

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

September 6-7, 2012

Kennewick, WA

Topics in This Meeting Summary

Executive Summary 1
Welcome, Introductions, and Announcements 3
Tri-Party Agreement Agencies – Annual Reports 4
Draft Letter: 200-UP-1 Proposed Plan Rev. 0 8
Draft Advice: Integrated Safety Management 9
Draft Advice: Hanford Facility Dangerous Waste Permit 10
Draft Advice: 2013 State of the Site Meetings 12
Term Limits Letter/Advice 12
Update on 2013 HAB Membership Package 16
Update on the AY-102 Tank..... 16
Committee Reports 18
Board Business..... 20
Public Comment..... 22
Closing Remarks 23
Attachments 23
Attendees 24

This is only a summary of issues and actions in this meeting. It may not fully represent the ideas discussed or opinions given. Examination of this document cannot equal or replace attendance and public participation.

Executive Summary

Hanford Advisory Board (HAB or Board) action

The Board adopted four pieces of advice and one letter concerning:

- Integrated Safety Management (advice)
- Hanford Facility Dangerous Waste Permit (advice)
- 2013 State of the Site Meetings (advice)
- Hanford Advisory Board Term Limits (advice)
- 200-UP-1 Proposed Plan Rev. 0 (letter).

Board business

The Board will hold committee meetings and calls in October. The Board:

- Confirmed 2013 Priorities
- Confirmed 2013 Calendar
- Provided the status of Board Chair Nominations
- Identified preliminary November Board meeting topics.

Presentations and updates:

The Board heard and discussed presentation and updates on the following topic areas:

- Tri-Party Agreement Agencies – Annual Reports
- Update on the AY-102 Tank
- 2013 HAB Membership Package
- 2012 Board Accomplishments
- HAB Committee reports.

Public comment

Public comment was provided.

HANFORD ADVISORY BOARD
September 6-7, 2012 Kennewick, WA

Susan Leckband, League of Women Voters and Board chair, called the meeting of the Hanford Advisory Board (HAB or Board) to order. The meeting was open to the public and offered periodic opportunities for public comment.

Board members in attendance are listed at the end of this summary, as are agency and contractor representatives and members of the public.

Three seats were not represented: Franklin and Grant Counties (Local Government), Hanford Atomic Metal Trades Council (Hanford Work Force), and the University of Washington (University).

The Board meeting was audio-recorded.

Welcome, Introductions, and Announcements

Susan Leckband welcomed everyone and reviewed the meeting objectives and agenda. Susan acknowledged and welcomed four new Board members:

- Ed Revell, Tri-Cities Development Council (Local Business), alternate
- Rebecca Rubenstrunk, Public-at-Large, alternate
- Melanie Meyers-Magnuson, Non-Union, Non-Management Employees (Hanford Work Force), alternate
- Mark Reavis, Central Washington Building Trades Council (Hanford Work Force), member

Dana Bryson, U.S. Department of Energy Richland Operations Office (DOE-RL) and Deputy Designated Federal Officer for the Board, reminded members that the Board is chartered under the Federal Advisory Committee Act (FACA) and that this meeting was called and will be conducted consistent with the Act. Dana thanked HAB members for volunteering their time.

Susan Hayman, EnviroIssues, reminded those on the phone that GoToMeeting was up and running, and reviewed Board ground rules. She reported that the June meeting summary was certified within 45 days and posted to the Hanford website.

Susan Hayman also explained that two letters of appreciation were prepared and proposed to send under Susan Leckband's signature: 1) To the Department of Energy-Richland Operations Office's (DOE-RL) for their response to HAB Advice #242 – Manhattan Project and Cold War Artifacts; 2) To DOE-RL and the U.S. Environmental Protection Agency (EPA) regarding the opening of the 200 West Pump & Treat Facility. There were no objections from the Board, so the letters will be sent as written.

Tri-Party Agreement Agencies – Annual Reports

U.S. Department of Energy, Office of River Protection (DOE-ORP)

Stacy Charbonneau, DOE-Office of River Protection (DOE-ORP), thanked the Board for all their advice over the last year. Stacy acknowledged that DOE-ORP would be providing a response to the Board's advice on safety culture soon. She noted that the Tank Closure and Waste Management (TC&WM) Final Environmental Impact Statement (FEIS) is planned to be released in December. Stacy then presented the annual report for DOE-ORP (Attachment 1). In addition to her presentation, Stacy specifically noted:

- Identifying and testing different supplemental tank waste removal and treatment technologies will be important in making tank waste removal decisions.
- DOE-ORP recognizes the limited on-site capacity to handle tank waste.
- The C-104 tank retrieval was completed 8 months ahead of schedule and under budget.
- The results of a speak-up survey looking at safety culture will be released in September.
- A safety culture self assessment will be conducted in February 2013.

U.S. Department of Energy Richland Operations Office (DOE-RL)

Matt McCormick, DOE-RL, presented the annual report for DOE-RL (Attachment 2). In addition to his presentation, Matt specifically noted:

- The Hanford Site Cleanup Completion Framework was recently updated and is currently out for public review.
- The Employee Concerns Program has provided advice leading to important worker safety improvements.
- A new Beryllium Program was implemented in July to improve worker safety and protection.
- DOE-RL continued to reduce groundwater and river corridor contamination in 2012 by working on: D/H Reactor Area, N Reactor Area, KW Reactor Area, KE Reactor Area, B/C Waste Sites, 300 Area, 324 Building, 618-10 Burial Ground, and the 618-11 Burial Ground.
- Five pump and treat facilities kept 100 kilograms of chromium from reaching the river in 2012.
- In the Central Plateau Inner Area, DOE-RL repositioned cesium and strontium capsules in the Waste Encapsulation and Storage Facility. This was done to increase capsule integrity from four days to a month in case of a facility failure caused by a beyond design event.

U.S. Environmental Protection Agency (EPA)

Dennis Faulk, Environmental Protection Agency (EPA), noted that it has been a tough year at the Hanford site. However, there have been major accomplishments, including the building of the 200 West Pump & Treat Facility. In addition to his presentation (Attachment 3), Dennis specifically noted:

- An early warning report, which identified issues with the handling of asbestos, has led to corrective actions.
- Current negotiations between the TPA agencies on delaying milestones are necessary because of budget cuts and increases in cleanup needs.
- EPA's Hanford project office is working on four new projects within the region, which may result in local EPA staff being less involved with HAB.
- EPA is working with the other TPA agencies to revise the Community Relations Plan (Hanford Public Involvement Plan). The plan is expected to be approved before the end of the calendar year.
- The River Corridor Workshops, while difficult to plan, resulted in rich dialogue and discussion despite relatively low attendance.
- Efforts continue to clean up chromium, including the large dig site in the B/C Area.

Washington State Department of Ecology (Ecology)

Polly Zehm, Washington State Department of Ecology (Ecology), thanked the HAB and Susan Leckband for their work over the past year. Polly presented the annual report for Ecology (Attachment 4). In addition to her presentation, Polly specifically noted:

- The Hanford Facility Dangerous Waste Permit (Site-Wide Permit) will never be a perfect permit given the complexity of the Hanford Site, but the permit's goals are to ensure compliance and environmental protection.
- Board advice has helped Ecology identify priorities and important issues in the Hanford cleanup.

Board 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. At what point can we discuss the possibility of developing a waste receiving and mixing facility between the tank farms and the Waste Treatment Plant (WTP)?

R. There are some technical issues that need to be discussed if a preconditioning facility were to be used in front of the WTP. Indicators show that a preconditioning facility would improve

efficiency and capacity at the WTP. DOE-ORP is preparing a draft justification letter for why a preconditioning facility is important and will be sending it to DOE Headquarters.

Q. It is important that the public have confidence in the Hanford cleanup program. DOE-ORP did not announce the possibility of a Double Shell Tank (DST) leakage. Instead, a citizens group broke the news, reducing the cleanup's credibility. Did DOE-ORP have internal discussions about how and when to go public with the information about a possible leaking DST?

R. DOE-ORP notified Ecology about finding unknown material in the annulus of DST AY-102. That tank has had a history of water infiltration in the annulus. DOE-ORP felt that more information was needed before going public about the possible leak. Currently, DOE-ORP is working hard to identify what the unknown material is and where it is coming from.

C. It is important to educate the public on the biology of chromium if they are to understand why chromium standards are so conservative.

R. The aquatic standard for chromium levels is stricter than drinking water standards for chromium. This is because studies indicate chromium reduces juvenile salmon's ability to uptake oxygen in their gills. DOR-RL has not done a lot of outreach on chromium standards, but they could.

Q. What is the source of the chromium plume in the BC Area?

R. Chromium was found in the BC Area and it is moving over a large area, which is why the excavation is getting so large. The chromium in the BC Area is from a Head House where a spill occurred. The D and H Areas are associated with the Water Treatment Facility.

Q. What is the progress on the 300 Area cleanup?

R. The 324 building is a difficult cleanup challenge. The nuclear safety issues are going to take time to consider and work out. The TPA agencies are discussing the 300 Area in the current negotiations, the results of which will be shared in October.

C. The River and Plateau Committee interacted frequently with Ecology staff in HAB's review of the Site-Wide Permit. Ecology was very helpful and responsive to HAB questions their support has been appreciated.

Q. Can you discuss the recent letter to DOE from Washington State leadership over concerns in meeting the consent decree?

R. Washington's leadership thought it was important to keep the pressure on continually moving forward with the Hanford cleanup. They understand that things come up which make meeting milestones difficult, but that it is important for DOE to strive and meet the set milestones.

Q. Do any of Ecology's outreach efforts focus on the health effects of low dose radiation and chemicals?

R. Most of Ecology's audiences and expertise are not focused on discussing health impacts of low dose radiation. Ecology is working to continue offering public participation grants so organizations can do outreach around topics of their choice, which could include the health impacts of low dose radiation and chemicals.

Q. Why is DOE-RL not using the successful techniques applied in the River Corridor to remove chromium in the Central Plateau?

R. There is chromium contaminated groundwater in the Central Plateau near S Plant and REDOX Canyon. However, the 200 Area Pump and Treat Facility does treat and remove chromium from groundwater. We have not found chromium contamination in soil sites near N, C, H, D, R, and F Reactors. There is concern about the K Reactor because it had a leak. DOE-RL is planning to deal with that contamination by putting the reactor in interim safe storage and then coming back to remove the material.

Q. There is concern with the process used for closing tanks and knowing whether the substance left behind is safe or not. In the case of the C-104 closure, have you sampled the residue left behind?

R. At the completion of retrieval actions, DOR-ORP has the ability to sample the bottom of the tank. The off riser sampling system can take samples in ten different locations at the bottom of a tank. The samples are analyzed and the results are reported to Ecology. DOE-ORP plans to conduct a performance analysis for the entire C Area as a necessary step in the tank closure process. This analysis will evaluate what material is left and the impacts that will have on the environment. The results of sampling are available as data reports.

Q. There is concern about the Single Shell Tank (SST) removal schedule. Now that there are some empty tanks in the C Farm, has any analysis been done on tank corrosion to determine accurately the life expectancy of those tanks?

R. DOE-ORP considered analyzing the empty SSTs in C Farm but there is no current workplan to do so.

Q. What are you actually expecting as a 2013 budget?

R. DOE expects there will be a continuing resolution, which will provide a budget on par with the 2012 budget.

C. The HAB appreciates DOE-RL's openness in allowing the Board to comment on the proposed plan and RI/FS for upcoming River Corridor RODs. This shows the important role of bringing a public policy voice into technical decisions. As the process moves into post-ROD implementation, it will be important to identify how the Board and the public will learn about and participate in cleanup implementation.

Q. What strategies are in place to mitigate spreading contamination from hosing down buildings with large quantities of water?

R. DOE-RL has implemented better water controls and collection methods, including troughs. After demolition, DOE-RL also analyzed samples and confirmed that water hosing did not spread contamination.

C. There are concerns with the construction management at the Waste Treatment Plant. There have been instances of miscommunication leading to workers building structures, and then needing to tear them down so equipment could access the site.

R. There are facility representatives and sub-contractors on site each day providing oversight. DOE-ORP will pass on this feedback to the project managers.

C. The HAB appreciates the recent transparency about the pipeline break this week in the 300 Area. Improved communication and openness is important because it reduces fear and concern that things are going on that we don't know about.

C. Tank waste mixing is one of the most important issues that need to be addressed. Yet, the funding for tank waste mixing is delayed and there doesn't appear to be any funding schedule to ensure this top priority is being worked on.

R. The Defense Board Recommendation 20-2 questioned the ability of the WTP to adequately mix tank waste throughout the pre-treatment process. DOE developed an implementation plan for a Large Scale Integrated Testing Program to review mixing and sampling at the WTP and Tank Farms. This work is currently funded and moving forward. Some issues have occurred causing DOE to revise the implementation plan. Once the plan is revised, DOE will be able to provide an updated schedule.

Draft Letter: 200-UP-1 Proposed Plan Rev. 0

Introduction of letter

Dale Engstrom, Oregon Department of Energy (ODOE), explained that the draft letter thanks the TPA agencies for their presentation to the River and Plateau (RAP) committee on the 200-UP-1 Remedial Investigation/Feasibility Study, Proposed Plan, and Interim ROD. Dale noted the letter highlights the added capacity built into the 200-West Pump-and-Treat facility that will allow for treatment to include groundwater in 200-UP-1. Additionally, RAP appreciated DOE releasing an Interim ROD instead of a Final ROD and agrees with the agencies choice of Alternative Three in the Proposed Plan.

Agency perspectives

John Morse, DOE-RL, said that DOE-RL appreciates the letter. John explained that DOE-RL is moving forward with activities and the Interim ROD will be released by the end of the fiscal year. They are also moving forward with the remedial design for the facility.

Dennis Faulk noted that HAB's comments influenced the decision to create an Interim ROD. Dennis acknowledged that there is still work to be done to identify the right technology for dealing with remaining issues, such as Iodine-129 (I-129).

Board discussion

The Board expressed their support for the 200-UP-1 letter. The letter was adopted.

Draft Advice: Integrated Safety Management

Introduction of advice

Mike Korenko, Public-at-Large and Health, Safety, and Environmental Protection Committee (HSEP) Chair, said that the Board has been contemplating advice on Integrated Safety Management (ISM) for over three years. Mike explained that ISM looks to identify risks, how best to mitigate those risks, and then how to implement those mitigation strategies. Mike commended DOE for their work on ISM and indicated that this advice is to push for continual improvement of these programs. He emphasized that ISM works at all levels of a system, from a facility manager to the employee level. The advice focuses on three categories: 1) interface, 2) process, and 3) behaviors. Mike lastly highlighted the involvement of DOE in providing comments and thoughts on the draft advice.

Agency perspectives

Brian Harkins, DOE-ORP, welcomed the proposed advice and said that DOE-ORP will evaluate and use the advice recommendations to improve the ISM programs. Brian noted DOE-ORP has implemented and continues to tweak the ISM programs. He said DOE-ORP is committed to ISM.

Ed Parsons, DOE-RL, thanked the HSEP Committee for allowing him the opportunity to work with them on this advice. Ed said that he came away from the process with a new understanding and hope for continued involvement in the future. He also indicated the DOE-RL is committed to ISM and values the Board's advice.

Board discussion

The following are the key points noted during the Board discussion:

- The Board discussed the use of metrics to demonstrate safety and measure the effectiveness of ISM programs. It was noted that HSEP was impressed with DOE's current metrics.
- The Board stressed the importance of behavior, communication, and values in safety culture and how these can be incorporated into ISM programs.
- DOE-RL agreed with the importance of incorporating behavior into the ISM system and noted the challenge of identifying how to do so.

After minor changes to language and content, the Board adopted the advice.

Draft Advice: Hanford Facility Dangerous Waste Permit

Introduction of advice

Susan Leckband explained that Ecology asked the Board to review and provide advice on the Hanford Facility Dangerous Waste Permit (Site-Wide Permit). Susan acknowledged the amount of work invested in drafting this advice and noted that the draft advice was brought to the Board by consensus of a Committee of the Whole (COTW).

Liz Mattson, Hanford Challenge, highlighted that the COTW started with 20 pages of advice and condensed it down to five pages of general advice bullets rather than specific unit and site advice.

Susan Hayman suggested that the Board's first focus should be to review the advice rather than Addendums 1 and 2. Susan Leckband added that the addendums do not need to be adopted by consensus and that they represent the discussions that led to the advice bullets. John Howison, Physicians for Social Responsibility, noted that Ecology was included in the Board's discussions and assisted in developing advice points.

Agency perspectives

Ron Skinnerland, Ecology, thanked the Board for their hard work on the advice and the process they used to draft it. Ron acknowledged that Ecology plans to thoroughly review all the advice and comments brought forward by the Board on the Site-Wide Permit. Process-wise, he noted that the public comment period on the permit was extended by three weeks until October 22nd. During this time, two additional public meetings will be held, one in Portland and one in Seattle. Ecology plans to review all the advice and comments they receive from the public, prepare responses, and identify a path forward. Ron noted that the permit will be a living document and could be amended in the future.

Lori Hoffman, DOE-ORP, thanked the Board for completing such an in-depth review of the permit. Lori said DOE-ORP is also reviewing the permit and will submit comments to Ecology.

Steve Weil, DOE-RL, added that DOE-RL and DOE-ORP will combine their comments, along with those from contractors, to submit to Ecology.

Board discussion

The following are the key points noted during the Board discussion:

- Two Board members fundamentally opposed the advice moving forward. From their perspective, the advice views the draft Site-Wide Permit as a call for greater restrictions. However, many of the advice points are too restrictive and would be impossible to implement. Many of the advice points created redundancy or would create an undue burden on DOE and Ecology.
- It would be useful to review comments submitted by DOE on the Site-Wide Permit.

- Some Board members expressed that the permit cannot be adequately reviewed without an accompanying EIS. Given the likely environmental impact from actions identified in the permit, Ecology would need to complete an environmental review under Washington's State Environmental Policy Act (SEPA).
- A substantial amount of discussion concerned an advice bullet that would bar off-site waste from being disposed of at Hanford. One Board member said that Ecology does not have the authority to bar off-site waste (including waste from out of state), only DOE can. Another member said that barring off-site waste would lead other waste disposal sites to bar Hanford waste from their facilities. The Board agreed to revise the advice bullet to include Risk Budget Tool (RBT) language. The RBT language explains that as long as the Hanford's site risk budget exceeds standards, the existing waste capacity would be reserved for on-site waste before being used for off-site waste.
- There is a need to incorporate language asking Ecology to base performance standards on the most protective standards possible.
- There was discussion on whether to incorporate National Emissions Standards for Hazardous Air Pollutants (NESHAP) into the advice on ensuring effluent levels in stack exhaust meet human health exposure criteria at the point of emission. The Board could not reach consensus on the advice point and decided to remove it from the advice.
- The advice bullet requiring DOE to demonstrate the technical functionality of the WTP design was an additional layer that could delay the construction of the plant. It was pointed out that it is unlikely that there will ever be 100% agreement among engineers on whether a design is technically functional. The Board agreed to replace technically functional with regulatory compliant.
- Some members expressed concerns about the addendums to the advice. Respecting the work that was done in creating the advice and addendums, the Board decided to add clarifying language to the addendums. The language would state that the addendums are not Board advice and were not endorsed by the full Board.
 - Ecology clarified that they would not provide written responses for all the points discussed in the addendums. However, Ecology will review the addendums and consider them in revising the permit. If Board members provide the addendums as part of public comment to Ecology, then Ecology will provide written responses to the addendum points. Some Board members acknowledged that they were planning to submit the addendums in their public comments.

After some additional minor changes to language and content, the Board adopted the advice with the following members objecting the advice and agreeing to submit minority report: Jeffrey Luke, Non-Union, Non-Management Employees (Hanford Work Force) and Mark Reavis, Central Washington Building Trades Council (Hanford Work Force). Their minority reports can be found as Attachment A and Attachment B to the advice.

Draft Advice: 2013 State of the Site Meetings

Introduction of advice

Steve Hudson, Hanford Watch of Oregon and Board Vice-Chair, highlighted how State-of-the-Site meetings (SOS) provide meaningful public participation opportunities. Steve explained that SOS meetings allow the public to learn what issues are important and allow them to engage with decision-makers. He noted that a SOS meeting has not been held for over a year. The advice focuses on restating the importance of the SOS meetings, the need to schedule them regularly, and identifying opportunities for the Board to collaborate with the TPA agencies in planning SOS meetings.

Agency perspectives

Dieter Bohrmann, Ecology, said the Ecology is supportive of future SOS meetings. Dieter noted that SOS meetings require lots of time and resources to plan and implement. He was interested in identifying ways the Board can assist in advertising and planning for SOS meetings. Additionally, he explained that it can be difficult to commit to a regular schedule for SOS meetings without knowing what work will be occurring around that time.

Dennis said the advice was very clear and beneficial. Dennis explained that the TPA agencies did not offer SOS meetings last year because they felt other public meetings served a similar purpose.

Dana reiterated that SOS meetings are important communication tools but they should be considered within an overall communications strategy. He said that scheduling when to hold SOS meetings depends on when they will be the most beneficial.

Board discussion

The following are the key points noted during the Board discussion:

- One Board member was concerned with the lack of public outreach on the health impacts of Iodine-129, plutonium, and chromium.
- SOS meetings are an important source of information to take to external groups. They provide an opportunity to hear what contractors, tribes, and regulators are working on.
- It is important to involve the Board and other stakeholders in planning SOS meetings. One member noted that Board members have knowledge about what issues the public are interested in as well as good locations for the meetings.

After minor changes to language and content, the Board adopted the advice.

Term Limits Letter/Advice

During a public comment period on Thursday morning, Liz Mattson read a letter she wrote that was discussed at the Wednesday night Executive Issues Committee meeting. This letter addresses the

Department of Energy's (DOE) plan to enforce term limits for certain seats on the Hanford Advisory Board (HAB or Board). The Board decided to issue this letter as a Board product, and took up this discussion Thursday afternoon. As a result of the discussion on Thursday, the Board decided to issue advice, rather than a letter to ensure that the Board received a response from DOE. Additionally, the Board agreed to return to other membership issues during the November Board meeting, when more thorough advice could be considered.

The following text reflects the discussion from Thursday afternoon (after the Board decided to proceed with a formally issued draft letter), through the decision to issue advice instead of a letter, and the final adoption of the advice on Friday.

Agency perspectives

Dana explained that the HAB operates under the Environmental Management Site Specific Advisory Board (EMSSAB) Charter. The EMSSAB Charter states that each advisory board will operate with term limits. Dana noted the HAB is unique in how it originated and has been implemented compared to other citizen advisory boards. Up to this point, DOE has used individual exemptions to avoid the term limit requirement.

Dana explained that creating the HAB membership package is a complex process that requires White House approval. The recent membership package was particularly difficult to receive approval. Dana discussed that DOE has been working to identify issues with this membership package so that they can proactively address them in the future. Term limits represent one of these issues, but it is not the only issue. Dana said other issues will be addressed in the October/November time frame.

Dana acknowledged that there are pros and cons of imposing term limits, but DOE wants to improve the process for Board turnover in a transparent manner that can promote greater diversity on the Board. There have been requests to join the Board that cannot be accommodated due to the lack of open seats. Thus, DOE is working to phase in term limits for the agency appointed seats (Non-Union, Non-Management Employees and Public-At-Large). Dana discussed that DOE wants to promote effective succession planning, and so will work to ensure that the term limits will be implemented with minimal impacts to the Board. Dana said that this is a DOE policy issue, and agency policy is a legal issue, which is why the Office of General Counsel (General Counsel) for DOE is involved.

Cate Alexander, DOE-Headquarters, introduced herself as the Designated Federal Official for all EMSSABs. Cate explained that she is involved in the review process of HAB's membership package. She assured Board members that local Site managers have been advocating on behalf of the Board in their discussions with DOE-HQ.

Cate asked the Board to consider all the different perspectives involved in the term limit decision. Cate remarked that there are legal requirements set by the EMSSAB Charter and FACA for diversity. DOE has a lot of respect for the uniqueness of HAB, but DOE needs to ensure the Board is compliant with the law. This legal issue goes beyond David Huizinga at DOE, to the General Counsel. DOE has brought forward the issues of term limits to the General Counsel, and the General Council believes the Board needs to work on creating balanced diversity in the context of the EMSSAB Charter and DOE policy. Cate

articulated that term limits are one strategy to increase the diversity on the Board and they are used effectively on all other EMSSAB boards.

Cate reflected that the majority of Board seats represent interests who designate their representative on the Board. The public-at-large and Non-Union/Non-Management seats were set aside as described in the original convening report as rotating seats to bring diversity to the Board. Cate explained that DOE will review the demographics of the affected area including race, ethnicity, gender, economic sectors, and education levels. These demographics will be used to identify diversity composition for that specific area. She assured the Board that diversity was not a 'check the box' exercise for DOE. Cate said that DOE wants to ensure the Board includes a wide spectrum of people from the community and from all walks of life, even those not as technically oriented. She acknowledged that incorporating diverse individuals onto the Board is a challenge, and cited examples from two other EMSSAB boards that have been successful in this regard. Cate suggested that there are strategies available to make it easier for new members to be incorporated into the Board. Examples included offering comprehensive orientations for new members and creating some structural changes to the Board's operations, including holding some evening meetings. Additionally, Cate indicated that DOE is looking at new recruitment strategies to bring new people onto the Board.

Dennis Faulk, EPA, said that ultimately it is DOE's decision on whether or not to implement term limits. Dennis liked that the Board was offering alternative solutions for increasing diversity and not just providing opposition to term limits. He noted that the agencies have already worked rigorously to involve the Latino population with little impact. He stressed the Board should not lose the concept that they were established and initially designed to include a diversity of viewpoints and perspectives.

Jane Hedges, Ecology, agreed with Dennis and complimented the Board for offering solutions to address diversity besides term limits.

Board discussion

The following are the key points noted during Board discussion on Thursday and Friday:

- Some members of the Board expressed the view that DOE is selectively picking pieces of the HAB Operating Guidelines by imposing term limits while not meeting other obligations, such as providing funding for independent technical advice and review.
- The Board's history reflects the importance of diversity in its establishment. Diversity was obtained in the creation of the Board and many of the Board's successes have been based on that diversity. Additionally, there are many examples of consensus being challenging to reach and, in some instances, not reached because of the diversity of opinions and values on the Board.
- The success of the Board is based on the quality of people that participate from various organizations, groups, and perspectives. Such quality requires a long-term commitment that cannot be achieved in just one or two terms. Part of the success of the Board has been its inclusion of diverse viewpoints. Diversity was obtained in creation of the Board and reflects what the Board means when its members talk about diversity.

- The length of the Hanford cleanup process makes it difficult to constantly bring in new Board members because of the complex issues and level of understanding necessary for the Board to operate and deliver advice. Current Board members offer institutional memory on the history of the Hanford site and cleanup, which if lost, would reduce the effectiveness of the Board's ability to operate.
- The Board was established before the EMSSAB Charter was created. Repeated negotiations and discussions between DOE and the Board about whether HAB must follow the EMSSAB Charter have been unclear and convoluted. Some HAB members still do not believe the Board should have to follow the EMSSAB Charter based on past negotiations and promises with DOE.
- DOE attempted to impose term limits on the Board four years ago and agreed to a lasting solution that term limits would not be imposed. Yet, the Board finds itself discussing this issue once again.
- The Board is effective and working well, and should be the model for other EMSSABs, not the other way around.
- Requiring term limits for the Public-at-Large and Non-Union, Non-Management Employee seats reduces the ability of people in these seats in leadership roles on the Board (for instance, Board chairs and vice-chairs typically serve all three of their 2-year terms, for 6 years total).
- DOE's view that HAB is a technical board does not reflect the reality of Board membership. Many members do not consider themselves technical experts, but are individuals who care about Hanford and have spent time to learn the major issues in the cleanup.
- Since the Hanford cleanup is unique, it is appropriate that the Board operates differently than other EMSSAB chartered boards. Hanford is the most contaminated site in the western hemisphere and no other cleanup site has to deal with the complexity of cleanup that Hanford has.
- Despite extensive efforts to reach out to ethnic communities, the Board has had difficulty filling member and alternate seats for the Public-at-Large seats with representatives of these groups, which contradicts DOE's goals and ideas of using these seats to increase diversity.
- The Board is willing to work with DOE on meeting DOE's goals in a way that is acceptable to both DOE and the Board. The Board is willing to work on identifying strategies and solutions to bring diversity and new perspectives to the Board without having external mechanisms forced on them, such as term limits.
- The Board would like DOE to provide more information on:
 - Those who are asserting that they are not being allowed a seat on the Board.
 - DOE's definition of diversity.
 - DOE's assessment of diversity for the current Board.
 - DOE's goals for increasing diversity and what will diversity look like when it is reached on the Board.

After minor changes to language and content on Friday, the Board adopted the advice. The following Board members did not oppose the content of the advice, but chose to abstain from the consensus process because they objected to the process used to develop the advice and did not have enough time to make an informed decision: Emmett Moore, Washington State University (University); Jerry Peltier, City of West

Richland (Local Government); Rob Davis, City of Pasco (Local Government); Mark Reavis, Central Washington Building Trades Council (Hanford Work Force).

Update on 2013 HAB Membership Package

Tiffany Nguyen, DOE-RL, gave an update on the 2013 HAB Membership Package. Tiffany stated that DOE-RL is starting the 2013 Membership Package process early and is working with DOE Headquarters to mitigate any issues with the package. She noted that the 2013 package nominating letter will require organizations to indicate if they want the same individual to represent them on the Board. She also noted that the TPA agencies will be working to fill open Public-at-Large seats.

Board discussion

The following are the key points noted during the Board discussion:

- One Board member suggested the 2013 package include language asking organizations to consider diversity when choosing candidates to represent them on the Board.
- The Board encouraged the TPA agencies to work with Board members to advertise open seats.
- One member suggested that DOE develop a letter to include in the package explaining what they are looking for in new Board members.

Update on the AY-102 Tank

Tom Fletcher, DOE-ORP, gave an update on the status of DST AY-102 (Attachment 5). Tom explained that during a routine inspection on August 5, 2012, DOE-ORP found unknown material in the annulus of tank AY-102. He said that at this time DOE is unable to identify if the tank is leaking, but that no tank material has been detected in the leak detection system. Tom's presentation explained the tank's history, the investigatory actions DOE is taking to identify the source and composition of the unknown material, and the short- and long-term actions that will be taken.

Agency perspectives

Ron Skinnerland, Ecology, said it is important to identify the issue with tank AY-102 and that Ecology supports getting answers.

Board 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. If AY-102 is not leaking, where could this material be coming from?

R. It is possible that the material could be from cross contamination or water leakage, but DOE-ORP does not know the answer yet.

Q. What would a response look like if DOE identifies that the tank needs to be removed quickly? Is there enough space in the AW-105 to accommodate the tank if it does need to be disposed of?

R. DOE-ORP does not expect to see much change in the unknown material in the near term. Once DOE-ORP has determined what the material is then they can decide that should be done. AW-105 is the designated disposal site if that is necessary and transportation and technical issues will need to be addressed for the tank to be disposed. AW-105 has 1 million gallons of emergency space currently, but if tank AY-102 is disposed of it will limit future retrievals.

Q. What was the anticipated lifecycle of tank AY-102?

R. The tank was built to last for 40 years. It is now 42 years old.

C. DOE should allow the DST Integrity Study and Working Team to review the AY-102 information.

Q. What is the rationale for removing the material from the annulus?

R. The rationale will depend on what the material is. If the material is just contamination we have to decide if we clean it out so that we have a baseline for monitoring. If the tank is leaking then we need to decide if removal of the material will even matter.

Q. Is there a possibility of building tanks between the tank farm and the WTP for additional capacity? How long would it take to build additional tanks?

R. It would take between five and six years to build additional tanks, mainly because of the RCRA permitting requirements.

Q. Are the primary and secondary walls the same thickness in the DST?

R. No, the outside of the annulus is thinner and the primary wall's thickness varies from thicker at the base to thinner at the top.

Q. Has Ecology looked into the option of moving the waste material from AY-102 into viable SSTs?

R. Ecology's first concern is to understand what is happening in tank AY-102 before reviewing different alternatives for moving the waste.

Q. Does DOE have an active program to identify and deal with tank leaks?

R. DOE uses a leak assessment Chemd-42 process that is the same for SSTs and DSTs. The process is used to identify if there is a leak and if the tank is sound.

Q. Does the Tank Closure and Waste Management FEIS provide mitigation measures for DST leaks?

R. Ecology will provide information to the Board on the SST and DST permit and the impact to DOE management of potential leaks and closure decisions.

Committee Reports

River and Plateau Committee (RAP)

Pam Larsen, City of Richland, acknowledged RAP committee members involved in drafting the advice on the RCRA Site-Wide Permit. Pam noted RAP met in July and discussed the 200-UP-1 Proposed Plan, follow-up on Board Advice #242 on historic presentation, RAP's 2013 priorities, and discussed the 2015 vision with DOE-RL. Pam reviewed RAP's work over the past year, highlighting the following:

- Following the 324 Building remediation
- Following technology plans for 618-10 and 618-11 vertical pipeline units. RAP members felt there was a good path forward on these pipelines until the work was tabled due to budget constraints from digging up chromium plumes.
- Reviewing and drafting advice on the 300 Area and 100-K Area RI/FS and Proposed Plans

Budgets and Contracts Committee (BCC)

Jerry Peltier, City of West Richland, said that the BCC has developed their 2013 workplan and will review it during the September committee call. Jerry noted that BCC did not meet over the summer. The BCC is looking at discussing:

- Providing annual draft advice in April on the out-year budget proposal presented by DOE each February
- Providing annual draft advice in June on the life-cycle report released every February
- Small business contracting
- DOE work scope and proposed budgets
- Following the re-baseline of the WTP

Tank Waste Committee (TWC)

Vince Panesko, City of Richland, reviewed the TWC's August meeting which covered SST issues, the WTP, and the Site-Wide Permit. Vince explained that DOE has found a half-inch to an inch rise in liquid levels for 21 SSTs over the last 12 years. At this point it is unclear what is causing the liquid levels to rise. It could be from rain intrusion, radiolysis from inside the SSTs, or other sources. The TWC may consider developing advice to DOE to use data from the 21 tanks to research and understand what is occurring in the SSTs.

Vince also discussed that the TWC was informed of the WTP work occurring on corrosion/erosion, pumping, and mixing. Vince noted that it is interesting that there are these still unresolved technical issues at this stage in the WTP's design.

Lastly, Vince said the Site-Wide Permit focused heavily on tanks. The TWC discussed that radiolysis of hydroxide ions in SSTs and DSTs lowers the pH. Vince noted that high hydroxide levels are needed to minimize corrosion and that if hydroxide levels are not maintained it has implications for tank integrity. Vince stressed the importance of understanding that the chemistry in the tanks is always changing.

Health, Safety, and Environmental Protection Committee (HSEP)

Mike Korenko reported that HSEP did not meet in June, July, or September to save HAB budget. HSEP did meet in August. At the meeting HSEP reviewed and revised the draft integrated safety management (ISM) advice, and discussed a presentation on DOE-RL/ORP maintenance policies. The committee will discuss 2013 priorities during their September call, but HSEP was concerned with the TPA agencies statements in their draft letter of 2013 priorities regarding efficiency, which were not aligned with worker safety concerns. Mike discussed upcoming HSEP topics, including:

- Monitoring of the ISM framework
- ISM implementation
- August 28th Nuclear Safety Board Report on ISM
- Safety Analysis Reports (SARs) for facilities and proposed maintenance
- Tank waste transfer vapors

Public Involvement and Communications Committee (PIC)

Liz Mattson discussed PIC's involvement in developing advice on the Site-Wide Permit and SOS meetings. Liz said that there will be two additional public hearings on the Site-Wide Permit on September 13th in Portland and September 18th in Seattle. At their last meeting, the PIC discussed:

- An update from the TPA agencies on their public involvement calendar. Liz noted that the River Corridor decision schedule has been pushed back.
- How HAB members interact and engage with the public about the Hanford cleanup
- The metrics of a successful public meeting
- How HAB and the public can be involved post-ROD implementation of CERCLA decisions

Site-Specific Advisory Board (SSAB)

Susan Leckband said she and Steve Hudson will be attending the upcoming EM-SSAB meeting on October 3, 2012. Dave Huizenga will attend the meeting and provide an update. Additional updates will be provided on waste disposition and budget. There will also be a session discussing what it means to be a Board chair and how to reach consensus.

Executive Issues Committee (EIC)

Susan Leckband said that EIC's last meeting resulted in final drafts of the 2013 Board priorities, 2013 calendar, and 2012 Board accomplishments, which will be confirmed at this Board meeting. Susan noted that the EIC also discussed HAB term limits which led to the draft letter that became advice.

National Liaison

Shelley Cimon, Public-at-Large, noted that she has not attended any national meetings in 2012. She is waiting to hear about DOE Order 435.1 and see the revisions from DOE-EM on the disposal of radioactive waste. She hopes to have someone from DOE provide an update at the November Board meeting. Shelley also handed out information noting that the Savannah River Site began shipping weapons grade plutonium to the Waste Isolation Pilot Plant (WIPP) for disposal and that a Draft Surplus Plutonium Disposition Supplemental EIS was recently released.

Board Business

2012 Board Accomplishments

Susan Leckband reviewed the Board's 2012 accomplishments (Attachment 6). Susan explained that in 2012 the Board accomplished quite a lot of work through their committee structure. She highlighted the amount of important work that occurred across committees with increasing levels of joint topics. She also discussed how agency responses to Board advice have been less timely than the Board would prefer.

2013 Board Priorities

Susan Leckband discussed the 2013 Board Priorities (Attachment 7). Susan said that the Board just received the TPA Agencies priorities for 2013 which will be incorporated into the Board's priorities. Susan indicated that the Board priorities are identified by topic and the committees assigned to address them. Susan Hayman said that the table of Board priorities was iteratively developed by committee chairs and vice-chairs, with review and edits by the TPA agencies.

Sam Dechter, Public-at-Large, was concerned that DOE's 2013 priorities letter downplays the importance of safety culture improvements.

Dick Smith said there is a large question that needs to be addressed about waste retrieval and the lack of capacity for disposing of waste. Dick explained the TWC wants to discuss what happens if the Vit Plant is delayed and at what point more tanks are necessary.

2013 Board Calendar

Susan Leckband reviewed the 2013 Board Calendar noting it follows the typical operating schedule. Susan explained that there was one Board meeting on a DOE alternative work schedule day off. She remarked that Board members will know three weeks before committee week which committees will meet on which days.

Liz Mattson noted that anyone can get on committee email lists if they want updates on various topics, including the EIC. Additionally, Liz mentioned that the Events-at-a-Glance emails provide updates on committee activities.

Lynn Davison asked if there was any consideration for reestablishing meetings in Seattle or Portland. Susan Leckband answered that each year the Board requests budget to hold meetings in Seattle and Portland but that recently the budget has been too tight to accommodate that request.

Bob Suyama, Public-at-Large, noted that every year the HAB Budget decreases. The Board has demonstrated the ability to get the job done for less money each year, which might indicate to DOE that they can keep decreasing the budget. Bob suggested that the Board review the calendar and committee workplans to identify the budget amount needed to do an adequate job in providing advice.

Status – Board Chair Nominations

Susan Leckband reminded the Board that the November Board meeting is her last as Board Chair. Pam Larsen, Nominating Committee member, explained the nomination process for the new Board Chair. Pam said the nominating committee includes Norma Jean Germond, Ken Niles, and herself. Pam asked Board members to submit their Board Chair nominations by October 15th. The nominees will then be presented to the Board at the November meeting and the Board will elect the new Chair. Pam noted that she was aware of Steve Hudson's interest in the Board Chair position.

Preliminary November Board Meeting Topics

Susan Hayman reviewed the list of potential meeting topics for the November Board meeting, including:

- Potential draft advice or letter related to Board membership and diversity
- Chair selection process
- TPA agencies updates
- Committee reports
- Presentation on DOE order 435.1 (tentative)
- New Board member orientation
- HAB values white paper
- Update on the Land Conveyance EA and scoping period (placeholder)
- Update on the Columbia River Crossing Pipeline and Natural Gas DEIS (placeholder)

Public Comment

Shannon Cram, UC Berkley, spoke about her process for applying for an open Public-at-Large seat on the Board. Shannon said that she needed to move to California to qualify for residency for school. Though initially approved for the seat, this was rescinded due to this move. Shannon explained the reasoning for this is because the Public-at-Large seats represent someone from specific regions. Even though she now lives in California, Shannon believes she still meets the intention for the seat. Shannon explained that her family is from Eastern Washington and that she grew up in the area. Her family worked at Hanford and she has fond memories of the area. She explained how deeply connected to the area she is and saying she does not represent the public in the area is false. She noted how she attends all of the Board meetings and is usually the only member of the public in attendance. The reason she attends is because of she cares and is interested in the issue and she wants to be involved. Shannon highlighted the recent River Corridor meetings as some of the best public meetings she's ever been too. A lot of what the Board discusses is how to engage the public and this requires more than just telling people. Shannon reflected that she audited University of Washington classes on Hanford where consistently only two or three people had heard of Hanford. Shannon said that she has been interested and working on Hanford issues since she was 23. Now she is 32, and she still is unable to find a meaningful way to be engaged with the Board. Shannon indicated this says something negative about the structure of public involvement at Hanford that needs to be addressed if someone like her cannot get involved.

Liz Mattson provided public comment as a private citizen, and read a letter addressing DOE's plan to impose term limits on certain HAB seats. Liz explained the EIC discussed the letter at their meeting, but there was not time to get a draft approved for the Board to discuss. Liz explained that if Board members were interested they could sign the letter.

Vince Panesko provided public comment as a private citizen, and spoke about diversity on the HAB. Vince explained that other agencies and organizations in the Tri-Cities have been struggling with diversity questions over the last two years. So far they have been unable to identify good solutions. Vince remarked that he is trying to tell DOE that it really needs expertise if it is going to attempt to bring in various groups of people who are not currently involved. Vince said that he is unsure if DOE has the resources to tackle the issue of diversity when other organizations have been unsuccessful. Vince said that personally he thinks that in 20-30 years it may be easier to bring in more diverse viewpoints. Vince identified another issue with diversity explaining that when DOE looks at other advisory groups it sees citizens, pastors, and business people from off the street. These citizens would spend maybe one meeting a month for two hours during the evening. Trying to use that structure for the HAB would result in reducing the impact of the Board. Vince said this leads him to ask questions about what DOE wants from public interest groups if they want that kind of trivial or superficial advice. Lastly, Vince noted that the Board has many people with experience from Hanford which gives them insight that saves DOE money. Instead of having to ask DOE to provide technical support, the Board can often provide that internally.

Mecal Samkow provided public comment as a private citizen, and spoke about diversity and term limits. Mecal thanked those from DOE Headquarters in attendance for coming to the meeting and providing an opportunity for face-to-face discussion. Mecal recognized DOE's good intentions of increasing diversity on the Board but said it is taking the wrong perspective in how to achieve diversity. Mecal described that, from a business perspective, DOE represents a parent company and the various advisory boards are

subsidiaries and sister companies. Every advisory board has goals, priorities, and challenges, but Hanford is a special case. Mecal explained it does not make sense for DOE to remove productive employees just because six years has passed. Mecal said that first and foremost, experts provide considerable experience and knowledge. Ensuring the Board maintains the needed knowledge and experience could be achieved only if seats were filled with an individual with equal or comparative expertise and availability. Mecal indicated the onus should be on DOE to find individuals who have the credibility to replace current Board members. In summary, Mecal said that DOE is adopting poor business practices if they are looking to replace someone succeeding at their job with someone may not be able to do the job. Before moving forward, Mecal suggested DOE start tracking diversity statistics and get a real analysis on what is going on with diversity on the Board.

Ken Niles provided public comment as a private citizen, and spoke about his surprise by the number of Board members who abstained on the term limits advice. Ken asked those members who abstained to consider the message they are sending. Ken explained that while abstention does not mean opposition, it is noted on the advice. This might be mistaken by DOE as a sign of disagreement on the topic. He noted that when 32 people write something collaboratively, it is never going to be perfect. If people were to abstain because of writing they would need to abstain from every piece of advice. Ken asked those who abstained to reconsider the message they are sending and support the term limits advice.

Shannon Cram, UC Berkley, provided additional public comment. She expressed that the Board is not a business but a community of people, which is why the Board is so effective. Shannon explained that when discussing expertise people need to realize that expertise means more than just being a nuclear engineer. Additionally, building an effective Board does not mean replacing members. There does need to be a way for people with valuable voices to get involved on the Board. Shannon remarked the importance of finding strategies to transfer experience to the next generation, but that those strategies do not just mean replacing members. Such a transfer requires continuity and relationships. Shannon said she does not support term limits for recruiting new members to the Board, especially given the number of seats that are unfilled currently.

Closing Remarks

Susan Hayman announced two new additions to the EnviroIssues facilitation team. Susan said that Daniel Brody will now be the Board and PIC note taker and that Hillary Johnson will facilitate the RAP and TWC.

Susan Leckband thanked everyone for attending. The meeting was adjourned.

Attachments

- Attachment 1: HAB DOE-ORP Annual Report
- Attachment 2: HAB DOE-RL Annual Report
- Attachment 3: HAB EPA Annual Report
- Attachment 4: HAB Ecology Annual Report
- Attachment 5: Tank AY-102 Status Update
- Attachment 6: 2012 HAB/ TPA Agency Priorities Tracking Table

Attendees

HAB MEMBERS AND ALTERNATES

Antone Brooks, Member	Gerald Pollet, Member	Mike Korenko, Alternate
Tom Carpenter, Member	Mark Reavis, Member	Bob Legard, Alternate
Robert Davis, Member	Dan Serres, Member	John Martell, Alternate
Lynn Davison, Member	Keith Smith, Member	Liz Mattson, Alternate
Sam Dechter, Member	John Stanfill, Member	Emmett Moore, Alternate
Norma Jean Germond, Member	Richard Stout, Member	Melanie Myers-Magnuson, Alternate
Harold Heacock, Member	Bob Suyama, Member	Vince Panesko, Alternate
Floyd Hodges, Member	Eugene Van Liew, Member	Ed Revell, Alternate
Steve Hudson, Member		Wade Riggsbee, Alternate (phone)
Rick Jansons, Member	Al Boldt, Alternate	Dave Rowland, Alternate
Pam Larsen, Member	Shelley Cimon, Alternate	Rebecca Rubenstrunk, Alternate
Susan Leckband, Member	Dirk Dunning, Alternate (phone)	Mecal Samkow, Alternate
Jeff Luke, Member	Dale Engstrom, Alternate (phone)	Richard Smith, Alternate
Ken Niles, Member	Laura Hanses, Alternate	Margery Swint, Alternate
Jerry Peltier, Member	Barbara Harper, Alternate	Art Tackett, Alternate
Maynard Plahuta, Member	John Howieson, Alternate	Jean Vanni, Alternate

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Dana Bryson, DOE-RL	Elizabeth Schmitt, DOE-HQ	Polly Zehm, Ecology
JD Dowell, DOE-RL	Steve Pfaff, DOE-ORP	Sharon Braswell, MSA
Matt McCormick, DOE-RL	Cate Alexander, DOE-HQ	Barb Wise, MSA
John Morse, DOE-RL	Alex Teimouri, DOE-EM	Jenne Slaver, CHPRC
Tiffany Nguyen, DOE-RL	Deborah Thomas, DOE-OIB	Rob Roxburgh, WRPS
Ed Parsons, DOE-RL	Dennis Faulk, EPA	Peter Bengtson, WCH
Steve Weil, DOE-RL	Emy Laija, EPA	Carol Johnson, WCH
Marybeth Burandt, DOE-ORP	Dieter Bohrmann, Ecology	Penny Phelps, WCH
Stacy Charboneau, DOE-ORP	Rick Bond, Ecology	Daniel Brody, EnviroIssues
Tom Fletcher, DOE-ORP	Jane Hedges, Ecology	Tammie Gilley, EnviroIssues
Brian Harkins, DOE-ORP	Dan McDonald, Ecology	Susan Hayman, EnviroIssues
Lori Huffman, DOE-ORP	Ron Skinnarland, Ecology	

MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald	Meredith Crafton, Hanford Challenge	Gary Garnant, Grant & Franklin Counties
Shannon Cram, UC Berkley	Ron Jarnagon	Regina Lundgren