### **FINAL MEETING SUMMARY**

#### HANFORD ADVISORY BOARD

March 6-7, 2014 Kennewick, WA

## **Topics in this Meeting Summary**

Executive Summary	1
Welcome, Introductions, and Announcements	3
Tri-Party Agreement Agencies – Program Updates	4
Committee Reports	9
Draft Advice: 100 N Proposed Plan, Draft A	
Public Comment	13
Draft Advice: Path Forward on Tank Waste	14
100 F Proposed Plan, Rev. 0 – Part 1	15
100 F Proposed Plan, Rev. 0 – Part 2	
Sounding Board – 100-F Proposed Plan, Rev. 0.	18
Public Comment	
Board Business	24
Attachments	27
Attendees	27

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

## **Executive Summary**

### Hanford Advisory Board (HAB or Board) action

The Board adopted two pieces of advice regarding the 100 N Proposed Plan, Draft A and a path forward on tank waste. The Board also adopted a letter on Board diversity and effectiveness.

The Board also held a sounding board on the 100 F Area Proposed Plan, Rev. 0.

#### **Board business**

The Board will hold two committee meetings in March (River and Plateau Committee and Tank Waste Committee). The Board confirmed the selection process for the Board's national liaison position. The Board also identified preliminary June meeting topics.

## Presentations and updates

The Board heard presentations on:

- Tri-Party Agreement agency program updates
- Recap of the 300 Area Proposed Plan
- 100 F Area Proposed Plan, Rev. 0

## **Public comment**

Two public comments were provided.

#### HANFORD ADVISORY BOARD

### March 6-7, 2014 Kennewick, WA

Steve Hudson, Hanford Watch 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 opportunity for public comment.

The Board meeting was audio-recorded.

### Welcome, Introductions, and Announcements

Kim Ballinger, Department of Energy-Richland Operations Office (DOE-RL), welcomed everyone to the meeting and introduced Mark McKenna, a new employee of Mission Support Alliance (MSA).

Steve introduced Cathy McCague, EnviroIssues, returning Board facilitator who has replaced Susan Hayman. Cathy said she is glad to be back with the Board, noting Susan will remain on the project as a strategic advisor. Cathy also introduced Melissa Thom, EnviroIssues, who is also back with the Board after a hiatus. Melissa will be the Board's note taker.

Cathy reviewed the meeting agenda and objectives.

Steve confirmed adoption of the December meeting summary.

Earl Fordham, Washington State Department of Health, introduced David Jansen, the new Director of the Office of Radiation Protection. David worked for the Washington State Department of Ecology (Ecology) in the 1990s and is very familiar with the Hanford project.

Steve reminded the Board that State of the Site (SOS) meetings will be held in April and are a good opportunity for the Board and Tri-Party Agreement (TPA) agencies to engage the public. Steve reviewed specific meeting dates: Seattle (April 15), Portland (April 16), Hood River (April 17), and Richland (April 29). Steve asked Board members to provide materials suggestions for a Board-hosted table at the SOS meetings, as well as indicate if they are available to attend and support the meetings.

Steve invited Board members to attend the upcoming Environmental Management Site-Specific Advisory Board (SSAB) meeting at the Pasco Red Lion, April 23-24. He said the first day of the meeting will provide interesting information from other nuclear waste sites. Susan Leckband, Washington League of Women Voters (Regional Environmental/Citizen), spoke to the SSAB dinner cruise departing on April 23 at 5:30pm from the Pasco Red Lion. She said specific information for the cruise will be provided in an upcoming Events-at-a-Glance email and encouraged Board members to sign up to attend.

Steve asked Board members to review the provided proposal on the National Liaison position and letter on diversity prior to the Friday Board meeting. He said the Executive Issues Committee (EIC) has devoted an extended amount of time to drafting both documents.

Mecal Seppäläinen, Oregon Hanford Cleanup Board (State of Oregon), encouraged Board members to read the recently published "The Hanford Advisory Board: Participatory Democracy, Technology, and

Hanford Advisory Board Final Meeting Summary

Representation," in the *Journal of Environmental Studies and Sciences*. She said it provides a summary of the Board process and its effectiveness.

Steve confirmed that the June Board meeting will be held June 4-5. It is a Wednesday-Thursday meeting, with the Wednesday meeting running 12 p.m.-8 p.m. in order to allow the public to attend after work hours.

Liz Mattson, Hanford Challenge (Regional Environmental/Citizen), announced that Board member Shannon Cram was married recently. She suggested Board members send her a note of congratulations as well as support as she cares for a sick parent. Liz also announced that she would be willing to text Board members meeting reminders before PIC conference calls to encourage better participation.

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

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

Greg Jones, DOE-RL, reviewed DOE-RL activities and accomplishments; his presentation is provided as Attachment 1. In addition to the information contained in his presentation slides, Greg emphasized the following in his remarks:

- Waste from the Central Plateau and River Corridor are contained in the Environmental Restoration Disposal Facility (ERDF).
- DOE-RL serves as the Hanford Site's landlord for emergency and employee services.
- DOE-RL is especially proud of the groundwater program, which is making water on the Central Plateau and River Corridor safe.
- Washington Closure Hanford recently conducted testing on a hot cell under the 324-Building, which has been breached and is very hot. A contractor will be hired to conduct cleanup and teardown of the facility after cleanup has been accurately and safely designed.
- Progress in the River Corridor includes the demolition of the 300 Area Test Reactor and a tank vault that were both send to ERDF.
- DOE-RL is currently studying how best to clean out the vertical pipe units (VPUs) and hope to begin the clean out in Fiscal Year (FY) 2014.
- The 200 West pump and treat system is online and will treat over one billion tons of water this year.

Greg encouraged participation in the Hanford Site and B Reactor tours in order to understand the history and magnitude of the site. He directed the Board to the DOE events calendar, noting two comment periods are currently open and there will be upcoming meetings for the SOS and the Hanford Site budget.

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

JD Dowell, DOE-ORP, provided an update on DOE-ORP activities and accomplishments; his presentation is provided as Attachment 2. In addition to the information contained in his presentation slides, JD emphasized the following in his remarks:

- Washington River Protection Solutions (WRPS) recently notified DOE of a new leak under AY-102. DOE has been monitoring previous leaks in risers 82 and 87 each week, and a 60 percent inspection over the summer did not identify the additional leak. DOE will continue to investigate the possible source for the leak, but JD stressed that the material has not leaked into the environment and there is no risk to human health at this time. A pumping plan will be submitted to Ecology on March 7 to look at resources available for pumping the waste out of AY-102.
- DOE-ORP recently received approval to hire 20 new employees, bringing their federal employee total to 169.
- DOE is requesting to forgo the third technology for cleaning up tankC-101, which is 96.3 percent complete. The request has been submitted to Ecology for review.
- The Mobile Arm Retrieval System () has retrieved about 90 percent of the waste in tankC-107. 91,000 gallons of waste have been removed from tankC-112; DOE is calculating how much waste is left for retrieval. Tank C-111 has 35,000 gallons of waste to be removed by an enhanced-reach sleuther-system to be completed September 2014. Tanks C-102 and C-105 are being staged for removal this year.
- A new core sampling system will be used on SY-102, looking at the particle size of the waste and conducting sampling this summer.
- Four campaigns are planned for the 242-A Evaporator, the first beginning in late May, another in September, and the remaining two in the early quarter of FY2015. DOE will conduct a readiness assessment to assure they are ready to move forward with the planned work.
- DOE is working to demonstrate how to increase the capacity of the C-Farm double shell tanks (DSTs) from 196 inches to 300 inches through buoyant displacement gas relief event testing (BDGRE), which examines how hydrogen impacts deep sludge formations in the tanks.
- Progress is being made at the Waste Treatment Plant (WTP):
  - Standard construction of the balancing facilities at the Analytical Laboratory (LAB) and Low-Activity Waste (LAW) Facility is underway, with both LAB and LAW near 80 percent completion.
  - Construction on the High-Level Waste (HLW) Facility may be phased back in FY2014 and DOE is making progress on HLW treatment issues.

- o The Steam Plant Boiler will supply 270,000 pounds of steam to heat WTP buildings and is near construction completion.
- o A full-scale test of the WTP vessel system will be conducted this year; the vessel will be installed to manage technical issues at the Pre-Treatment (PT) Facility and HLW.
- The budget profile for DOE-ORP will allow for catch up after significant delays during the government shutdown.

Washington State Department of Ecology (Ecology)

Jane Hedges, Ecology, provided an update on Ecology activities and accomplishments; her presentation is provided as Attachment 3. In addition to the information contained in her presentation slides, Jane emphasized the following in her remarks:

- Ecology is extremely concerned about the leaks at AY-102 and stand behind the position that the tank will need to be pumped. Ecology will review DOE's pumping plan as soon as possible.
- Ecology is also exceedingly concerned for the FY2015 budget recently released for DOE-RL, although DOE-ORP has faired a little better. Ecology is concerned that important TPA milestones will be missed and they are working with the budget delegation to ensure work will be funded to support those milestones.
- Ecology recently completed an inspection of a leaking box and issued an agreed-upon penalty to DOE for \$261,000. DOE has paid \$15,000 of the penalty, the rest of which will be held back as tasks are completed in order. If tasks are not completed, the penalty will be reinstated. Jane said penalties are meant to change behaviors.
- Ecology is in the middle of several public comment periods and has participated in a number of recent outreach opportunities for various community groups.

### U.S. Environmental Protection Agency (EPA)

Dennis Faulk, EPA, provided an update on EPA activities and accomplishments. Dennis noted the following key points:

- EPA will experience a work force reduction through the end of FY2015 but will continue to ensure DOE complies with EPA regulations.
- An engineering evaluation cost analysis (ECA) has been issued for taking perched water from 200 East to the 200 West pump and treat. An ECA is a short form document to reach a quick answer on a straight forward problem.

- EPA has been meeting with DOE over the past couple months to analyze how to move forward with groundwater work given budget constraints. Dennis said the strontium-90 (Sr90) barrier supposed to be implemented may be in jeopardy.
- The 100 BC Area has been backfilled and vegetated. New wells have been installed to further delineate for potential plumes, completing work in the area.
- EPA is working on a proposal for treatment within ERDF as well as a joint proposal with DOE for macro-encapsulation within the trench that will be out in the late April, early May timeframe.
- The Consortium for Risk Evaluation with Stakeholder Positions (CRESP) is a group of academics from Vanderbilt University, sponsored by DOE. The kickoff meeting for their risk evaluation project at Hanford is next week and will be attended by Dennis, Jane Hedges, and Dave Jansen. They will keep the Board apprised of the project.

#### 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.

- C. I amconcerned about the cumulative waste load waiting on site, considering we will notbe able to ship our transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP).
- Q. Will the waste in the 100-K Area be retrieved to another interim facility? Will DOE pre-treat waste before interim storage or is the Treatment (T) Plant the final repository?
  - R. [DOE-RL & EPA] We will treat waste in the sludge annex staging area. The T-Plant is only for removing waste from along the river and is not designed for long-term storage. The current Record of Decision (ROD) provides for lag-time storage but not long-term storage. We will need to decide what we want to do and whether you think that decision should go out for public comment.
- Q. Given recently discovered dam cracks and leaks, is there any way to encourage an inspection of the Priest River Dam for structural damage?
  - R. [DOE-RL] I imagine they will look at other dams, but the Board could send them a letter encouraging an inspection because of the potential impact to the Hanford Site.
- C. The Priest River Dam is overseen by Grant County.
- Q. How does WRPS inspect AY-102?
  - R. [DOE-ORP] WRPS uses a long probe to video record the tanks, as well as tracker technology for drains. We are always looking for ways to be more predictive and stay ahead of issues.

- Q. Where does the penalty money go after collected from DOE?
  - R. [Ecology] It goes into the State Toxic Control account and cannot be used on the Hanford Site.
- Q. Is there any way to speed up DOE's ability to produce glass? The glass-production plant is almost completed and it appears that it may be idle for a period before DOE is prepared for it to treat waste.
  - R. [DOE-ORP] DOE has acknowledged that the Consent Decree (CD) milestone for initiating glass operations in 2019 is at risk, and we will be meeting to discuss milestones and the schedule, but we cannot share the sensitive details until after the state has been engaged.
- Q. Can you further explain the testing for hydrogen gas moving through sludge? How hot are the tanks, how much heat load can they take, and can the Board assume the sludge is the same viscosity throughout? I'm concerned that with the thermal heat load already in the tanks, additional heat could change the viscocity through evaporation, necessitating the addition of water to keep the heat load at an even temperature. This calls into question the continued ability of hydrogen gas to escape.
  - R. [DOE-ORP] There are a number of technical issues and critical points for analysis, but the testing is not yet operational. We have to look at the function of the friction between particles and how it drives matter, but we are still assessing the safety of the mechanical load on the structures before moving forward. We are moving through the design process, which will be provided to Ecology for review, at which point the Board could ask for a committee briefing.
- Q. I am concerned about the risk assessment being conducted for WTP, specifically because it was not originally designed to be a nuclear facility. How will the assessors account for the aging commercial equipment in order to make the assessment meaningful?
  - R. [EPA] It will be interesting to see how this process develops, because we need to figure out how to factor compliance into the risk equation. We hope, for example, that cesium capsules will be assessed at the macro level, but we do not know yet.
- Q. Will the discovery of new material in the AY-102 risers increase monitoring activities for other risers? Could increased monitoring have caught the problem sooner?
  - R. [DOE-ORP] We have not developed protocol for the future yet, but we will complete a 365 review to make sure the leak is not coming from anywhere else. The impacted riser will become a part of continuous monitoring at a higher frequency. All DSTs are on a three-year review process now, unlike before when it was five to seven years. We will discuss monitoring with Ecology.
- Q. What are DOE-ORP's primary concerns for WTP?
  - R. [DOE-ORP] Resolving technical issues for the PT Facility and designing features that are defendable, robust, and safe.

- Q. Has there been a determination for how long ERDF will continue to perform before the system starts to fail?
  - R. [DOE] I will need to get back to you on the design life of ERDF, but we are conducting testing for the leach collection system. The cap in place at ERDF will protect the soil for the project lifetime, independent of the liner.
- Q. Does the CRESP venture have the potential to delay decisions?
  - R. [EPA & Ecology] I hope their efforts reinforce what we have already accomplished and where we are headed, as we have used risk in priority setting already. We will continue along our Hanford cleanup course. We hope to gain more information that will support our decision making, but will not participate in the process if it derails.
- C. I have been interviewed by CRESP and expressed deep concern about their goals for the risk analysis, particularly because this effort has been commissioned by DOE-Headquarters (HQ). I expressed that I would rather see the funding go to cleanup than an additional study.
- Q. What's the definition of long-term storage in the ROD for T-Plant?
  - R. [EPA] Lag-storage is defined by months, not years. When the ROD was issued, the plan was to move forward with processing the waste for direct shipment to WIPP. The regulation is to get the waste off site by 2024, but we do not need to force feed it if it is contained in a safe configuration, and we will consider that as we revise the ROD.
- Q. Will the Board receive any more information on DOE's Hanford Tank Waste Retrieval, Treatment, and Disposition Framework (Framework)? We have not been briefed on what the Framework and associated study concluded.
  - R. [DOE-ORP] Kevin Smith, DOE-ORP, has committed to discussing the technical issues raised with the Board, but the issues do not drive the Framework. Nine technical issues have been identified and are being addressed by different groups managed locally through Bechtel.

Steve Hudson closed the question and answer session and thanked the Tri-Party Agreement agencies for their presentations.

## **Committee Reports**

Public Involvement and Communications Committee (PIC)

Liz Mattson acknowledged members of PIC, reminding the Board that all Board members are members of PIC. She said PIC had a successful meeting yesterday, mostly concerned with committee business, sixmonth accomplishments, and providing feedback for the agencies on SOS meetings and building credibility with the public. Liz reviewed the committee's key accomplishments:

- Joint committee topic support for the openness advice, path forward for tank waste, 100 F Area Proposed Plan, and any other River Corridor decisions as they are available.
- Strategic public involvement activities with a specific look at unique public involvement tools.
- Design of SOS meetings and meeting support.

Liz encouraged more Board members to participate in PIC meetings and conference calls, noting that she would be willing to text them meeting reminders prior to calls.

Budgets and Contracts Committee (BCC)

No updates at this time.

River and Plateau Committee (RAP)

Dale Engstrom said RAP has experienced recent delays because of budget issues in FY2013 but has been working over the past six months on the proposed plans and remedial investigation/feasibility study (RI/FS) processes for 100 K, 100 F, and 100 N. . RAP is looking at the expansion of pump and treat systems in the 200 West, K, P, and H Areas, as well as DOE's long-term stewardship program in the 100 F and other areas. Dale said they have been reviewing the remediation strategy for the Central Plateau and perched water experiment in the Central Plateau Vadose Zone. RAP also recently reviewed the Performance Assessment for ERDF and proposed modifications for the Resource Conservation and Recovery Act permit (RCRA). RAP will review the 100 D/H Area Proposed Plan and long-term stewardship in the upcoming months, as well as receive presentations on the groundwater modeling process and perched water. Dale noted that the next RAP meeting is scheduled for March 11 at the Richland Public Library.

*Tank Waste Committee (TWC)* 

Bob Suyama acknowledged TWC members, noting the complex nature of the issues the committee addresses. Bob said TWC used the Board's sounding board comments on the tank waste framework to generate the advice brought forward today. The advice was also informed by a DOE briefing on the direct feed of LAW to the Vitrification Facility . Bob said TWC also received an update from Ecology on proposed scenarios for the next system plan evaluation, noting that DOE did not provide scenarios due to delays from the government shut down. TWC held a joint session with HSEP on DST flammable gas and safety issues. In the upcoming months, TWC will receive briefings on WTP, tank issues, and tank waste feed characterization and staging from the F ramework document, for which the committee may develop advice to bring to the Board. Bob said the committee is interested in learning more about glass and will receive a DOE presentation to provide the basics in order to potentially provide advice. TWC will review agency responses to past advice on leaking tanks and openness and transparency as related to the Framework document and will discuss the recent leak at AY-102, as well as a detailed briefing on the Extent of Condition for Tank Integrity Report on DSTs that was recently addressed by Oregon Senator Ron Wyden.

Bob reviewed TWC's six-month accomplishments, noting the committee worked specifically on:

- Waste Management Area C Performance Assessment
- System Plan
- Tank Retrieval and tour of C-110 retrieval completion
- DST integrity and how it applies to AY-102
- WTP technical issues, specifically hydrogen gas hazards and piping issues

Bob noted TWC has not addressed any of the HAB Work Plan "B" priorities because their "A" priorities have kept them very busy. TWC will propose one addition to their "A" priorities for TRU tank waste and consideration of shipment to WIPP.

Health, Safety and Environmental Protection Committee (HSEP)

Becky Holland acknowledged HSEP members, noting the recent busy schedule the committee has kept with several joint topics with other committees. Becky said an ongoing topic for HSEP is the safety basis at WTP and they recently discussed DSTs flammable gas issues with TWC. The committee received updates from DOE on the site's safety culture and HSEP is working on narrowing the topic down for more workable action. Becky said HSEP is looking at the Emergency Preparedness Program and how they can help DOE better communicate emergency response and preparedness to employees. Becky said HSEP recently took a tour of some site facilities and is looking forward to producing an informational video with the Hanford Communities, as well as the upcoming tour of open air demolition at PFP.

Becky said HSEP received a radiological (RAD) Primer presentation from issue managers and the Washington State Department of Health (DOH) and are discussing providing a committee demonstration on what it is like for employees to dress and undress for dealing with hazardous waste.

Richard Bloom, HSEP vice-chair, thanked the DOH for their participation in the RAD Primer. He said their demonstration on air activity in the Richland library showed how to move from field measurements to effects on humans and was very interesting.

National Liaison

No updates at this time.

Site-Specific Advisory Board (SSAB)

Steve Hudson said Hanford is hosting the SSAB April 23-24. The Board voted on three SSAB pieces of advice at the December Board meeting. The waste disposition in the United States advice was passed by all boards, as well as the recommendation from New Mexico on budget constraints and whether or not promised funding can be withheld during sequestration. But the Board did not approve the advice on

recycling materials from nuclear facilities, though the other SSAB boards decided to move it forward. Steve noted that he did not change his vote to unanimously pass the third piece of advice as he is a representative of the Board.

Executive Issues Committee (EIC)

Steve Hudson said the EIC meets frequently and does exceptional work for the Board. He noted that the diversity letter and National Liaison position proposal are EIC topics to be addressed by the full Board during the Friday meeting. The EIC recently discussed changes to the Board schedule and the Board's 20<sup>th</sup> Anniversary celebration.

## **Draft Advice: 100 N Proposed Plan, Draft A**

*Introduction of advice* 

Dale said plans for the 100 N Area has been an ongoing project for a while, moving through the draft RI/FS process and Proposed Plan, which were published in summer 2013. The project was then postponed for budget reasons, and RAP decided to hold a round table for questions, comments, and a presentation from DOE. The advice brought forward today was informed by that discussion.

Dale explained that 100 N housed the last of the production reactors. This particular reactor had a closed loop system so not as much chromium leached, and what did leach has since been washed away. But Sr90 is in the ground creating a plume, making it the primary contaminant of concern. DOE attempted to create a water barrier to keep the Sr90 from the groundwater, which worked, but did not solve the problem. DOE then injected 300 meters with apatite as a test for creating a permeable reactive barrier (PRB). The test was successful and the advice encourages DOE to continue its use.

Agency perspective

Mike Thompson, DOE-RL, said he is happy to answer any technical questions as they arise.

Jane said Ecology appreciates the advice and Alicia Boyd, Ecology, is available for technical questions as well.

Board discussion

The following key points were noted during the Board discussion:

- Board members clarified that an apatite PRB does not remove Sr90, only keeps it in place as it
  naturally decays. Sr90 has a 28-year half life, meaning that every 28 years, half of the material
  will decay.
- One Board member asked to clarify where the statements of fact in the background have stemmed from. The background was edited to include a reference to information coming from the 100 N Proposed Plan itself.

- The Board discussed asking DOE to evaluate apatite technology even if it has already been studied and tested. Mike said the technology has been evaluated but has been removed from the draft plan. He said he believes the advice to be asking for apatite technology to be included in the proposed plan for further evaluation. Mike noted that apatite technology has both fans and critics, as it does contain the Sr90, but phytoremediation (planting Coyote Willow trees) makes the Sr90 available to the food chain in a way it would not be if DOE let it decay naturally. One Board member quoted recent studies that demonstrate phytoremediation takes out 90 percent of Sr90, but it was not specific to the 100 N Area. Mike said he does not disagree with the technology's effectiveness, but noted that such a large investment in the area would not remove more than 0.02 pica curies of Sr90. Mike noted the difficulty of protecting the planted willows from the food chain should they be implemented, as well as the cost of the project for very little gain. Over a 45-year period, the project would cost \$12 million and would remove 0.02 pica curies of Sr90. Jane reiterated that there are benefits and short falls to the technology, but Ecology would still like to see it considered as an alternative to stop Sr90 from getting into the Columbia River. The Board decided to move forward with bullets three and five, asking DOE to continue evaluation of phytoremediation and appatite PRBs, but many Board members noted their concern with moving Sr90 into the food chain through phytoremediation.
- The Board discussed advice point five, noting the first sentence is positive about apatite technology while the second sentence seems to critique it. The point is meant to display encouragement for the successful testing of apatite technology while asking DOE to complete the below groundwater area that has not been injected. Mike said that the 190 wells drilled to inject apatite into the upper area treat the highest concentration of Sr90, noting the concentration is much less in the lower area. He said that if the technology is approved, DOE would drill an additional 400 bore holes (non-permanent wells) to inject closer to groundwater in an area that is unsaturated soil at low-water times and will become saturated during high-water times.
- One Board member asked if the appatite already injected has reduced Sr90 to a measurable degree. Mike said the application is performing very well at a 90 percent reduction between the injection and the Columbia River. The appatite is formed by injecting phosphate to mix with the calcium in the soil, creating calcium-phosphate.

After minor changes, the advice was approved.

### **Public Comment**

Dave Jansen, Washington Department of Health Director of Radiation Protection, thanked the Board and agencies for allowing him to return to Hanford after 20 years away working on other Superfund sites and for the Department of Corrections.. Dave congratulated the Board on the tremendous progress on site, noting how important their work is for those who work there. He said he hopes he can be a positive addition.

#### **Draft Advice: Path Forward on Tank Waste**

*Introduction of advice* 

Liz said the advice is phase two of the Board's advice process stemming from Secretary Moniz's Tank Waste Retrieval, Treatment and Disposition Framework document provided in September 2013. The first piece of advice was about openness and transparency at WTP, and this advice was developed based on sounding board comments from the December Board meeting. Liz noted that the Board has provided multiple pieces of advice on WTP and tank waste treatment in the past, which is summarized in the background of the advice. Liz said TWC hopes the advice does not repeat what the Board has already advised on. Liz asked issue managers for the advice to refrain from comment until other Board members have spoken.

Agency perspectives

Agency representatives said they would hold their comments for the discussion.

Board discussion

The following key points were noted during the Board discussion:

- Board members noticed some out-of-place reference numbers in the background of the advice. The references were updated before the final version of the advice.
- Board members made suggestions for removing unneeded language from the advice to help with tone.
- The Board discussed the rule of "as good as glass," with Jane noting that the current state and federal law for land disposal restriction of HLW is vitrification, but that if DOE can prove another treatment to be equivalent, or "as good as glass," it is feasible. Ecology's opinion is that DOE has not yet found that equivalent.
- One Board member said it is inappropriate for the Board to advise DOE to engage them in technical discussions about tank waste, as it is DOE's responsibility to engage with the regulatory agencies and only provide information to the Board and public. Liz noted that the technical committees already engage in technical issues with DOE, so the bullet states it explicitly that they would like it to continue and for DOE to make a commitment to continue in a formal document. The technical information needs to be understood before the committees can develop high-level advice. The advice point will be reworked to clearly define the Board's expectations for technical engagement, citing past examples.
- One Board member said they are unclear as to the focus of the advice in advice point four. Liz clarified it is to specifically address the nuclear quality assurance (NQA1) concerns of Board

members. The Board would like to see a plan in place for safety, quality, and determining if WTP will actually be a permittable facility when it is completed. Ben Harp, DOE-ORP, said DOE conducts quality checks as they move forward to record that they are ready to operate when the Readiness Review is conducted at the end of construction. One Board member pointed out that WTP was not originally designed as a licensable nuclear facility so NQA1 requirements were not in place during the early phases of construction. The Board discussed removing the bullet entirely because it is significant enough for its own advice, but determined to rework the advice point and place it in the background instead to provide more context.

- The Board agreed to ask TWC to explore separate advice on evaluating technologies for interim stabilization of waste.
- Dan McDonald, Ecology, noted that there are documents currently in place to address what the Board is asking for in reference to communicating impacts. He said he is confused as to whether the Board is asking for a new plan to be created or to be shown existing plans for tank waste. Liz clarified that the advice is asking for the development of a tank waste implementation plan, to which Dan noted DOE could provide any number of documents in return. The Board discussed what it is specifically they would like to see for a tank waste plan, whether a formal or informal document or simply a Board presentation. Clarifications were made to the advice point to state what the Board would like DOE to do for tank waste planning, given recent news of leaks in AY-102. Liz said TWC will address DOE's responses in committee.
- One Board member spoke to the nine groups working through issues identified in the Framework document. He said the issues are primarily technical and based on assumptions being made for construction of WTP and its transition from a commercial facility to a nuclear facility. The issues are found in validating commercial machinery for the NQA1 status and relate specifically to erosion and corrosion, mixing, hydrogen, and others. Experts have been convened to look at the best science available for all issues. The Board member said the group review is at a point where the Board can ask DOE to present on the issues and findings.

After minor changes, the advice was approved.

### 100 F Proposed Plan, Rev. 0 – Part 1

Recap of the 300-Area Record of Decision

Larry Gadbois, Ecology, provided a presentation on the 300 Area ROD; his presentation is provided as Attachment 4. In addition to the information contained in his presentation slides, Larry said:

• The final ROD for the 300 Area was issued in November; it amended previous RODs.

- The Comprehensive Environmental Response, Compensation, and Liability Act is risk-driven, and EPA needs to make sure they meet those standards without doing anything worse than what was implemented in the interim, which were good enough to adopt in the final ROD.
- The 100 F Proposed Plan shows that the regulators are is being more protective of groundwater than in the past, as they were using a less defensible model for groundwater modeling.
- After the ROD is issued, DOE has six months to develop a work plan for regulators' approval. The work plan develops on-the-ground details and how the plan will be implemented. The interim cleanup levels have changed a little, but DOE has known the change has been coming and are ready to make the transition.

### Issue manager perspectives

Dale Engstrom said it was his impression that the 300 Area ROD had a lot to do with application of polyphosphate in a small area to contain partitioning of groundwater. Larry said the ROD provided \$20 million for phosphate sequestration, which involves injecting phosphate to achieve a geologically stable mineral over a long period of time. The intent is to clean up the groundwater faster than the natural process would provide, and the phosphate model binds it up.

#### Board discussion

The following key points were noted during the Board discussion:

- The Board asked how the Board's advice on the 300 Area Proposed Plan was incorporated into decision making to help inform advice for the 100 Area. Larry said the recent sounding board provided valuable input, even if it did come at a different point in the process, which is why EPA asked for another sounding board on the 100 Area. Dennis said EPA had many discussions with DOE over land use and irrigation for the 300 Area ROD, which allowed for a more robust cleanup. The 300 Area ROD, in that sense, is paving the way for other RODs. The agencies did not take the Board's advice on treatability testing rather than sequestration due to project maturity and budget issues. Jim Hansen, DOE-RL, said the Board's sounding board comments on Endangered Species Act consultation, specifically on salmon and steelhead, have been carried into the 100 F Area Proposed Plan. Additionally, DOE re-evaluated concerns about patrols of industrial and core areas in the 300 Area.
- The Board discussed concentration levels of uranium after sequestration. Mike Thompson, DOE-RL, said sequestration for uranium stabilizes the mineral uranium occurs in, preventing it from dissolving into the aquifer as much as it would without. The sequestration allows the groundwater to get to drinking water standards quicker than it would through a natural process.

#### 100 F Proposed Plan, Rev. 0 – Part 2

Briefing on 100 F Proposed Plan Rev. 0

Greg Sinton, DOE-RL, provided a presentation on the 100 F Area Proposed Plan; his presentation is provided as Attachment 5. In addition to the information contained in his presentation slides, Greg said:

- The 100 F Area in the River Corridor is made up of five operable units. The 100 F Area itself is cleaned up but cleanup is continual in the surrounding areas.
- Plumes in the area are currently at low concentrations, but a few still exceed at least one standard, like drinking water.
- The preferred alternative for the vadose zone, alternative two, has been ongoing for the past few years and is already in place for moving forward.
- The preferred alternative for groundwater, alternative two, is less costly and readily implementable with prior activities.
- The 300 Area Proposed Plan provided issue resolutions to inform the 100 F Area Proposed Plan and served as a basis and example for moving forward.

Greg noted an uptick to the hexavalent chromium (Cr(VI)) concentrations indicated in the presentation from 5.3 ug/L to 5.5 ug/L, and from 25.1 mg/L for nitrate to 28 mg/L.

Agency perspective

Chris Guzzeti, EPA, said the 100 F Area ROD will be completed by September 30, 2014. Chris said the preferred alternative for groundwater will not be a remedy that will allow the agencies to simply implement and walk away, but will require monitoring and testing to ensure the remedy is working.

Issue manager perspectives

Dale advised the Board to not consider the sounding board as a replacement for Board advice. The committee will still need to review the plan and bring advice forward if necessary.

Board discussion

The following key points were noted during the Board discussion:

• The Board discussed the 100 F Area's end state and needed long-term monitoring. Dennis said long-term monitoring will continue until groundwater contamination levels drop to below the required standards, but noted that the F Area is one of the cleanest areas on site due to the extensive efforts to clean up the reactor. Greg said 15 waste sites in the 100 F Area will have residual contamination in need of monitoring. One Board member asked for specific plans for institutional controls (ICs). Greg said the two main controls will be controlling excavation which

- would expose deep RAD waste, as well as preventing irrigation in certain areas. ICs will be more than signs, Chris said, and will come more in the form of gate restrictions and excavation permits.
- The Board discussed contaminants of concern in the area, including Sr90 and nitrate and the risks associated with each over the lifetime of residuals monitoring. Greg said that Sr90 is found in high concentrations along the site, but the general number is what someone might be exposed to. One Board member noted that the risk to the public is not the issue with the contaminants, only land use.
- The Board voiced concern about providing a sounding board without prior in-depth review of the technical issues associated with the plan. EPA said the sounding board is helpful for them but that they are aware more technical information will need to be brought before the associated committees to help support development of advice.
- One Board member asked DOE to describe the remaining remediation for the 10 waste sites that
  will still need to be cleaned up after the ROD is issued. Greg said the remaining sites are not in
  the main operational area and tend to be much less significant in terms of cleanup. The sites are
  mostly smaller on the surface and DOE does not anticipate having to dig very deep. He noted that
  some of the sites are still going through a cultural review process, which may affect the timing of
  cleanup.
- The Board discussed the vast range of cleanup dates provided for the groundwater alternatives and whether those years and dates could be better communicated. Greg said the range of dates is based on two different statistics, the 90<sup>th</sup> percentile (shorter timeframe) and max concentration (longer timeframe). The Board discussed finding a better way to communicate those timeframes to the public, including discussing Sr90's half life for decay of 30 years as a manageable number.
- One Board member asked if the 100 F Area, which was one of the first sites cleaned up to interim
  cleanup standards and turned over for long-term stewardship, will be turned back over to the
  cleanup contractor once the ROD is released. Greg said nothing in the alternatives would cause
  the site to go back into active cleanup, though Washington Closure Hanford is currently on site
  working on remediation.
- One Board member asked for clarification on the relationship between groundwater and aquifer sampling. Greg said sampling tubes are placed near the interface of the river with the groundwater system, which tends to be shallow and close to the river, but not in a periodically rewetted zone. The location of the sampling provides lower test results.

#### Sounding Board – 100-F Proposed Plan, Rev. 0

Introduction of process

Cathy McCague, EnviroIssues, reviewed the sounding board procedures and noted that each Board member and alternate is allotted two minutes to share the perspective of the seat and constituency represented. Once all Board members and alternates have the opportunity to comment, they will be offered a round two opportunity if time allows. Cathy invited members to frame their comments with the following prompts:

- Given what you have learned from the 300 Area experience, what, if any, policy-level concerns do you have with the agencies' 100 F proposal that you would like RAP to pursue?
- Do you feel Board advice is warranted on this topic?

Chris asked the Board to also provide suggestions on public involvement strategies for the 100 F Proposed Plan.

Sounding Board

## Theresa Labriola, Columbia Riverkeeper

The plan should have a longer comment period from the beginning to allow for a consistent timeframe and time to get the public out to public meetings and webinars. For the 300 Area experience, we were concerned about reliance on monitoring of natural attenuation (MNA). We want you to consider unrestricted future use as the guiding principle for monitoring. The Endangered Species Act (ESA) Section 7 should be considered an important part of every component for the proposed plans. Will dilution of Sr90 on the Columbia River allow people to drink it? Salmon and juvenile salmons were not well-addressed in the 300 Area Proposed Plan. Board advice is always warranted for an issue this important.

### Maynard Plahuta, Benton County

Personally, I do not think this plan is a big deal for the Board but we do need to assure the public with meetings and be transparent. The only issue is to ensure salmon are adequately addressed, as there is a population near the F Area. MNA comes down to the level of risk involved and if it is acceptable, and in this case, I am comfortable with the level of risk.

#### Jonathan Matthews, Nez Perce Tribe

The Nez Perce Tribe has an end state vision, and for Hanford Reach it is based on unrestricted use. When institutional controls are included as alternatives, our end state vision is not met. I would like to see how water quality standards, which have been revised by Ecology, will be incorporated into the proposed plan.

#### Lynn Davison, Non-Union, Non-Management Employees

I like Mike Korenko's idea for developing other methods for communicating technical information to the public; his map idea is appropriate for showing clean areas and the cost of achieving clean. I would like to see Board advice on the 100 F Area Proposed Plan.

#### Tony Brooks, Benton-Franklin Public Health

We need a risk framework the public can understand, like when we talk about the risk of exceeding eight

pica curies per liter of Sr90. It is a small number compared to other risks. We need to show comparative risk. Chernobyl released a huge amount of radiation but the animals now inhabiting the wildlife park on site are doing well, despite the radioactive material.

### Sam Dechter, Public-at-Large

I am concerned about the risks involved and potential budget problems down the road. I like the options presented in the selected alternatives because the timeframes and risks are about equal and will provide for budget for other projects. We do not want to waste money for not too much gain. I think the RAP committee should decide whether they want to do advice, and our Public Involvement Committee should think creatively about reaching a new group of people.

Emmett Moore, Washington State University No comment.

#### Jean Vanni, Yakima Tribe

In the 300 Area, the Yakima Tribe's cumulative cancer risk is two out of 1,000 people. This is 100 times the public's risk. In the F Area, the cumulative cancer risk is 10 out of 10,000, and the non-cancer risk is five out of 10,000. The minimum is supposed to be one out of 10,000. DOE is doing the minimum amount of cleanup. For the diesel plume in the 100-N Area, our radionuclide cancer risk is 13,000 times the non-cancer health effects; it is suppose to be one. I would like to caution us about advice. In the RI/FS document, there is an area in F that requires indefinite institutional controls for technetium-99, which is over 200,000 years.

## Susan Leckband, Washington League of Women Voters

My concern is always based on cumulative risk over periods of time. This area of the site would be an attractive nuisance as people are going to want to stop there on their boats, and DOE will not be able to stop them. ICs do not work. I am concerned about that risk. The MNA map may not be appropriate in this case and we have already learned that it does not work. This is a golden opportunity for the agencies involved to tell the public what they do, how much it will cost, if that area will ever be available for alternate use, etc. Pica curies do not matter to the public – they just want to know if they can take their kids out there.

#### Mecal Seppäläinen, Oregon Hanford Cleanup Board

This is a worthwhile process we need to refine, as we do not yet have enough information to be able to comment. The Board should consider drafting advice on institutional controls so we know more about what they will be and how the public will understand them. Public involvement should be in-person meetings with specific outreach to students and teachers. My family is from Belarus, and they live 50 miles from the Chernobyl exclusion zone. They have daily consequences from the contamination and suffer immense health care costs. They cannot live the lives they previously held. These problems come from bizarre decision making during the Cold War, so we need to keep the risk and what is worth the money in context.

### Dale Engstrom, Oregon Department of Energy

This sounding board is different in that the committees have not had to opportunity to tackle this information before hand. ODOE agrees that 100 F has smaller plumes and lower concentrations than other areas on site, but we would suggest you be cautious of comparing sites against each other; sites need to be considered on their own merit. 150 years for this problem to go away is too long, and there are several methods to get rid of Sr90. The process that eliminated most of these methods should be revisited. Advice should be considered by the appropriate committees.

## Richard Bloom, City of West Richland

We should speak in terms of targets when we are expressing this level of risk. Whether we address salmon or boaters, the key issue comes down to assuming there will be a loss of administrative controls over the area. Who is our target and what is their risk? We need to know what the restrictions are versus unrestricted use. I suggest the public involvement be creative, like hosting a picnic somewhere on site to invite those who are not only skeptical, but inquisitive about what is out there.

## Norma Jean Germond, Public-at-Large

From the point of view of the public, they should be safe and not have to worry about contamination. The specifics of risks should be left to the experts, while the public just needs to know about cumulative doses and feel comfortable that we can live here and farm, drink the water, or go fishing. It is important to talk about the salmon, but white fish is also important to people, including the tribes. Whatever controls you need to make us safe, fine, but I am interested in and concerned about the ICs, because nothing will last long enough.

### Gary Garnant, Franklin and Grant Counties

I appreciate the helpful comparison with the 300 Area and agree that 100 F is an attractive area for users. Our elders used to guide the young down the Columbia River and point out all of our important sites. Our elders are gone now, but we have a reason to return because of the historical use.

### Liz Mattson, Hanford Challenge

A sounding board is one piece of Board input and it does not replace advice, but we do not have information from the committee this time around. Let us not get in the habit of saying the sounding board suffices without advice. My biggest concern is with MNA and ICs. We should pursue the ability to do treatment and removal. We often get stuck in the mindset of looking at short-term challenges and feel overwhelmed by the limitations of budget and resources. But this will take a long time and we need sustained passion for doing a complete job. We can push for more to get it right. ICs are not reliable as it is hard to ensure their continuation.

#### Gene Van Liew, Richland Rod & Gun Club

The risk for the general public needs to be broken down as simple as possible. We also need to know what the effects will be for the small and big game, as well as fish that range in and out of the reservation. Poachers shoot animals out there and we should conduct tests on those animals as well as look for samples. Good information on consumption from fish from Lake Roosevelt and the Yakima River is available but we rarely look at what happens to the river animals. I would like to see that addressed. The

public does not understand what revegetation of waste sites means or how well it is doing. Cheat grass can take over out there and ruin vegetation, which becomes a fire risk.

## Shelley Cimon, Public-at-Large

I look forward to reviewing this plan in committee, as we need to know more before we can make informed decisions about leaving the waste in place. The average life of ICs before failure is five years. At the most recent RAD Waste Summit, a woman from the Ukraine Department of Radiation said that even 25 years later, Chernobyl is an "un-mitigable" disaster; the costs are enormous to the health of the people there. I am concerned about the Sr90 plume that is intensely radioactive in some areas and not in others; we need to understand the figures there. In the future, we will not be able to control entry to the area and we need to address and monitor the movement of animals on and off site.

Becky Holland, Hanford Atomic Metal Trades Council I echo Susan Leckband's statement.

### John Howieson, Physicians for Social Responsibility

A sounding board is limited because we do not have the in-depth information provided in and by the committee full of experts. A sounding board provides a range of different opinions that the agencies can just select from, whereas advice is a consensus product that expresses what we think as a group. There is a huge difference and we need to be careful about using this method.

### Bob Suyama, Public-at-Large

In comparing the 300 Area to 100 F, we should note the proximity of the 300 Area to Richland and the probability of it having a different use than the 100 F Area, where someone might visit but not stay there long. It has a major impact on the risk we provide to the public. HAB Advice #268 on Draft A of the 100 F Area Proposed Plan says that we want the fourth groundwater alternative. Sr90 has a long time frame no matter, so it is hard to get my mind around the numbers and the differences as far as the effect of various chemicals provided through appetite barriers, which is what we recommended DOE re-examine. RAP needs to look at this plan in committee.

#### Armand Minthorn, Confederated Tribes of the Umatilla Indian Reservation

All work done on site needs to be guided by foresight; there have to be plans for looking ahead. If things are not anticipated and planned for, something unexpected will knock everything off course. No one can walk away from this contamination, so we need foresight and long-term stewardship so contaminants are dealt with even 300 years from now. The river is connected to everything, including animals, fish, groundwater, us, and even snow and rain. The holistic manner of water needs to be addressed.

## Bob Parks, City of Kennewick

In my 22 years at Hanford, I spent the first year at 100 F. I have seen a lot of nasty things cleaned up and I do not have faith in ICs because someone else will be in charge in the future. The people who buried things out there are not around to tell us where. Things out there are still dangerous, including animal droppings. I would restrict access, not turn it loose.

### Steve Hudson, Hanford Watch of Oregon

For public involvement efforts, the 300 Area workshops were very successful and the public remembered them for a long time. This is a golden opportunity to help educate the public. The difficulties and concerns expose the public to how issues are being addressed and who is addressing them. Public workshops are the best way to attract more people to participate.

#### Dirk Dunning, Oregon Department of Energy

20 years ago, when cleanup in the N Area started, DOE tried using a number of methods for removing Sr90 from the soil and they discovered a mixture of sodium and potassium that worked really well. If we lose our ICs of this area in the future, someone will put in grass and fertilize it and Sr90 will immediately enter the river. According to the Natural Resource Damage Assessment (NRDA), chemicals in the soil are a hazard as long as they remain there. The public does not perceive risk the same way decision makers do; theirs is based on fear and perception. They are concerned with unknown risks, so we want to make sure we are talking about the same thing.

#### Harold Heacock, TRIDEC

The risk is statistically very small, but our situation is about the visible public risk. The public wants the risk treated and removed as much as possible. They want us to invest the money and get it done. The problem will not go away unless treated.

#### Steve White, Columbia Riverkeeper

I want to reiterate that this is an uninformed sounding board. I have heard some good suggestions for explaining risk to the public. At the workshops, do not have the scientists and engineers make the presentations; they need to come from someone who speaks in lay terms to the public.

### Barbara Harper, Confederated Tribes of the Umatilla Indian Reservation

We are skeptical of the completeness of the data sets, as well as the characterizations of the upwelling and flux of the river. The tribal risk is very high and is not used to set remedial goals. No cumulative risk assessment has been conducted, only exposure pathways. MNA residual contamination is an injury to natural resources, and ICs are the definition of injury, which is anything that impairs unrestricted use.

### Gregory Korshin, University of Washington

I concur with Mecal. My family used to live in Kiev, Belarus, and were there during the Chernobyl explosion. My aunt concocted cancer a few years later, which is clearly indicative of what might happen.

#### Round Two

#### Jonathan Matthews, Nez Perce Tribe

The NRDA process will potentially go on for another 10-15 years, and in that time we will have gone through two to three five-year review processes that can be fed back into the loop as to whether the chosen alternative has limitations. The cost is tied into the NRDA process with damages based on modeling results and we will have a better understanding of what the real number is at that point. If something gets missed, it will be identified in the five-year review.

### Theresa Labriola, Columbia Riverkeeper

I learned a lot from the sounding board, and I think this must be what the public feels like – hearing this information for the first time and immediately being asked to comment on it. We have heard that our advice is only incorporated into decisions four percent of the time and that public comment has never influenced change. The public sees that DOE does not make changes after they have provided comment.

#### Jean Vanni, Yakima Tribe

Thank you to everyone for the important comments. The consideration of future impacts for decisions we make today is important. We need to take this plan to the RAP committee. The Umatilla and Yakima risks are very close. For the general population, the risk is one in a million, but for us it is three out of 100. DOE automatically relies on a risk that affects one in 10,000, when really it should be one in 1,000,000. This reliance results in the use of ICs.

### Susan Leckband, Washington League of Women Voters

This sounding board has served an incredible purpose. The rest of the Board does not get the opportunity the committees do, but our non-committee voices are still valuable.

## Mecal Seppäläinen, Oregon Hanford Cleanup Board

It has been very valuable to hear from everyone because not everyone speaks during Board meetings. This is a valuable process to help the agencies experience what they might hear from the public and be prepared for it. I think ICs need to be a bigger conversation for the government.

### Liz Matton, Hanford Challenge

I am glad we did this sounding board and had the opportunity to hear from everyone at the table. I want to encourage people to attend committee meetings, because it is another avenue for more depth and learning.

#### Discussion

Bob Suyama encouraged Board members to attend the upcoming RAP meeting, which will address ICs and long-term stewardship.

Dennis said the feedback on discomfort with ICs is very helpful given what the public must feel about them. He said the agencies will not use the sounding board in place of Board advice.

## **Public Comment**

Dave Swanberg said he is attending the Board meeting as a member of the public. He said he would like to suggest the Board review a letter written by Roy Schepens about the "good as glass" and supplemental technologies regulations at Hanford. He said it would provide useful information for the tank waste advice.

#### **Board Business**

#### EIC Proposal for the National Liaison Position

Pam Larsen, City of Richland (Local Government), introduced the position proposal, noting how valuable the National Liaison is to the Board and EIC. Pam said the position has faced challenges because of funding issues so a redefinition of the position is needed to maintain support for the Board chair and vice-chair as well as represent the Board nationally. The position description supports a National Liaison who can focus on national issues, provide feedback to the Board, and commit to the position for two years. The position will go through elections at the same time as the Board chair and vice-chair, and anyone interested should submit their qualifications.

Steve said the position description has been shaped by Susan Leckband and current National Liaison Shelley Cimon and describes certain skills a candidate would need to support the responsibilities of the position. He thanked Susan and Shelley for their good work on the document.

One Board member suggested including the addition of written reports on national issues as well as verbal in the proposal. The Board discussed the importance of the position and Hanford representation at the national level.

Cathy confirmed the description, noting that it will be added to the Board Process Manual when it is updated later this year.

EIC proposal for the letter describing HAB actions related to diversity

Susan Leckband provided background information on the development of the diversity letter, noting the process started during a September 2012 visit from DOE-HQ. Board members were concerned term limits on Board seats would be imposed, and there has since been an ongoing dialogue between the Board, the local agencies, and DOE-HQ about diversity and Board effectiveness. Susan noted that some basic tenants of the Board are included in the letter for those receiving the letter for the first time. The letter addresses ways the Board already works toward diversity and effectiveness, as well as items to be implemented in the future to increase interest in Board participation. Susan said the letter will be sent to David Huzinga and David Borak, the new Designated Deputy Federal Official (DDFO).

Update on Board's 20th Anniversary

Steve said the celebration of the Board's 20<sup>th</sup> Anniversary will take place during the September meeting, noting the time constraints of planning something in time for the June Board meeting.

Susan asked the Board to send in any historical photos of the Board to include in the celebration, as well as suggestions for former members or agency representatives to invite or mementos to display. Susan, Shelley Cimon, and Pam Larsen will lead the planning effort.

Dennis said he hopes the anniversary celebration will be on Wednesday before the Board meeting so he can attend. Becky noted that the Board calendar still says the September meeting is tentatively scheduled

for Seattle. Steve said the EIC will discuss location, though the meeting will most likely be held in the Tri-Cities to save on budget.

Identification of preliminary June Board meeting topics

Cathy reviewed tentative meeting topics for the June Board meeting.

- BCC budget advice
- Lifecycle Scope, Schedule, and Cost Report advice (tentative)
- 100 F Area advice (tentative)
- NQA1 concerns with WTP advice (joint HSEP and TWC)
- Resolution of technical issues at WTP (DOE-ORP)
- Revision of ground rules (EIC)
- Agency updates
- Committee reports
- 20<sup>th</sup> Anniversary planning update
- WIPP ramifications (DOE)
- Debrief of SSAB meeting.

The EIC will consider these topics when developing the June agenda.

Closing Remarks

Cathy reviewed scheduled committee meetings and conference calls.

Steve asked the Board if time should be included in the Board agendas for extended dialogue on specific topics to allow members to talk about emerging issues. He asked them to consider if something like that would be valuable. Mecal suggested a dialogue on institutional controls would be very valuable to try to work through concerns with the agencies.

Pam reported on an Energy Community Alliance meeting she attended the previous week. She said she spoke with a budget representative from DOE-HQ about the SSAB providing development support for the FY2016 budget. Pam noted the representative was surprised by the suggestion, but the SSAB has a history of being involved in the budget process. Pam also spoke with Monica Regalbuto of Argonne National Laboratory, the likely nomination for the Environmental Management – 1 position. Monica is excited to visit and learn about Hanford issues.

Pam spoke to the recent accident at WIPP, noting that experts from across the complex are working on a plan for how to proceed. The main concern is for the employees who were exposed. Pam said the salt water climate in New Mexico is corrosive and has taken a toll on machinery, leading to the fire and chemical release. Pam said Hanford is the only site in the nuclear complex not significantly impacted by delays for shipments to WIPP, but the issue is very serious and will eventually cause delays and a large budget to get back on track.

Steve thanked everyone for a quality meeting.

The meeting was adjourned.

## **Attachments**

Attachment 1: DOE-RL agency update
Attachment 2: DOE-ORP agency update
Attachment 3: Ecology agency update

Attachment 4: EPA Recap of 300 Area ROD

Attachment 5: 100-F Proposed Plan Rev. 0 presentation

#### **Attendees**

#### **HAB Members and Alternates**

Tony Brooks, Member	Ken Niles, Member	Barbara Harper, Alternate
Robert Davis, Member	Bob Parks, Member	Mike Korenko, Alternate
Lynn Davison, Member	Maynard Plahuta, Member	Theresa Labriola, Alternate
Sam Dechter, Member	Mecal Seppäläinen, Member	Bob Legard, Alternate
Earl Fordham, Member	Richard Stout, Member	John Martell, Alternate
Gary Garnant, Member	Bob Suyama, Member	Jonathan Matthews, Alternate
Norma Jean Germond, Member	Gene Van Liew, Member	Liz Mattson, Alternate
Harold Heacock, Member	Gabe Bohnee, Member	Emmett Moore, Alternate
Rebecca Holland, Member	Armand Minthorn, Member	Melanie Myers-Magnuson,
		Alternate
Steve Hudson, Member	Richard Bloom, Alternate	Brad Peck, Alternate
Floyd Hodges, Member	Al Boldt, Alternate	Ed Revell, Alternate
Gregory Korshin, Member	Shelley Cimon, Alternate	Tom Rogers, Alternate
Pam Larsen, Member	Dirk Dunning, Alternate	Richard Smith, Alternate
Susan Leckband, Member	Dale Engstrom, Alternate	Margery Swint, Alternate
Jeff Luke, Member	John Howieson, Alternate	Jean Vanni, Alternate
Armand Minthorn, Member		Steve White, Alternate

## AGENCY, CONTRACTOR, AND SUPPORT STAFF

Steve Beeler, DOE-ORP	Alex Teimouri, DOE-RL	Dave Jansen, Department of
		Health
JD Dowell, DOE-ORP	Mike Thompson, DOE-RL	Todd Nelson, BNI
Lori Gamache, DOE-ORP	Dennis Faulk, EPA	Cathy McCague, EnviroIssues
Chris Kemp, DOE-ORP	Larry Gadbois, EPA	Tammie Gilley, EnviroIssues
Jim Lynch, DOE-ORP	Chris Guzzetti, EPA	Melissa Thom, EnviroIssues
Carrie Meyer, DOE-ORP	Emy Laija, EPA	Sharon Braswell, MSA
Glyn Trenchard, DOE-ORP		Mark McKenna, MSA
Kim Ballinger, DOE-RL	Jane Hedges, Ecology	Rob Plippo, MSA
Jim Hansen, DOE-RL	Alicia Boyd, Ecology	Peter Bengtson, WCH
Greg Jones, DOE-RL	Dan McDonald, Ecology	
Greg Sinton, DOE-RL	Nina Menard, Ecology	

# MEMBERS OF THE PUBLIC

Stephanie Akker	Scott McDonald	Felix Vargas
Annettee Cary, Tri-City Herald	David Swanberg	