#### FINAL MEETING SUMMARY

#### HANFORD ADVISORY BOARD November 1-2, 2012 Richland, WA

#### **Topics in This Meeting Summary**

Executive Summary
Welcome, Introductions, and Announcements
Tri-Party Agreement Agencies – Program Updates
Draft Advice: Double-Shell Tank Integrity
Draft Injury Assessment Plan – Hanford Natural Resources Trustee Council
Draft White Paper: Hanford Advisory Board Values
Environmental Assessment: Proposed Conveyance of Land at the Hanford Site
Proposed Revisions to DOE's Order 435.1
Tri-Party Agreement (TPA) Change Package
Proposed Changes to Board Structure, Integrity, and Operations
Environmental Management-Site Specific Advisory Board (EM-SSAB) Letters
Election of Board Chair
Committee Reports
Board Business
Public Comment
Closing Remarks
Attachments
Attendees

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 one piece of advice and one white paper concerning:

- Double-Shell Tank Integrity (advice)
- Hanford Advisory Board Values (white paper)

In addition, the Board reached consensus agreement to support the advancement of the following two Environmental Management-Site Specific Advisory Board (EM-SSAB) letters:

- Funding for Technology
- Decontamination Technology to Make Recycling Cost Effective

## **Board business**

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

- Elected a new Board Chair
- Identified preliminary February Board meeting topics

## Presentations and updates:

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

- Tri-Party Agreement Agencies Program Updates
- Draft Injury Assessment Plan Hanford Natural Resources Trustee Council
- Environmental Assessment: Proposed Conveyance of Land at the Hanford Site
- Proposed Revisions to DOE's Order 435.1
- Tri-Party Agreement Change Package
- Proposed Changes to Board Structure, Integrity, and Operations
- HAB Committee reports

#### **Public comment**

Public comment was provided.

#### HANFORD ADVISORY BOARD November 1-2, 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.

One seat was not represented: Citizens for a Clean Eastern Washington (Regional Citizen, Environmental, and Public Interest).

The Board meeting was audio-recorded.

## Welcome, Introductions, and Announcements

Dana Bryson, U.S. Department of Energy Richland Operations Office (DOE-RL) and Deputy Designated Federal Officer for the Board (DDFO), reminded Board members that the Board is charted under the Federal Advisory Committee Act (FACA).

Susan Leckband welcomed everyone and reviewed the meeting objectives and agenda. She welcomed one new Board member: Gary Garnet, Benton & Franklin Counties (Local Government).

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

Susan Hayman also announced that Board member orientation will be provided as a webinar, with additional information coming soon.

# **Tri-Party Agreement Agencies – Program Updates**

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

Matt McCormick, DOE-RL, provided an update on recent activities and accomplishments for DOE-RL; his presentation is provided as Attachment 1. In addition to his presentation, Matt noted:

- DOE-RL is focused on cleaning up the Columbia River corridor and implementing groundwater remedies.
- DOE-RL's 2015 Vision has allowed them to create near term endpoints and show tangible progress towards Hanford cleanup. While the 2015 Vision has been successful, there have been challenges along the way, including funding and increased scope of work. These challenges mean that certain elements of the 2015 Vision will need to continue beyond 2015. Two areas that will require additional time are the cleanup of Building 324 and the 618-11 burial ground.

- The chromium "big dig" at the B/C Waste Site is going to get larger but should be finished by spring of 2013.
- The 200 West Pump and Treat Facility is exceeding expectations in reducing contamination levels.
- Workers successfully and safely dispositioned glovebox HA-23S at the Plutonium Finishing Plant (PFP). The glovebox was blocking the entrance/exit and workers tested the successful procedure using a model.
- DOE-RL continues to implement and review procedures with the Employee Concerns Program.

Matt recognized Susan Leckband for her leadership as the Board Chair for the past six years. He commended her stellar performance and congratulated her on her intent for continued engagement with the Board.

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

Tom Fletcher, DOE-ORP, provided an update on recent activities and accomplishments for DOE-ORP; his presentation is provided as Attachment 2. In addition to his presentation, Tom noted:

- DOE-ORP is working to identify what is causing the material in the Double-Shell Tank (DST) AY-102 to fluctuate in and out of a crystallized state.
- A Problem Evaluation Report (PER) was written on DST SY-103, which identified a white crystalline material in the annulus. DOE-ORP has determined through visual data that the material is refractory material from construction and not waste. While the PER was written correctly, DOE-ORP did not provide adequate documentation on their determination that the material was of no concern. DOE-ORP is looking at lessons learned from this incident to ensure that workers continue to report potential leaks in the future.
- DOE-ORP has made significant progress in Single-Shell Tank (SST) retrieval.
- The construction of the high-level waste (HLW) and pretreatment facilities has slowed in order for DOE-ORP to review and address technology challenges.

Scott Samuelson, DOE-RL, recognized Susan Leckband for her excellent work as HAB Chair. Scott told Susan that he appreciated her honesty and openness and commended her for leading the Board to adopting over 60 pieces of advice as Chair.

Scott also recognized Dana Bryson, who is taking a new position within DOE and introduced Jeff Frye as the Board's new DDFO.

# U.S. Environmental Protection Agency (EPA)

Dennis Faulk, Environmental Protection Agency (EPA), used a video from his trip to Africa to demonstrate two key points. First, while good progress is being made we still have lots of bites of the

elephant left. Many thought that the Hanford Cleanup would have made further progress by now. Second, Dennis also pointed out that an elephant is known for its good memory and indicated the importance for the Board and the Tri-Party Agreement (TPA) agencies to remember and reflect on Hanford's history. He recommended that the Board review a 1995 report commissioned by the Board on tanks to see if its assumptions still hold true.

Dennis reviewed some historical facts about the Board, including members who have served since the Board's beginning, the past Board Chairs, and the progress the Board has made. He also recognized DOE for their effort to proactively shift their vision of the Hanford cleanup.

Dennis identified the issues that EPA is focusing on:

- The TPA Change Package negotiations which should be finalized soon.
- The 300 Area Proposed Plan, which will go out for public comment sometime in early 2013.
- Sampling cultural sites around the K Area Reactors.
- Providing scoping comments on the Proposed Land Conveyance at the Hanford Site.

Dennis also thanked Susan Leckband for her time as Board Chair.

## Washington State Department of Ecology (Ecology)

Jane Hedges, Washington State Department of Ecology (Ecology), provided an update on recent activities and accomplishments for Ecology; her presentation is provided as Attachment 3. In addition to her presentation, Jane noted:

- The draft Hanford Facility Dangerous Waste Permit (Site-Wide Permit) comment period was extended until October 22<sup>nd</sup> to give the public more time for review. During this time, Ecology provided additional public meetings. Jane noted that it will take time to review all the comments Ecology has received.
- Ecology thanked HAB members who participated in public hearings on the draft Site-Wide Permit.
- Ecology is especially concerned with the DST AY-102 leak and its impact on criticality of the tank retrieval mission. Jane explained that Ecology is working closely with DOE on this issue to identify a path forward that will not inadvertently lead to future issues.

Jane concluded by thanking Susan Leckband for her work as Board Chair.

#### 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. Can DOE-RL clarify the purpose and results of Pacific Northwest National Laboratory's (PNNL) groundwater sampling study in the bottom of C-7:1 completed in August?

*R. PNNL* helps DOE-RL analyze groundwater. The groundwater sampled at C-7:1 was used to identify groundwater attributes such as total metals and pH. The study was designed to help distinguish the interface of groundwater and river water. EPA added that while the soil around C-7:1 has high contamination levels, the groundwater has low contamination levels. The study was attempting to explain why that might be.

Q. When does DOE expect to receive Secretary Chu's recommendation?

*R.* There is no set time period to receive Secretary Chu's recommendation. The Board will be informed of his recommendation as soon as it is released.

Q. When DOE-RL's 2015 vision first was released it was unclear if it would be just another plan with little intent; however, the vision has been successful and ensured continued progress. When can the Board expect to hear about expanding the vision beyond 2015?

*R. DOE-RL is currently working with the other TPA agencies to prioritize work after 2015. The Board will be kept updated as this effort continues.* 

Q. Have the assumptions in the 1995 tanks report been met?

*R. EPA cannot answer that at this time. It would be an interesting discussion for the Tank Waste Committee.* 

# Draft Advice: Double-Shell Tank Integrity

# Introduction of advice

Dirk Dunning, Oregon Department of Energy, provided an introduction to the draft advice. He explained that in 1995, the Board discussed the possibility of DOE building four to six new DSTs at a cost of \$110 million each. At that time, the Board advised that the funding should be used to resolve technical issues and build the Waste Treatment and Immobilization Plant (WTP). However, now the WTP is considerably delayed, DSTs are past their end of design life, and one has begun to leak.

Rob Davis, City of Pasco, added that the issue of insufficient DST capacity has been around for years. He explained that the current tank strategy is to test the waste and adjust chemistry until the tank is either emptied or fails. This strategy is unacceptable now because the DSTs are failing. The draft advice includes four important recommendations: 1) DOE build new DSTs, 2) build the new tanks as quickly as possible, 3) expand monitoring of DSTs, and 4) reactivate an independent advisory group to review DST leakages and provide potential solutions to keep other tanks from leaking.

#### Agency perspectives

Tom Fletcher thanked the Board for the time spent on drafting this advice. He explained that any steps DOE-ORP takes to deal with the leaking DST will be collaborative with Ecology and the Board. Tom identified that the advice point to increase monitoring frequency aligns with DOE-ORP's current plans to learn from tank AY-102 and update the tank monitoring program as needed. While DOE-ORP may not agree with each point in the advice, this discussion is necessary to ensure cleanup is done correctly at Hanford.

Cheryl Whalen, Ecology, explained that Washington State law is clear that when a permitted tank leaks DOE is required to remove the waste from that tank. Ecology understands that AY-102 could not be pumped in 24 hours, but believes that a system should be in place to pump the tank rapidly if the leak should worsen. Cheryl noted that Ecology is working closely with DOE to review options for safe storage of all DSTs and single-shell tanks (SSTs). Ecology views SST retrieval as the greatest potential risk to the environment, and it is necessary to look at actions for potential leaking DSTs and their impact on the WTP, with rebaselining.

#### Board discussion

The following are the key points noted during Board discussion:

- The Board identified that this advice represents a position shift from past Board advice. The issue of new DST capacity has been in the margins for the last 20 years and the leak in AY-102 has forced the Board to consider the building of new DSTs, especially considering the delays in the WTP. The Board discussed that the whole tank strategy is predicated by the WTP functioning correctly and treating waste. Past discussions always assumed that WTP would be online and treating waste before the DSTs came to the end of their design life. While AY-102 is not leaking into the environment, it doesn't mean that it will not eventually or that another tank will not. This reality makes it clear that the tank waste strategy needs to be modified quickly.
- Additionally, the Board discussed that given that SSTs are 60 years past their design life and now the DSTs are at the end of their design life, the reality of leaking tanks is very likely. The major question is when the DSTs and SSTs will fail and currently there is no storage capacity for waste from leaking tanks.
- The Board noted that, while the advice calls for building additional tank capacity, ultimately building more tanks will not solve the problem of treating tank waste.
- Several Board members disagreed with advice points recommending additional studies because they minimize funding for projects.
- One Board member noted their concern in DOE being able to deliver any part of the tank waste retrieval system on schedule. They emphasized the importance of ensuring the completion of SST retrieval and that TPA milestones are not delayed.

- One Board member asked DOE what the process and schedule for building new DSTs might be. DOE responded that past studies estimates \$100 million per tank and five to seven years to construct six new tanks. There are budget requirements and a regulatory path for approval that would need to occur.
- One Board member highlighted the importance of DOE to consider and provide information on multiple scenarios outlining what might happen if SSTs or DSTs begin leaking.
- The Board agreed to add language that indicates that the Board does not support pushing out TPA milestones dealing with SSTs and DSTs.
- The Board discussed the importance of encouraging DOE and contractors to keep tank infrastructure maintained. The Board recognized that historically, tank infrastructure has degraded outside of required specifications because of lack of maintenance.

After edits to language and content, the Board adopted the advice.

## Draft Injury Assessment Plan – Hanford Natural Resources Trustee Council

## Presentation

Larry Goldstein, Hanford Natural Resources Trustee Council (HNRTC), gave a presentation on the HNRTC's Draft Injury Assessment Plan; his presentation is provided as Attachment 4. In addition to his presentation, Larry noted:

- The Hanford site is relatively intact and provides a significant scientific, biological, and cultural legacy.
- There is an important distinction between damages and injuries. Damages are monetary compensation for injury to national resources or lost services those resources provided. Injury is any adverse effect to natural resources.
- HNRTC is focused on injuries post-1980, or after the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted.
- The HNRTC is interested in receiving comments from Board members on the Draft Injury Assessment Plan and whether it meets the long-term stewardship values of the Board.

#### Agency perspectives

The TPA agencies provided no comments.

#### 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. How do you apply damages and injuries from the past to future land use?

*R.* HNRTC's objective is to restore functioning ecosystems and ensure injuries are minimized by a good cleanup that allows as much unrestricted access to the site as possible. HNRTC is reviewing what should be achievable for the broad landscape through land use planning and economic development.

C. At times, there may be overlap between the issues the HAB and HNRTC are working on. Keeping up to date on what each is working on will be important.

Q. How big an undertaking is applying Natural Resources Damage Assessment (NRDA) to Hanford?

R. When Congress passed CERCLA and NRDA provisions they did not imagine a site as big or as contaminated as Hanford. HNRTC's task is to try and make NRDA work in a cost effective and time efficient manner. There is some tension with the trustees on how comprehensive the NRDA needs to be. Some trustees want a literal application of the regulations while others acknowledge that to do so would require over 20 years and millions of dollars. NRDA acknowledges that every site is different and that NRDA should be used as guidelines for communities to use.

Q. How did HNRTC sort out pre- and post-1980 damages?

*R.* Defining damages pre- and post-1980 is definitely a gray area. It depends on determining the source and pathway for damages. Hanford is the largest intact area of shrub steppe in the western United States, with a tremendous scientific and biological legacy at the site.

C. Why haven't elk and bats populations been analyzed, given their prominence on the Hanford site?

*R.* The only species we have studied in-depth to date are mussels. We are studying them to better understand contaminant pathways of chromium and uranium, especially in the 300 area. We have also been reviewing data from the Mission Support Alliance (MSA) to identify contaminants and species of concern.

C. No local governments are considered trustees and participate on the HNRTC. This presentation mentioned tribes, but did not discuss the 1,500 people who owned the Hanford land prior to the federal government.

*R.* It is true that ranchers and farmers were displaced and that was an omission in the presentation.

Q. What is the balance of tribal and nontribal representation on the HNRTC, and does this create imbalance between tribes and 'white' populations?

*R.* Trustees on the council are defined in federal statute. The federal government, tribal nations, and state governments have a direct trust responsibility for particular resources. The HNRTC evolved over time and was established with just eight members. Now, members have multiple alternates as the workload has increased.

Q. Has the HNRTC reviewed other NRDA sites to draw on their experience developing an Injury Assessment Plan? Is there another comparable NRDA site?

*R.* HNRTC has not directly reviewed other NRDA sites. The HNRTC does work closely with the US Fish and Wildlife Service, a leader in NRDA. HNRTC has not found another NRDA site that is comparable to Hanford.

The Board will continue to track this issue. Board members with particular interest can choose to comment on the draft document as individuals or representatives of their organizations.

## Draft White Paper: Hanford Advisory Board Values

#### Introduction of white paper

Ken Niles, Oregon Department of Energy, provided an introduction to the white paper. Ken explained that each committee has reviewed a version of the white paper at some point in the last few months. The purpose of the white paper is to capture the Board's high level values. These values have been presented through Board advice, but have never before been summarized in this manner.

#### Agency perspectives

Dana Bryson supports the Board development of the white paper.

Jane Hedges said she thought the white paper captured the Boards values very well.

Dennis Faulk expressed support for the white paper.

#### Board discussion

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

- The Board liked that the values were not prioritized; however, some members expressed concern that readers would assume a priority based on the arrangement of the values in the bulleted list. Thus, the Board recommended adding a statement highlighting that all of the presented values are of equal importance. Additionally, some Board members requested that worker health and safety be listed as the first bullet in the list of values.
- The Board recognized that the white paper would be a living document that would evolve and change over time. The Board discussed that its values can change and that just because a value was part of past advice does not mean that the Board should not consider changing its values.
- The Board discussed how best to clarify its value on minimizing the amount of offsite waste brought to the Hanford site. Currently, some limited categories of waste are allowed to be disposed of at Hanford, but the Board does not want to see this expanded. The board decided to characterize this value as "Take Care of Hanford Waste First."

- The Board discussed potential uses for the identified HAB values including:
  - Providing them on the Board's webpage
  - Create a visual representation of the values that emphasize that they are mutually important
  - Send the white paper to the TPA agencies and DOE Headquarters
  - Provide to new members and potential nominees
  - Provide to Board members and suggest they share with their represented organizations

After edits to language and content, the Board adopted the white paper.

#### Environmental Assessment: Proposed Conveyance of Land at the Hanford Site

#### Presentation

Paula Call, DOE-RL, gave a presentation on the Proposed Conveyance of Land at the Hanford Site Environmental Assessment; her presentation is provided as Attachment 5. In addition to her presentation, Paula noted:

- The Tri-City Development Council (TRIDEC) is the Hanford Site Community Reuse Organization (CRO). DOE created the CROs in 1993 to recognize local communities that were adversely impacted by workforce restructuring. The CROs were designed to help reduce local economic dependence on a cleanup site.
- DOE decided to develop an Environmental Assessment (EA) rather than an EIS because it was unclear if significant environmental impacts would result from the land conveyance.

#### Agency perspectives

Dennis Faulk said that Paula accurately captured EPA's role in her discussion of the Comprehensive Environmental Response, Compensation and Liability Act (CERCA). The other way EPA is involved is through the National Environmental Policy Act (NEPA) process. EPA has an analysis group that reviews NEPA documents. EPA has sent a letter to DOE during scoping and Dennis will make it available to the Board.

John Price, Ecology, indicated that the State's role is limited. Ecology did talk with DOE about whether the conveyed land would require a modification to the Hanford permit.

#### 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. Is the Navy leased land 618-7 included in the land being considered for conveyance?

*R.* The Navy leased land is included in the original conveyance request. Through scoping, DOE removed the 618-7 area and decided to expand the land area considered for conveyance and analysis.

C. Considering that conveyance of federal land is a considerable project, it seems appropriate that DOE conduct an EIS rather than an EA. Is seems inefficient to conduct an EA, which is likely insufficient, thus ultimately causing DOE to create an EIS.

Q. What is meant by 'mining' in the Comprehensive Land use Plan?

R. Mining just acknowledges the barrow areas on the Hanford site.

Q. When the idea of land conveyance was first discussed it was stated that only surface uses would be allowed. Is this still true or is there a possibility that land use would include subsurface activities which could potentially release contaminants?

*R. DOE*'s assumption is that subsurface activities would be restricted to 15 feet below the surface. DOE would restrict breaching or activities that might flush groundwater and mobilize contaminant plumes.

Q. What institutional controls or mechanism does DOE have to ensure that long-term stewardship after conveyance will not release contaminants?

*R.* Most of the land being considered for conveyance has already been deleted from DOE's priority list. DOE is required to develop institutional controls to enforce land use restrictions.

C. When long-term stewardship begins it is highly likely that the institutional controls will not be durable. It is the responsibility of regulators, land issuers, and landowners to set up a structure of controls that is as durable as possible, but these will eventually fail.

C. Any land that is designated by DOE to a CRO would be subject to state and local government planning and use restrictions.

*R.* The County and local land use plans are consistent with the Comprehensive Land Use Plan presented by DOE.

# **Proposed Revisions to DOE's Order 435.1**

#### Presentation

Pam Larsen, City of Richland, introduced Marty Letourneau, DOE-Headquarters, who is working on revisions to DOE Order 435.1 – Radioactive Waste Management. Pam noted that Marty has been involved with Order 431.5 since it was established and has worked with teams conducting cleanup to refine the Order. She explained that the proposed revisions will impact Hanford, especially tank waste.

Marty explained that he works in DOE's Environmental Compliance Office and was involved with Order 435.1 since it was created in 1999. He said that he is leading the team trying to make improvements to the Order. He discussed that 435.1 was created in response to Defense Board Recommendation (94-2) to use an Integrated Safety Management (ISM) structure go guide requirement development. The Order worked well, but in 2008 it became clear that it was time to review and improve it.

Mary explained that the review has emphasized improvement and incorporation of lessons learned. DOE worked with both federal and operating contractors to identify issues and spent the last year working in small groups to address those issues. He highlighted the following proposed changes to the Order:

- Development of a Technical Standard (mandatory) aimed at all the Disposal Authorization Basis Technical documentation necessary to start to operate a Low Level Waste (LLW) disposal facility.
- Development of a Technical Standard (mandatory) on packing and transportation of Transuranic (TRU) waste.
- Changes to the Waste Incidental to Reprocessing (WIR) Citation and Evaluation processes
  - Incorporation of and better alignment with National Defense Authorization Act (NDAA) Section 3116
  - More process and control overall concerning the citation process, which is incorporating 10 years of lessons learned
  - Strengthening of the Radioactive Waste Management Basis (RWMB)
  - Strengthening of change control processes
  - Attempting to provide more definition to what requires permanent isolation, what is highly radioactive, and what are sufficient concentrations.
  - Consultation with Nuclear Regulatory Commission (NRC) on Evaluation WIRs will be required, but will be informal compared to NDAA Section 3116

Marty also indicated areas of Order 435.1 that will not change:

- Overall structure of authorities and authorization process for LLW disposal facilities.
- Process for Closure of High Level Waste (HLW) facilities (e.g., tank farms, still requires WIR, Performance Assessment/Composite Analysis (PA/CA), and Closure plans (Tier I and II)
- For HLW, waste must be treated, stored and transported to meet the requirements of the DOE/EM-0093, Waste Acceptance Product Specifications for Vitrified High-Level Waste Forms and DOE/RW-0351, Waste Acceptance Systems Requirements Document

Marty explained that DOE recently released a draft of the revised Order 435.1 for informal internal review. They have received comments back and are working with General Council before releasing the draft Order for public review and comment in January.

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. Will the proposed revisions ensure that the TPA agencies follow NDAA Section 3116 in closing tanks at Hanford?

*R.* The way the TPA is set up, there is no wording that identifies waste left in tanks is residual or HLW, which Section 3116 does. Order 435.1 can provide a definition through the WIR process. The question is if there is greater legal vulnerability given previous lawsuits brought against DOE on the WIR process. We are working to align the WIR language in 435.1 as closely to Section 3116 as possible.

Q. What was the most identified issue of concern with Order 435.1?

*R. DOE* talked with a collection of federal and contractor employees from all sites involved in the management of waste in order to understand how users of 435.1 feel about the Order.

Q. In 1953 DOE discharged eight million gallons of HLW directly into the soil and an additional million gallons of waste leaked from the SSTs into the soil. How does the WIR process deal with high levels of contamination in the soil beneath tanks?

*R.* All contaminated media is considered under a federal issue under CERCLA and is not considered in waste management. There are three processes for closing HLW tanks and facilities: 1) demonstrate waste is clean enough for restricted or unrestricted use, 2) do WIR process and closure plan, and 3) put all waste under CERCLA (this process is not suggested at any of DOE's waste sites).

Q. Does this mean that DOE could pump all HLW into the soil and it would no longer be classified as HLW?

*R.* Theoretically yes, it would fall under CERCLA, but DOE will continue to follow the WIR process to handle high levels of contamination in the soil beneath tanks.

Q. Can DOE explain whether the rewrite addresses past conflicts with Order 435.1 and the Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA)?

*R. RCRA* and *TSCA* deal with hazardous waste while Order 435.1 deals with radioactive waste so there should not be any conflicts.

Q. Will there be an exemption process for WTP HLW melters or will they be managed like the smaller West Valley melters?

*R.* The WIR process would be only way of taking piece of equipment that is highly contaminated with waste and residual and determine if it is not HLW. The only way that DOE could provide an exemption would be to consider melters under citation process, which would say that any melter DOE manages is not considered HLW. DOE is not comfortable making that claim. Citations are

really designed to be used for innocuous items such as booties, tools, or lab work that have not come in serious contact with HLW.

Q. Will there be any changes on tank waste incidental process analysis regarding the wording to the maximum extent technically and economically practicable?

*R.* DOE plan on using the NDAA Section 3116 language but that will not change the process for tank waste residual determination.

DOE is going to use the wording in NDAA Section 3116 that says "to the maximum extent practicable." This does not change how DOE will handle waste management. DOE will still have to show the removal of high level radionuclides to the best extent possible.

Q. Can DOE explain the citation process and whether it will be changed in the Order 435.1 revision?

*R.* The citation process was originally meant to be a list of things that even if they were slightly contaminated would never be considered HLW. The citation process was designed for items such as tools, booties, or decontamination wipes. The main change in Order 435.1 is that DOE is providing more specific categories and items in the citation process.

Q. Can DOE explain the HLW criteria evaluation process in 10 Code of Federal Regulations (CFR) 10.61?

*R.* The criteria in 10 CFR 10.61 are the same criteria in Order 435.1 now and in NDAA Section 3116. These criteria are consistent between DOE and NRC and are applied in making decisions on classifying HLW. The key point with these criteria is whether waste meets the performance objectives of LLW or not. If it does, than the waste should be disposed of and does not require isolation and placement in a depository.

Q. Will the revised Order 435.1 make changes to NRC role in consultation?

*R. The revised Order will make consultation on WIR process mandatory instead of optional. There will still be some minor differences from NDAA Section 3116. D* 

C. The current Order 435.1 LLW guide requires performance assessment and cumulative assessment for new facilities but does not discuss how DOE will close existing facilities such as the Hanford tank farms.

*R.* The current Order 435.1 current order actually does discuss closure of facilities. To close a tank farm or another existing facility DOE follows the HLW closure requirements to conduct a performance assessment as if the facility was LLW facility and develops a closure analysis and plan.

Q. Will the revised Order 435.1 address potential Hanford SST designation as transuranic (TRU) waste so it can be sent to the Waste Isolation Pilot Plant (WIPP)?

*R.* There is work going on looking at the potential to designate SST waste as TRU waste so it can be sent to WIPP. DOE does have ability to designate those tanks by pedigree not as HLW and as TRU waste; therefore, they can go to WIPP. The problem is that the New Mexico Environmental

Department (NMED) has a veto in their permit that says if DOE sends anything to WIPP that is of tank origins it will require a permit modification request which could take years to complete.

Q. What is the criterion DOE uses to identify key radionuclides with respect to models and uncertainty?

*R. DOE is expanding the need to address both sensitivity and uncertainty in identification models. We are making key improvements in the performance assessment process. Currently key radionuclides are identified if they are a fission product, included in Tables 10 and 2 of 10 CFR 10.61, or it is any radionuclides in concentration high enough to be important in performance assessment.* 

## Tri-Party Agreement (TPA) Change Package

## Presentation

Dennis Faulk, John Price, and Doug Shoop, DOE-RL, gave a presentation on the Proposed Changes to the TPA; their presentation is provided as Attachment 6. In addition to their presentation, they noted:

- The proposed change package was necessary due to additional waste sites and areas with higher contamination than the TPA agencies had expected, particularly regarding chromium.
- The TPA agencies have established a final schedule for disposition of the Canyons but have not done investigation or characterization of them. The Canyons are lower priority because they are currently stable.

# 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. Is there potential to extend the public comment period beyond the February Board meeting so the Board can provide comments?

*R.* It is possible to extend the comment period; however, doing so would create liability for DOE because it will mean missing certain milestones which are due in December. DOE wants to have an open and transparent process and is willing to accept that liability if there is a compelling reason to do so.

Q. Will the increasing complexity of demolishing the Plutonium Finishing Plant (PFP) impact schedule for decontamination and decommissioning?

*R.* Plutonium removal is tied to the PFP. The TPA milestone is that the PFP demolition will be complete in 2016, but in reality it will likely take until 2019. Decontamination and decommissioning is difficult because new challenges often arise and it is important to continue progress while maintaining safety. The challenge for the PFP is the 242 Building.

Q. Where is the thorium vault located?

R. The thorium vault is located at U Plant and is not along the river.

Q. Does the interim safe storage of KE Reactor affect the ROD schedule?

R. The interim safe storage of KE Reactor does not impact the ROD.

Q. The U Canyon grouting is almost complete and the next step is engineering and collapsing the building. How is that going to work?

*R.* The grouting is complete. The TPA has milestones to collapse the walls by 2017 and to cap the U Canyon in 2021.

Q. How will the barrier in the U Canyon be constructed?

*R.* DOE is working with EPA and Ecology to take material from the K Area and transport it to the Central Plateau near U Plant to use in barrier construction. The current approach is to get material from Barrow Area C, in consultation with tribes because of its proximity to Rattlesnake Mountain. DOE is currently going through a NEPA analysis on this plan.

Q. How does the change package impact DOE-RL's 2015 Vision?

*R. DOE-RL's 2015 Vision assumed a certain funding profile and a certain number of waste sites. These have not been realized, but progress on the Vision has been made.* 

The River and Plateau Committee (RAP) has this topic on their November committee meeting agenda. They will discuss whether they believe that this is a topic for Board advice, and provide a recommendation either way to the Board.

#### Proposed Changes to Board Structure, Integrity, and Operations

Dana Bryson presented DOE's response to HAB Advice #259: Term Limits. Dana said he was happy to provide a simple and direct letter responding to the Board's advice. Dana explained that the letter states that DOE wants to work through any membership issues with the Board and to allow HAB the opportunity to give advice on anything DOE proposes. DOE will not be enforcing term limits in the 2013 membership package. Additionally, DOE is working to identify all the issues that might occur with the membership package approval and will bring those issues to the Board. Dana encouraged the Board to bring forth any ideas of how DOE can better develop Board membership. He said the Board is doing very well, but there is always room for improvement in how the public is involved.

Susan Leckband added that DOE's response gives the Board time to engage DOE in discussion on membership issues. The Executive Issues Committee (EIC) plans to discuss with DOE how the Board could solve their concerns while not damaging the Board's integrity. Susan described this as a positive path forward. The EIC will continue to work on this issue and keep the Board apprised.

## Environmental Management-Site Specific Advisory Board (EM-SSAB) Letters

Susan Leckband explained that at the last Environmental Management-Site Specific Advisory Board (EM-SSAB) meeting four draft letters were created for each EM-SSAB to consider supporting. The letters address:

- 1. Waste Isolation Pilot Plant's (WIPP) disposal mission
- 2. Disposal of DOE HLW
- 3. Funding for technology
- 4. Decontamination technology to make recycling cost effective

During the Boards discussion the following high level points were made:

- The Board will approve EM-SSAB letters with a consensus process. If anyone objects to a letter, it will not be supported to go forward.
- The Board would like the EM-SSAB to consider developing a more robust process for drafting and reviewing letters. Additional clarification is also needed on the EM-SSAB letter process and what it means if one Board does not approve a letter.

#### WIPP's Disposal Mission

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

- Some Board members took issue with the letter recommending DOE send waste to WIPP in New Mexico without collaborating with the State first. They indicated it is critical to have the State's consent and active participation to increase the likelihood that WIPP would actually accept new waste. Other Board members felt that such collaboration was implied. Susan Leckband confirmed that the New Mexico SSAB supported the letter.
- Some Board members felt that this was fundamentally an issue of state's rights.

Due to lack of consensus, the Board did not lend its support to the letter going forward.

#### Disposal of DOE HLW

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

• The Board remarked that if the word "separate" was instead "prioritize" then the letter would be acceptable. However, "separate" limits the opportunity to leverage funds from the nuclear industry.

While there wasn't consensus to support the letter going forward, the Board provided a conditional agreement that if the wording was changed from "separate" to "prioritize" they would approve the letter.

#### Funding for Technology

The Board supported the letter going forward.

## Decontamination Technology to make Recycling Cost Effective

The Board supported the letter going forward.

## **Election of Board Chair**

#### Presentation of Candidates

Pam Larsen, Board Nominating Committee, shared with the Board the nomination of Steve Hudson, Hanford Watch, for Board Chair. Pam explained that Steve was the only nominee for Chair and that he submitted all the required information and was willing to serve.

Susan Hayman added that Bob Suyama was nominated but did not accept the nomination.

#### Candidate Statements

Steve Hudson provided a statement discussing his willingness to serve as Board Chair and his commitment to the Board's work.

#### 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. One duty of the Chair is to advocate for the Board and challenge the TPA agencies. How do you plan to rise to that challenge?

*R.* Steve responded that confrontation is part of the Board's work and it happens often. He explained that his skills of working with people and providing support and deliberative arguments can achieve results and diminish contention.

Q. Will you be forced to travel more since you are in Oregon?

*R*. Steve answered that he already travels a lot and that it does not bother him. He can attend meetings over the phone or in-person as needed.

Q. The Board values diversity and its ability to accept a variety of viewpoints. For the Board to be effective, the Board Chair needs to allow divergent views to be discussed and represented in the advice process. How do you plan to ensure this occurs?

*R.* Steve responded that the Board is mature and has fostered diversity. While many members do not hold the same opinion, they respect each other and their diverse views. As Board Chair, he would work to acknowledge diverse opinions and thank everyone for providing their viewpoint.

#### Election

The Board unanimously elected Steve Hudson as the next Board Chair.

The Board approved Susan Leckband to act as interim Vice-Chair. The Board also convened a Nominating Committee to start a Vice-Chair nomination process for selection at the February Board meeting. Nominating Committee members include: Pam Larsen, Norma Jean Germond (Public-at-Large), Ken Niles, and Keith Smith (Public-at-Large).

#### **Committee Reports**

#### River and Plateau Committee (RAP)

Pam Larsen noted that RAP will have a meeting on Tuesday, November 6. At the meeting the committee will:

- Receive an update on the F Reactor Operable Unit Remediation that has been declared complete under the interim Record of Decision (ROD).
- Hear an update on the plutonium land mine accomplishments and challenges.
- Discuss the TPA change package jointly with PIC and BCC
- Review committee business, including: identifying issue managers and working on their three month work plan.

#### Budgets and Contracts Committee (BCC)

Jerry Peltier, City of West Richland, asked for additional members to work on the BCC. Jerry outlined the key issues the BCC will be working on:

- DOE budget proposal and the uncertainty of Hanford cleanup funding.
- Potentially developing advice related to small business contractors

#### Tank Waste Committee (TWC)

Dirk Dunning encouraged Board members to become involved in the TWC and join them for their next meeting. Dirk reviewed that the TWC discussed the following at their last meeting:

• Integrated tank farms and the WTP

- AY-102 and DST integrity work
- Letter from Washington's Governor to Secretary Chu
- Concerns raised by an engineer at DOE-ORP and his letter to management

Dirk also highlighted the topics for TWC's November meeting:

- Update on DST AY-102 and SST retrieval work
- Tank sampling, blending, mixing, and efficiency
- DST integrity follow-up
- Technology options for supplemental low-activity waste treatment.

#### Health, Safety, and Environmental Protection Committee (HSEP)

Becky Holland, Hanford Atomic Metal Trades Council, reported on HSEP's last meeting where they discussed:

- Worker training issues
- Worker safety issues
- Integrated Safety Management response letter

HSEP will have their next meeting on Thursday, November 8. HSEP will meet jointly with TWC to review DOE's response to HAB Advice #258 on safety culture and the WTP. HSEP will receive a tutorial on documented safety analysis. They will also discuss site wide safety culture survey results.

#### Public Involvement and Communications Committee (PIC)

Liz Mattson said that the Board received a response to their advice on State of the Site (SOS) meetings. At their last meeting, PIC discussed:

- The response to HAB Advice #261: State of the Site (SOS) Meetings. The committee discussed the potential to hold SOS meeting in fall 2013.
- The Hanford Public Involvement Plan is almost complete and the response to comment document is available.
- Public involvement opportunities for the 300 Area Proposed Plan begin in February.
- The publics' understanding of cleanup levels. PIC discussed a series of questions and factors that make cleanup levels confusing to the public. These questions will be brought to RAP to discuss and refine.

• The next EM-SSAB meeting will be in the Tri-Cities in April. PIC discussed the logistics for the meeting. Board members can attend the meeting but will not be reimbursed for travel.

PIC will have a committee call on December 6 (later changed to December 20).

#### Site-Specific Advisory Board (SSAB)

Susan Leckband said that at the last EM-SSAB meeting they heard excellent updates on waste disposition and budget. At the meeting, the EM-SSAB developed the four letters which the Board discussed.

#### Executive Issues Committee (EIC)

Susan Leckband explained that the EIC is developing a proposal based on the Term Limit advice to address diversity on the Board. The proposal will be available at the February Board meeting. The EIC also discussed how the Board communicates its recommendations. Lastly, there may be a Committee of the Whole (COTW) to discuss the Tank Closure and Waste Management FEIS in December or January.

#### National Liaison

Shelley Cimon, Public-at-Large, had no updates as the National Liaison.

#### **Board Business**

#### November Committee Meetings and Calls

Susan Hayman reviewed November Committee meetings and calls:

- November 6: RAP Meeting 9:00 a.m. to 4:00 p.m.
- November 7: TWC Meeting (joint with HSEP) 9:00 a.m. to 4:00 p.m.
- November 7: EIC Meeting 6:00 p.m. to 8:00 p.m.
- November 13: BCC Call Placeholder
- December 6: PIC Call

#### Preliminary February Board Meeting Topics

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

- Potential advice on the Tank Closure and Waste Management FEIS
- Potential advice on the TPA Change Package
- Board Vice-Chair selection

Hanford Advisory Board Final Meeting Summary

- Discussion of the Tank Closure and Waste Management FEIS
- Response to HAB Advice #263: DST Integrity

#### 2013 Board Membership Process

Tifany Nguyen said that DOE-RL is working on the 2013 nomination/renomination process. She indicated that some members will be contacted by Barb Wise, MSA, to ensure DOE has the correct information about their organization's nominating official. She explained that each nominating organization will receive a letter, nomination form, and operating ground rules. Once DOE receives the returned nomination, they will work to get the nominee's application completed.

#### **Public Comment**

Ron Jarnagin provided public comment on the HAB Values White Paper. Ron said that he has a background working with corporate boards. He suggested using the term "core values" rather than just values because it adds a level of impact and focus for those used to corporate values. He felt that the values require prioritization and focus. Having 13 unprioritized bulleted items just invites others to assign priority to them, which may not reflect the Boards intentions. Also, he suggested highlighting the most important values and then providing sub-values as bullets underneath. This would succinctly state the values so everyone can remember them. He thanked the board and stated that he just wanted to provide his thoughts.

#### **Closing Remarks**

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

#### **Attachments**

Attachment 1: HAB DOE-RL Program Report Attachment 2: HAB DOE-ORP Program Report Attachment 3: HAB Ecology Program Report Attachment 4: Hanford Natural Resources Trustee Council – Injury Assessment Plan Attachment 5: Hanford Site Proposed Land Conveyance Project Attachment 6: Proposed Changes to Tri-Party Agreement

#### **Attendees**

Tom Carpenter, Member (phone)	Jerry Peltier, Member	Larry Lockrem, Alternate
Robert Davis, Member	Maynard Plahuta, Member	John Martell, Alternate
Lynn Davison, Member	Dan Serres, Member	Liz Mattson, Alternate
Sam Dechter, Member	Rosenda Shippentower, Member	Emmett Moore, Alternate
Earl Fordham, Member	Keith Smith, Member	Melanie Myers-Magnuson,

#### HAB MEMBERS AND ALTERNATES

		Alternate
Gary Garnant, Member	John Stanfill, Member	Vince Panesko, Alternate
Norma Jean Germond, Member	Bob Suyama, Member	Wayne Riggsbee, Alternate
Harold Heacock, Member		Rebecca Rubenstrunk, Alternate
Rebecca Holland, Member	Al Boldt, Alternate	Mecal Samkow, Alternate
Steve Hudson, Member	Shelley Cimon, Alternate	Richard Smith, Alternate
Pam Larsen, Member	Dirk Dunning, Alternate	Margery Swint, Alternate
Susan Leckband, Member	Laura Hanses, Alternate	Rick Tackett, Alternate
Jeff Luke, Member	Barbara Harper, Alternate	Jean Vanni, Alternate
Doug Mercer, Member	John Howieson, Alternate	Steve White, Alternate
Ken Niles, Member	Paige Knight, Alternate	
Bob Parks, Member	Bob Legard, Alternate	

# AGENCY, CONTRACTOR, AND SUPPORT STAFF

Dana Bryson, DOE-RL	Dieter Bohrmann, Ecology	Barb Wise, MSA
Karen Lutz, DOE-RL	Madeleine Brown, Ecology	John Fulton, CHPRC
Matt McCormick, DOE-RL	Melinda Brown, Ecology	Sonya Johnson, CHPRC
Tifany Nguyen, DOE-RL	Jane Hedges, Ecology	Kimberly Tebrugge, CHPRC
Tom Fletcher, DOE-ORP	Jeff Lyon, Ecology	John Britton, WRPS
Lori Gamache, DOE-ORP	John Price, Ecology	Michael Connelly, WRPS
Ron Koll DOE-ORP	Andrea Prignano, Ecology	Felix Miera, WRPS
Scott Samuelson, DOE-ORP	Cheryl Whalen, Ecology	Daniel Brody, EnviroIssues
Alex Teimouri, DOE-EM	Ginger Wireman, Ecology	Susan Hayman, EnviroIssues
Dennis Faulk, EPA	Sharon Braswell, MSA	Tammie Gilley, EnviroIssues
Emy Laija, EPA	Rae Weil, MSA	

# MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald	Ron Jarnagin	
-------------------------------	--------------	--