transcribed Flip Chart Notes

Attachment 2: Suspected Water Intrusion in Hanford Single-Shell Tanks

Attachment 3: "21" Tanks from RPP-RPT-50799, Rv. 0 (without T-102 and T-112)

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

- Attachment 4: Progress of Technical Issues at WTP
- Attachment 5: Hanford Advisory Board 2013 Program of Work
- Attachment 6: TWC Experts for August 7 Committee Meeting
- Attachment 7: Washington State's Dangerous Waste Permit for Hanford's Single-Shell Tanks
- Attachment 8: SST-Unit Permit Outline
- Attachment 9: Single-Shell Tank System Closing Unit #4

Attendees

HAB Members and Alternates

David Bernhard	Steve Hudson	Maynard Plahuta
Al Boldt	Pam Larsen	David Rowland
Dirk Dunning	Liz Mattson	Dick Smith
Laura Hanses	Vince Panesko	Margery Swint
John Howieson	Jerry Peltier	Jean Vanni

Others

Mary Burandt, DOE-ORP	Dieter Bohrmann, Ecology	Mike Connelly, CHPRC
Jeremy Johnson, DOE-ORP	Jared Mathey, Ecology	Nicole Addington, EnviroIssues
Elizabeth Lutz, DOE-ORP	Dan McDonald, Ecology	Susan Hayman, EnviroIssues
Tiffany Nguyen, DOE-RL	Maria Skovsko, Ecology	Sharon Braswell, MSA
Pavi Seidbr, DOE-RL	Nancy Uziemblo, Ecology	Annette Carey, Tri-City Harold (phone)
	Cheryl Whalen, Ecology	Gail Laws, Washington DOH
		John Britton, WRPS
		Susan Eberlein, WRPS
		Dan Glaser, WRPS
		David Little, WRPS
		Jan Schneider, WTP
		Carol Slack, WRPS
		Dennis Washenfelder, WRPS