

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

April 12-13, 2012

Kennewick, WA

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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

Board action

The Board adopted one piece of advice concerning the Hanford 2014 Budget and Cleanup Priorities.

Board business

The Board will have committee calls and meetings in April. The Board discussed:

- Committee leadership announcements.
- Board vice-chair selection.
- Preliminary June Board meeting topics.
- Board calendar review.

Presentations and updates

The Board heard and discussed presentations and updates on the following topics:

- Tri-Party Agreement Agencies – Program Update.
- “CERCLA 101” and Risk Assessments.
- Mid-year report on 2012 Board accomplishments.
- DOE’s Weldon Springs Site.
- Committee reports

Public comment

Public comment was provided.

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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.

Four seats were not represented: Franklin and Grant Counties (Local Government), Central Washington Building Trades (Hanford Workforce), Oregon Hanford Cleanup Board (State of Oregon), and the University of Washington (University). Liaisons not represented include the Confederated Tribes of the Umatilla Indian Reservation.

The Board meeting was audio-recorded.

Welcome, Introductions, and Announcements

Susan Leckband welcomed everyone and reviewed the meeting objectives and agenda.

Susan Hayman, EnviroIssues, provided instructions for accessing GoToMeeting for those on the phone and reviewed Board ground rules. She reported that the February meeting summary was certified within 45 days and posted to the Hanford website.

Susan Hayman announced that currently, the only nominee for the Board vice-chair is Steve Hudson, who has provided his résumé and statement of interest for the Board's review. She asked that any other nominations from the floor be made known to her as soon as possible and noted that any new nominee will have to provide their background material prior to the second day of the Board meeting.

Susan Leckband introduced and welcomed new Board member Richard Stout, who represents Washington State University.

Tri-Party Agreement Agencies – Program Updates

U.S. Environmental Protection Agency (EPA)

Dennis Faulk, U.S. Environmental Protection Agency (EPA), said EPA recently had a very good meeting with the National Remedy Review Board, who visited Hanford to review the 300 Area, K Area, and Unit Process One (UP1) Pump and Treat System. Dennis said EPA has responded to Board advice 253 concerning the 100 K Area Remedial Investigation and Feasibility Study (RI/FS) and Proposed Plan, noting that the response says the Tri-Party Agreement (TPA) agencies have agreed to identify Alternative 3 of the Proposed Plan as the chosen remedy, as requested in the Board's advice. The response also notes that the agencies have come to agreement on the cleanup of the Hanford Orchard Lands.

Dennis spoke to the upcoming budget talks, noting that for EPA, getting the groundwater systems in place is a high priority, and there seems to be no budget allocated for it in fiscal years (FY) 2013 and 2014.

Emy Laija, EPA, said the TPA agencies discussed plans for River Corridor decision document workshops around the region with the Public Involvement and Communications Committee (PIC) during their

meeting yesterday. The agencies are aware that some meetings designed for public comment are too technical, so they would like to provide educational workshops on the River Corridor decision documents to talk about what cleanup is and what it will look like around the Columbia River. The workshops will be provided at a high level in order to help the public understand final decisions. Emy said the flip chart notes from this discussion at the PIC meeting are provided at the back of the meeting room, and she asked Board members to make additional comments on meeting locations, format, and meeting support. Emy noted that the TPA agencies are interested in hosting meetings in locations where Board members and their constituencies can provide logistical and turnout support. The meetings are tentatively scheduled in the mid-June timeframe.

Washington State Department of Ecology (Ecology)

Jane Hedges, Washington State Department of Ecology (Ecology), said the Ecology office is entirely focused on finishing the Resource Conservation and Recovery Act of 1976 (RCRA) Site-wide Permit by the May 1, 2012 deadline. Ecology will only be printing three hard copies of the 14,000 page document, a cost-savings of \$80,000 from the previous editions' printing of 22 hard copies. Jane thanked the other agencies for their flexibility in the reduced number of hard copies. Jane said the administrative record for the Site-wide Permit will soon be available.

Jane provided a presentation on recent accomplishments and near-term projects for Ecology; her presentation is provided as Attachment 1. In addition to her presentation, Jane noted:

- Ecology discussed the delayed release of the single-shell tank (SST) permit with PIC during their meeting on April 11. The SST permit will be released on June 30 for a 90-day public comment period, which will end on September 30, coinciding with the rest of the Site-wide Permit. Ecology will be hosting a separate public meeting/webinar on the SST permit and has solicited feedback from PIC on how/when to do so.
- Ecology has and will continue to support multiple outreach efforts on the Site-wide Permit; Jane encouraged Board members to schedule a Site-wide Permit update for their constituencies.
- The Site-wide Permit is being uploaded to the Ecology website, and many chapters are already available online for public review prior to the public comment period.
- Ecology is working to set up a Hanford site tour for Governor Christine Gregoire, who views groundwater cleanup to be a key goal for the site.
- Ecology is analyzing the effects of the recently passed state budget; Ecology fared well, but may see indirect consequences from cutbacks for other agencies.

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

Stacy Charbonneau, U.S. Department of Energy -Office of River Protection (DOE-ORP), introduced the new deputy designated federal officer (DDFO) for Hanford, Dana Bryson, noting that this is her last meeting in the DDFO position. Stacy thanked the Board for the opportunity to work with them and gain insight during her time with the Board. DOE looks at the position as an opportunity for managers to learn more from the broad spectrum of stakeholders and perspectives. Susan Leckband thanked Stacy for her support and advocacy for the Board.

Stacy noted a new organizational change for DOE that became effective on Sunday, April 8. For DOE-ORP, the change means that the nuclear safety and environmental safety programs have been combined, and the engineering section that focused on tank farms will now be managed by tank farms manager, Tom Fletcher. DOE-ORP's finance and budget division has joined with DOE-RL's budget division, and the

human resources and legal departments have merged. The communications departments have also merged to be managed under Eric Olds, DOE-ORP. Stacy also said that the Federal Project Director for the Waste Treatment Plant (WTP) has a contract that will expire at the end of May, and DOE-ORP is hoping to fill the position with another current federal employee by that time.

Stacy provided an update on DOE-ORP activities; her presentation is provided as Attachment 2. In addition to her presentation, Stacy showed a short video of the inside of tank C-108, which has recently been completed for waste retrieval. She also noted:

- DOE-ORP is currently focusing on the Defense Nuclear Facilities Safety Board's (DNFSB) recommendations and deliverables, led by an Integrated Project Team consisting of representatives of Bechtel National, Inc (Bechtel), tank farms, and WTP. The Integrated Project Team is focusing on the mixing vessels at WTP and safety culture, and they will complete nine major corrective actions in the next year, with more actions identified for the long term.
- WTP has received less funding than what was expected for the FY2013 and FY2014 budget projections. DOE-ORP has asked Bechtel to put together a new baseline change proposal to revisit the needed budget for the upcoming years based on a baseline with built in contingency dollars to fund risks in real time. WTP may switch to a flat-funding profile.
- DOE has decided not to identify a preferred alternative for secondary waste treatment in the Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS). DOE sees it as their job to continue to look for alternatives for vitrification of low activity waste (LAW), and therefore feels it is more genuine to not identify a preferred alternative, as the technology available may change in the future, and DOE needs the flexibility to adopt a new, better technology. The decision is consistent with FY2014 and FY2015 milestones. Stacy said she expects the TC&WM EIS to be released in June 2012.
- The mobile arm retrieval system (MARS) will be used in tank C-107 towards the end of April for bulk retrieval and hard heel. Stacy noted that the MARS experienced a pump malfunction in the double shell tanks, but it is now back online.
- A vacuum system will be attached to the MARS to clean up leakage in the C-105 tank.
- Construction of the Pretreatment Facility has slowed due to lack of funding, but construction continues on the High Level Waste Facility, focusing on solving the remaining technical issues.
- Stacy said DOE-ORP has solicited feedback from employees about safety and organization on site, and they have received excellent suggestions in return. Everyone on site is invested in making DOE-ORP a safer place to work.

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

J.D. Dowell, U.S. Department of Energy-Richland Operations Office (DOE-RL), said the reorganization of the DOE field offices also affected DOE-RL; all projects are now combined under one system manager, and J.D.'s position has been made permanent. J.D. said that 2013 will be challenging due to budget restraints, but DOE is excited to be looking towards the 2015 Vision, as well as looking past 2016. J.D. provided a presentation on recent accomplishments and near-term projects for DOE-RL; his presentation is provided as Attachment 3. In addition to his presentation, J.D. noted:

- DOE-RL would like to revisit the 2015 Vision with the River and Plateau Committee (RAP) to and ensure everyone understands the priorities for completion by 2015, including the River Corridor reactors and remediation and the Plutonium Finishing Plant (PFP).

- The 200 West Pump and Treat System will come online in June to help DOE-RL reach their goal of one billion gallons of waste treated.
- DOE is working towards a paperless system under the Efficiency Initiative. Documents will be provided electronically via tablets or other methods other than paper.
- DOE-RL is working on final validation of sites that have been cleaned up. The Spent Nuclear Fuel Package will be finished within the week, and the fuel will be removed to storage. A crew of 24 people is working on cleaning up the pencil tanks at the PFP; the effort has been well choreographed for maximum safety and momentum.
- The 308 Building, the former Fuels Development Lab, has been demolished, and there will soon only be three to four buildings remaining in the 300 Area.
- The bottle crushing effort in the 618-10 Burial Ground has resulted in a cost savings of over \$400,000, but DOE anticipates that thousands of bottles are left to be recovered.
- A contract for infrastructure and access road setup in the 618-11 Burial Ground has been awarded for \$4.3 million, and there are potential safety costs in the future of the project. 618-11 has technical, safety, and regulatory challenges, as does the 324 Building. The 618-11 Burial Ground cleanup must be completed within three years.
- The 100-F Reactor is the prime candidate for footprint reduction in 2013, but the 100-F-57 waste site is proving a challenging cleanup, as field tests have shown a greater volume of chromium contaminated soil than previously expected.
- A plume has been located in the D Area, and DOE believes it to be the source for chromium contamination in the 100-D Area. Power lines and groundwater wells will be moved to access the plume, so remediation will not begin again until fall 2012.
- Additional waste sites in the N Area have been identified for remediation after the N Reactor was successfully cocooned three months ahead of schedule and the TPA milestone. DOE continues to mitigate cultural resources in the N Area.
- High levels of tritium have been found in the 118-K Burial Ground; DOE expects to have to remove the waste to a deeper level than previously expected.
- A migration study is being completed to better characterize a plume in the 100-C-7 waste site, where groundwater is reached at 85 feet.
- The New Standard Large Waste Boxes are the most complicated waste boxes to work with, as they hold two to three times more waste than a regular waste box. But completion of loading the regular glove boxes into the new standard is saving money and making the site safer.
- The on-site asbestos issue has been a success story for DOE-RL. Employees raised concerns about asbestos leakage on site; DOE properly investigated and conducted sampling which proved that there was not an asbestos release while the work plans were being executed. DOE and the regulators responded immediately and properly to the concerns, and they strive to continue to respond appropriately to all safety concerns on site. DOE will brief the Health, Safety, and Environmental Protection Committee (HSEP) on the issue during their April meeting.

- J.D. said that DOE will likely find themselves in a continuing resolution for the FY2013 budget when this fiscal year closes.
- J.D. spoke about the Central Waste Complex (CWC) waste box that was recently identified by Ecology as potentially dangerous. DOE is completing an integrity analysis of the box and has since enclosed it from the elements for better protection.
- DOE is currently working on the PFP, River Corridor, and Central Plateau chapters of *The Hanford Story* video series.

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. The closing date for the Site-wide Permit public comment period is a Sunday – does that mean the comment period will actually close the following Monday?

R. Due to the extended comment period and the ability to comment online, the public comment period will still end on Sunday, September 30.¹

Q. How does Ecology feel about DOE’s decision to look at alternative waste forms for secondary waste rather than identify a preferred alternative in the TC&WM EIS?

R. Ecology is disappointed. We feel that the EIS data was very clear that the material will remain near the surface forever, and the alternatives we analyzed are appropriate. Ecology’s response to the decision will reflect our opinion and the need for a more robust cleanup form.

Q. What gives DOE the confidence that they can develop an understanding of alternative waste forms in 18 months when we don’t have those waste forms today?

R. DOE feels responsible to look at other alternatives in the next two years that could potentially allow supplemental treatment closer to the waste sites, like on a platform in 200 West, rather than having to transport it to a facility. We need to remember that the waste form for supplemental treatment will be disposed of at Hanford. We may have an opportunity to remove one of the major constituents of concern and create another waste form that will be accepted by the Waste Isolation Pilot Plant (WIPP) or Nevada.

C. I encourage DOE to look at the EIS for spent fuel and the decision that led to termination of the program due to a high generation of hydrogen and transportation issues. It is a cautionary example, and I encourage you to revisit supplemental treatment for 2015.

C. The Hanford Communities has produced a TV program about the Site-wide Permit that will air prior to the May 3 workshop, and we hope other communities will help us to air the program as well.

Q. Can EPA share the National Remedy Review Board’s response to the remedy selection for the 300 Area?

¹ Jane Hedges said the comment period would end on Monday, October 1 during the Board meeting, but the answer has subsequently been corrected.

R. They raised some concerns about the 300 Area polyphosphate testing; they want to implement a contingency remedy as a default for a more standard remove, treat, and dispose (RTD) remedy should the first remedy not work. Their greatest concern was that we don't have viable cleanup options for the Vadose Zone. The National Remedy Review Board is always critical of us for not having produced anything from the ZP1 vapor extraction system. There was great tribal participation during the review.

Q. Do the TPA agencies address the health effects of radiation at public meetings? Or has the risk reduced so much that we don't need to talk about it anymore?

R. We don't generally address radiation risk at public meetings, but after the tsunami in Japan, we asked the Washington Department of Health to come to the State of the Site meeting in Portland to answer radiation questions. DOE focuses on the risk to the Columbia River, which is chromium, and other contaminants on the Central Plateau, like uranium and technetium.

Q. How many pounds of soil did DOE have to remove to get to the thirteen thousand picocuries of tritium? It would help the public to have a better example of what that would look like.

R. We have the opportunity to remove a lot of the soil, but we also want to communicate the appropriate risk to the public. It's safe to say that tritium is not a risk to the public because of how it decays, but that doesn't translate as easily when addressing water risk. We may remove soil to reach 50 picocuries, but we're concerned about the water risk, so if the agencies agree, we might remediate further.

C. I am concerned about meeting the 2015 Vision for groundwater, given that there isn't budget for it in the next two years. I think we need to add a bullet to the budget advice to specifically address funding groundwater efforts. Groundwater is more important than the PFP. This Board helps Hanford translate scientific information into public policy, and that is positively reflected in the evaluations from the DNFSB and National Remedy Review Board.

Q. Why is the SST portion of the Site-wide Permit being delayed? Is there a problem with the SSTs?

R. There are many reasons for its delay, including that this is the first time we've had to do a permit for the SSTs. The SSTs are different from a standard operating facility because they are non-compliant. We've spent many hours with our attorneys going over how to accomplish the permit. It's so outside of the normal box that we believe it deserves special attention and time.

Q. For the TC&WM EIS alternative, will it take a long time to identify the supplemental waste? The last time we went through this process it ended up taking longer and costing more money. Why not use the normal LAW process that was planned on?

R. DOE has not abandoned the secondary LAW treatment option; we're still analyzing the same four alternatives that have been identified in the EIS. We did not get far enough with testing of the other alternatives before funding ran out. But through recent developments, including the progression of the secondary waste treatment process and re-baselining, we believe it is appropriate to do technetium removal for secondary waste and revisit those conversations. There might be waste forms that are more efficient for dealing with secondary waste. We want secondary waste treatment online in the 2022-2023 timeframe, and we have the necessary milestones for those decisions in 2015. If our decision ends up being something other than secondary LAW, we are required to inform Ecology in 2014 and begin work in 2015.

C. It's great that DOE understands the importance of technetium removal, but there is potential for a huge life cycle cost. Implementing a different glass smelter or changing to a different type of glass, like phosphate or borosilicate, would eliminate the need for another large facility.

R. DOE would like to present to the Tank Waste Committee (TWC) on why we have or have not selected that type of glass as our alternative.

Q. It is commendable that DOE is going after plumes and is willing to dig to 80 feet, but why does that willingness to dig deep not translate to the 300 Area in the River Corridor?

R. DOE is concerned about the source of contamination in the 300 Area and the use of RTD. RTD in that area has the potential to drive the contamination into the groundwater more quickly than it would flow there naturally. 32 percent of the contamination is in a permanent rewetting zone where the level ebbs and flows, and our ability to capture the material as it moves is limited. Uranium moves much slower than chromium, and we are more technically challenged in the 300 Area. We are in phase one of leveraging technology and looking at what we will do if the remedy doesn't work.

Q. Where will the new large waste boxes that contain PFP glove boxes be disposed of?

R. They are subject to the same criteria for any waste; if a box contains transuranic (TRU) waste it will be shipped to WIPP, and if it's not TRU it will go to the Environmental Restoration Disposal Facility (ERDF).

Q. Why not let secondary waste recycle through WTP multiple times rather than sending it through the Effluent Treatment Facility system? Technetium removal is commendable, but what about the iodine?

R. Recycling is a part of the processing with WTP, but an endless recycle needs to be evaluated for efficiency of the WTP operations. DOE believes the technetium consistency is high enough that we have to account for it in secondary waste. Technetium and iodine do raise concern from a disposal standpoint, but technetium is the biggest concern for containing it in a waste form. We have not yet fully determined the iodine content of the tank waste.

Q. Is a second LAW facility in the long-range funding plan or will DOE need to solicit new funding for it?

R. It is in our baseline for the funding profile, however, the funding profile for tank farms would need a significant increase for construction of waste receivable facilities, a supplemental treatment facility, and a secondary waste facility. Looking into the future, the funding profile is significantly higher than what we are receiving today, which is why we need to look for savings now should we not receive \$400-\$600 million more per year for the next two decades.

Q. How can the Site-wide Permit reflect the TC&WM EIS when the draft Site-wide permit comes out in May and the final TC&WM EIS doesn't come out until June?

R. Ecology will incorporate portions of the draft EIS now and portions of the final EIS later when it is ready for review.

C. It seems unfair for the public's review of the Site-wide Permit that they do not have the same access to the documents that Ecology has access to, including portions of the final TC&WM EIS.

Q. Please keep the Board updated on the discussions about how to deal with secondary waste treatment. Originally, technetium was going to be dealt with in the plans for the Pretreatment Facility, but then that ability was left out of the design because it was deemed of no significant concern. Can DOE just retrofit the design of the Pretreatment Facility as it was originally designed to take care of technetium?

R. The design of the Pretreatment Facility has progressed enough that rather than retrofitting the facility, we can make technetium treatment part of another process. We won't have to deal with building around the WTP given where we are today. We will be starting with new designs for treatment facilities for secondary waste.

Q. Can DOE speak to the perched water issue?

R. Perched water was an experiment in S Farm where we pumped an area we knew to be on the ledge of water; we extracted water and started seeing a rise in uranium and technetium levels. Characterization for that area is planned throughout the rest of the year, but we have enough samples to go back and perch the water through 2013.

“CERCLA 101” and Risk Assessments

Issue manager framing

Jean Vanni, Yakama Nation (Tribal Government), provided introductory remarks for the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) 101 discussion and reviewed the associated handouts provided to the Board. Jean's introductory remarks are provided as Attachment 4, and the handouts documenting the CERCLA issue managers' concerns are provided as Attachment 5.

Agency presentation

Larry Gadbois, EPA, said the purpose of the discussion is to provide a high level overview of what a risk assessment is and how it fits into the CERCLA decision process. Larry's presentation is provided as Attachment 6. In addition to his presentation, Larry noted the following:

- A risk assessment has many components, but is only one of many tools of the CERCLA process. Risk assessments can be run backwards or forwards (i.e. determine the basis for action, and also determine protective cleanup levels).
- The 100 K and 300 Areas share the same risk assessment process and documents. There have been interim actions in place in the two areas since the 1990's, and the River Corridor Baseline Risk Assessment (RCBRA), prepared in 2011 but not yet approved by the TPA agencies, looked at the upland and river components including contamination, groundwater plumes, soil contamination, etc.
 - To follow up with the interim actions and to determine if they were successful, an evaluation was completed to determine if the cleanup standards are adequate enough to transfer to the final decision. Characterizations have been completed, and that information is provided in the RI/FSs and proposed plans for the 100 and 300 Areas. DOE has made a commitment to keeping cleanup levels for the final decision at least at the same level as the interim actions.
- The TPA agencies will continue to follow regulations and environmental laws, such as the Clean Water Act and CERCLA, but there will need to be a policy decision about the appropriate

cleanup, given that the natural background levels of the area are already higher than risk base thresholds.

- The 100 K Area Proposed Plan looks at a rural residential scenario for its cleanup value because the Washington State Model Toxics Control Act (MCTA) standards do not address radionuclides. The plan also looks at a subsistence farmer scenario (live on site 350 days a year, collecting food and water on site), which is driving the cleanup for strontium 90, as strontium can be absorbed through plant intake.
- The TPA agencies are still working to determine what type of leaching models should be used for groundwater. Larry reviewed contaminants of concern that are driving cleanup on the site, noting that ecological risk levels are typically more conservative than human levels, but human levels drive cleanup.

Larry concluded by saying that the RCBRA is an important document that has been under agency and public review for many years, and the agencies acknowledge that they won't be able to agree on the whole thing. He said the agencies would like to start working with the important, agreed upon parts of the document so the whole thing isn't stalled due to minor disagreements.

Agency response

Jim Hansen, DOE-RL, said the regulators are currently in discussions about altering and clarifying the RCBRA document, and they are still months away from issuing a Revision 0 for public review. He asked the Board to remember that they are looking at a draft of the document and there are still changes to be made.

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. The contaminant table has differences between its projections and what the Board has commented on in the past. Is the STOMP 1D model really appropriate for these scenarios?

R. STOMP 1D is a one dimensional model used to calculate leaching of the soil, and it has gone through many modifications. The 300 Area has a lot of groundwater motion, whereas other areas have much less, so the differences are found in the amount of motion. The table that Jean handed out displays the MCTA default values, which are used in the absence of specific site knowledge and generic models are used. We use more specific information about a site when it is available. The STOMP 1D model tends to be more conservative than what we see in groundwater, but we have the ability to make the model more sophisticated. We can also do site specific leachate tests to ascertain how particular chemicals are behaving.

C. We hear a lot about conservative models, but all too often we see that the actual results and the environment are the opposite of what's shown in the model. Some believe contaminants will dilute by half as they move into the Columbia River, but that's not what we're seeing here; the contaminants movement through the soil isn't behaving as predicted. The TPA agencies need to actually validate so we know if the contaminants are doing what we're expecting them to do.

C. If DOE has made a commitment for final decisions not to backslide to cleanup levels lower than the interim actions levels means you're not willing to look at new data that may indicate it is okay to do otherwise. There is a lot more information about strontium 90 now that wasn't available in the 1990's. It

takes a lot of strontium for there to be health effects. Your models are highly conservative for radioactive materials.

Q. Are the agencies aware of any decreased risk on site compared to when cleanup first started? How much good have we done so far?

R. Most of the waste sites along the River Corridor have been cleaned up as part of the interim actions, and they will remain in their current states for the final decisions, which means we have already reduced a lot of the risk. The removal of K Basin from the River Corridor is also a big reduction. We are making progress, but then we find issues like soil contamination under the 324 Building, so there isn't an absolute curve we can depend on. We've come a long way but still have a long way to go.

C. The risk of cleanup is not insignificant in itself.

R. The actual job of removing risk is part of CERCLA, and the agencies are mindful of it.

Q. It is troubling that we are approaching final decisions quickly and there still aren't conclusions for many of the contaminants identified. The agencies are using raw data and drawing their own conclusions versus relying on RCBRA for the final decisions.

R. We need to move forward through the approval process even though there is some detail that hasn't been approved yet. Some parts of the RCBRA document are acceptable to the TPA agencies and can be used for other plans. Ecology needs key parts of the TC&WM EIS for the Site-wide Permit and the State Environmental Protection Act (SEPA), so the portions they need will go through more scrutiny in order to be formally approved. We are using the conclusions drawn in RCBRA; there are 32,000 pages of data, and some of it can come forward as it is incrementally determined to be acceptable.

Q. Will the Board be able to review Draft B of the 100 K and 300 Area Proposed Plans?

R. DOE has not made a commitment for a Draft B review, but the Board will get another chance to review the RI/FS, proposed plan, and supporting documents when Revision 0 is issued for public comment.

Q. Regulations and laws tend to change through a three to five year document cycle. Do the documents pick a fixed point in time and work towards those values or do you adapt to changing levels of what is deemed acceptable cleanup?

R. Regulations change, and we are always learning more about the toxic components of contaminants, so the numbers go up and down. For CERCLA, we take the best science available and follow the current state of regulations to make a cleanup decision. All of that gets locked into the record of decision (ROD). Then we go back and look at that decision during the five year review to see if the decisions are still protective. Big changes in our knowledge base may change the decision, but small changes won't. There are uncertainty sections in RCBRA that allow us to explain where the information in the risk assessment isn't clear.

Q. Has Ecology separately validated that the STOMP 1D model emulates the actual contaminants of concern?

R. Ecology looked into whether the model is a known application across the state and country. The STOMP 1D model is publically known and compares to other models. It contains the required contaminants and has been validated in terms of application. We don't compare it to an exact model because that is not required by state law.

C. Models at Hanford have performed poorly in the last 20 years because they don't represent reality. STOMP models are better than what has come before because they demonstrate reality, but if we don't represent the lateral transport of contaminants in the Central Plateau, we are not showing reality.

Next steps

Jean said RAP will continue to track the CERCLA process and RCBRA documents as the final River Corridor decision process continues. Jean spoke to her concern about the agencies' treatment of contaminants of concern, noting that it is impossible to identify a final remedy and treatment when all of the contaminants have not been identified. She said she is also concerned about the use of the STOMP 1D model.

Dennis clarified that the agencies are confident about their knowledge of the contaminants of concern in the groundwater, given that they have over 50 years of data. Dennis said the agencies can discuss the contaminants and models with the RAP committee. Jane clarified that Ecology has approved the use of the STOMP 1D model as a baseline that can be added to when site specific data is available. Jane said different parameters may be set for different areas on site, and the modeling process is a continual approval process between the agencies. Ecology will continue to track the modeling process.

Jean thanked Larry for his presentation and asked Board members to contact her with any questions. She encouraged participation in the RAP committee for anyone interested in following the topic.

Draft Advice: 300 Area RI/FS and Proposed Plan

Introduction of advice

Dale Engstrom, Oregon DOE (State of Oregon), said the 300 Area advice addresses the second of the RI/FSs and proposed plans to be issued. The advice is coming forward now because RAP and HAB members are disappointed in the quality of the document and how it has been constructed. Dale said RAP appreciates that they have been able to review Draft A of the documents, and they want to ensure a better quality document for the next revision. Dale said the advice also speaks to the sequencing of documents, as two proposed plans have now been drafted before the completion of the risk assessments. The agencies are using the parts of the risk assessment that they need, but the Board is still uncomfortable with the sequencing process. Dale said the advice addresses the chosen alternative and conclusion of the proposed plan, which selects a method that uses polyphosphate sequestering that the Pacific Northwest National Laboratory has proven to be ineffective. The Board doesn't want to see the plans move forward with the identified preferred alternative.

Agency perspective

Mike Thompson, DOE-RL, said the 300 Area documents are a culmination of all the work that has been done in the area since 1989. The conclusions are supported by a lot of work, and DOE is using all of the technology available to them for remediation. Mike said DOE has vetted 32 technologies running the range of alternatives, including no action and complete removal, and they have proposed to use the best technology available for uranium removal. To date, DOE has spent \$97 million to RTD the 300 Area

under a final action that covered the first 25 feet of disposal (removed to ERDF). What remains in the 300 Area is a threat to groundwater, and Mike acknowledged that most would prefer DOE to dig up the remaining material. But DOE would have to dig through wet soil, and it would require 12 years of cleanup to attain drinking water standards. Exposure point concentration requirements can be met in as little as 40 years with no action, meaning the aquifer would eventually clean itself. If the remediation technology identified in the proposed plan does not work, it's DOE's responsibility to either do something else or leave it be.

Mike said the remediation technology has been tested, and while the first test failed (sequestering the uranium to slowly convert it to phosphate), the method of using phosphate to turn the uranium into a different form was successful, so that is the preferred method.

Larry said the test to inject phosphate into the groundwater to create an appetite barrier didn't work, but that where the phosphate was injected, it moved to 75 feet and the uranium was gone. Phosphate connects to uranium and makes a stable element that precipitates with the rest of the aquifer. The agencies know that there is one piece of ground in the 300 Area that doesn't take water, and there are other areas within 300 that have different characteristics. Larry said that the chemistry is right for combining phosphate with uranium and calcium for positive results, though it is not a well known technology, so it is appropriate for DOE to go through a phased approach on the ground. The first phase is necessary before the agencies proceed to a larger deployment.

Jane said Ecology would like to see the phosphate treatment as a contingent remedy rather than a phased remedy, and Jane has made this clear to the National Remedy Review Board. She said she hopes that if the phosphate doesn't work, DOE will examine other alternatives rather than let the aquifer clean itself up. Jane said there is a lack of clarity on the institutional controls (ICs) that will be used, and that Ecology feels there should be ICs that might allow for future land uses like mixed residential-high density, rather than just industrial use. Ecology has questions about the process used to determine that one portion of the aquifer is not potable, so they will ensure that DOE goes through the necessary Applicable or Relevant and Appropriate Requirements (ARARs) to show all of the information, not just the justification.

Board discussion

The following are the key points noted during Board discussion:

- The Board discussed the quality of the advice and the short timeframe in which it was prepared. Some felt that the writing was disjointed and didn't clearly focus on the critical advice points. Some Board members suggested sending the advice back to the RAP committee for necessary refinements.
- The advice does not reflect another issue identified by RAP, which is that they don't believe the 300 Area to be ready for a final decision at this point in time. There is still more analysis to be done in order to gain confidence in the remedy selection, and a revised interim ROD might be a more appropriate step at this point.
 - The agencies stated that there would be no reason to go to an interim action ROD at this point, because the agencies know where the uranium is and they know one of two technologies will clean it up. Interim actions are for when you don't know what to do. DOE believes that they are using the best technology for cleaning up uranium, and the technology can restore the aquifer to drinking water standards more quickly than no action. DOE can demonstrate that RTD in other parts of the 300 Area is impacting the aquifer through dust suppression efforts that also affect the workers; RTD does more

damage, and DOE cannot recommend going forward with such an expensive technology that causes more environmental damage. Phase one allows the agencies to evaluate and learn about the technology and then make a decision about what to do three to four years in the future.

- Ecology said they would like to see RTD analyzed as an alternative should the phosphate method not work, but they acknowledged that RTD seems to cause more harm than good in the 300 Area.
- Some Board members felt that, given how comfortable EPA is with the sequestration technology, it may be appropriate for the Board to revise the advice language..
- Contaminant release into the Columbia River from the existing rewetting zone seems insignificant and is not a significant health risk. One Board member felt that it doesn't make sense to conduct a large cleanup effort when the real problem is in the groundwater under the contamination and it can be prevented from causing harm by implementing ICs. DOE responded that their goal is to clean up the area within the timeframe of Hanford cleanup, rather than waiting for it to solve itself. DOE wants to achieve their goals more quickly than identified in the interim actions.
- Previous Board advice has advised the agencies not to use ICs along the River Corridor. If someone plants an orchard on site in 300 years, and the uranium has not been cleaned up, the aquifer will still be a risk. Local tribes who live along and fish the Columbia River will also be at risk because the river is their main source of diet, and the uranium that enters the river is three times higher than the drinking water standard.
- The advice addresses the Board's wishes for DOE to go after the uranium hot spots and sequester the rest of the contamination. DOE said their goal is to sequester the mobile fractions of the uranium, which amounts to about half of the total contamination.

Next steps

The Board determined to send the advice back to RAP for further review and revision. RAP will revisit the advice and prepare it for the June Board meeting. Dennis said the advice will still be timely in June.

Mid-year report on 2012 Board Accomplishments

Susan Leckband introduced the 2012 HAB/TPA Agency Priorities Tracking Table (Attachment 7) as a compilation from all of the committee work plans and identified priorities for the year. The mid-year review is helpful for both the Board and the agencies to understand the depth of the issues the Board is addressing.

Susan reviewed key points of the Executive Issues Committee (EIC) discussion about the Board's mid-year progress:

- The tracking table reflects the large amount of cross-committee work being conducted by the Board in order to gain efficiencies and save on the budget. Issue manager networking has been a positive move forward as well.

- Collaboration between committee members and agency representatives is critical during the committee business portion of committee meetings. It is crucial that agency representatives take part in work load and calendar planning.
- The tracking table represents hundreds of volunteer hours that Board members donate to Hanford issues. The EIC hopes it is a helpful document for the new DDFO to understand the commitment and relationships of the Board and agencies.
- The delays of important documents or a change in priorities are the two biggest causes of a committee's delay in addressing an identified priority topic. The agencies and committees need to better collaborate and communicate on timeframes and priorities.
- The Board appreciates and thanks the agencies for allowing them access to decision documents much earlier than they have been provided in the past. The documents are fundamental to cleanup, and the Board would like to see the cooperation continue.
- Committee successes:
 - The RCRA Site-wide Permit public involvement process has been an exemplary model for committee and agency cooperation (PIC/RAP and Ecology). The public involvement and review of the document will be very successful because of the time Ecology and the issue managers have put towards the effort.
 - TWC and HSEP are working together on safety issues at the WTP.
 - DOE and the River Corridor contractors have been actively engaged with RAP on River Corridor issues and documents. They have offered committee tours of the 618-10 and 11 Burial Grounds to help RAP understand the issues at those sites. The relationship is very constructive and much appreciated by RAP members.
 - PIC is represented on every other committee, and its members are deeply involved with cross-cutting issues in order to bring the public involvement perspective to every topic.
 - HSEP has had a positive effect on safety and safety culture at Hanford.

Agency perspective

Dennis said the 300 Area advice and discussion is proof that the agencies are at risk for providing rough documents to the Board early in the review process. He asked the Board to remember that the agencies are allowing them to review very rough drafts, and he doesn't want the agencies to shy away from continuing to share because the Board response is so overwhelming. Dennis asked the committees to remember to include EPA in committee discussions, citing a recent HSEP and TWC discussion about asbestos that EPA was not aware of. Dennis said that EPA may not have the personnel to staff all committee discussions, but they would like to be aware of critical discussions.

J.D. said DOE has made a commitment to releasing early drafts of documents to the Board, as it is a way for the Board to become familiar with the documents and understand the processes prior to public comment. He said he hopes the sharing process isn't inefficient, noting that the agencies need to be able to make their own document improvements before the Board gets involved. J.D. said that as long as he is in his position at DOE, the Board will receive Draft A for DOE-lead documents.

Draft Advice: Hanford 2014 Budget and Cleanup Priorities

Issue manager framing

Jerry Peltier, City of West Richland (Local Government), thanked the agencies for the March 15 FY2013 and 2014 budget presentation, which helped inform the Budget and Contracts Committee (BCC) development of the advice. The main concern addressed in the advice is that if the agencies are going to spend money to produce the Lifecycle Scope, Schedule, and Cost Report (Lifecycle Report), then the information provided in the report should inform budget decisions and out-year projections. DOE cannot develop the report and then not fund to the levels it identifies for the scope. The advice also addresses the rebaselining of the WTP, and Jerry noted that the last time DOE did a rebaseline, the cost of the WTP doubled and the timeframe for completion extended. Jerry said the advice addresses the lack of funding for the Pretreatment Facility even though pretreatment is a requirement for waste to enter the WTP.

Agency response

Stacy said that funding and planning for long term and interim storage is already in the funding baseline and budget request, so she feels the advice point that references this is unnecessary. In addition, the inclusion of the cost of construction of the Pretreatment Facility will be addressed in the rebaseline effort. Stacy noted that some of the language is confusing as to which funding profile the advice is talking about, whether it's through FY2014, between FY2014 and FY2018, or for the long term. Stacy suggested clarifying edits to the advice's background, and said it is helpful for the Board to say they agree with the field offices' budget requests as the top bullet of the advice. She noted that DOE has plans for interim long term storage of up to 4,000 canisters of high level waste and it is included in the baseline.

Board discussion

The following are the key points noted during Board discussion:

- Dirk Dunning, Dale Engstrom, and Ken Niles, Oregon DOE (State of Oregon), and Rob Davis, City of Pasco (Local Government), recused themselves from the advice decision process due to a potential conflict of interest.
- The Board discussed the need for recusal from the budget advice given that the advice addresses funding for specific advisory programs, as well as public involvement. The Board determined to edit advice language to be more generic and not address specific funding lines for public involvement programs in the advice bullets (i.e. DOE-RL-100 and PBS-100). BCC will work on separate advice to address the specific DOE-RL-100 funding profile.
- The Board discussed the need for an advice bullet to address the funding of groundwater programs, including a study into the iodine plume in UP1. The advice addresses groundwater funding for nuclear materials stabilization and remediation programs in the background, but there is not a specific bullet. The Board determined to incorporate a bullet addressing groundwater funding. EPA noted that the advice bullet regarding groundwater programs will assist in their discussions with DOE concerning the need to fund groundwater treatment programs identified in the 2015 Vision. DOE spoke to the specific groundwater projects that will be funded in the upcoming years, noting that they look forward to discussing if there are potential funding gaps in the 2015 Vision with EPA. Groundwater programs may be delayed for now, but they will be funded by 2015.
- DOE-ORP has expended their American Recovery and Reinvestment Act funding, and DOE-RL will use their remaining funds on the PFP through the end of the year. DOE is moving forward

with preparing waste for a national geologic repository even though the exact location of the repository has not yet been identified. The Board removed the advice bullet on long term storage funds and planning.

- HSEP is interested in learning more about how the leaking, mixed waste drums have put workers at risk at a future committee meeting. Ecology would like the Department of Health to also be present for the meeting.
- The Board discussed the advice bullet addressing the funding of TRU waste removal. The Board has always identified the removal of TRU waste as a priority, but they acknowledged that there isn't funding for it in FY2013. The bullet was edited to clarify that the Board advises funding and implementing the plan characterization in 2013 in order to begin the process that would allow for TRU waste retrieval and disposal in 2017.
- DOE-ORP reported that their plan for Pretreatment Facility technical issue resolution is to resolve issues for the design of WTP in FYs 2013 and 2014, and then to focus on resolution of feed criteria and operations issues in FY2015. The Board edited the advice point on the Pretreatment Facility to address a subsequent funding for the construction phase of the facility after safety and engineering concerns have been resolved.
- The Board clarified that the advice is directed at the DOE field offices as well as DOE-Headquarters (DOE-HQ). DOE-HQ is being asked to fund the DOE-RL and ORP field offices at full compliance.

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

DOE's Weldon Spring Site

Ken Niles, Oregon DOE (State of Oregon), provided the Board with an overview of his visit to DOE's Weldon Springs Site in Missouri. Ken's presentation is provided as Attachment 8. Ken visited the site as part of a group that interacts with DOE on a national level; Jane Hedges is also a member.

Ken's presentation showed pictures of the cap that has been put in place at the Weldon Springs Site, and of the cap and the site, Ken noted the following:

- The cap covers 200 million cubic tons of waste and is made of limestone. It sits on 45 acres of land and rises 75 feet high.
- Though the proposed Hanford caps will not be made of limestone, the Weldon Springs cap is relatively similar to what might be used at Hanford. Potential caps at Hanford would be more like five barriers on 17 acres of land.

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. Does Weldon Springs have a visitor center or museum?

R. There is a visitor facility. The purpose of the meeting and tour was to think about long term stewardship and maintaining a site's presence and history, which has been tied into Weldon Springs' closing agreement.

Q. Does Weldon Springs have performance information for capture underneath the facility?

R. This information was not provided as part of the tour.

Q. If the cap is only eight feet thick, how did it get to be 75 feet high?

R. The waste is piled above ground, so the height is mostly the waste. The groundwater is very close to the surface in that area.

Q. Who controls access to the site, and what is the intended land use plan for the future?

R. Access isn't really controlled; the area surrounding it is open and doesn't have a fence. The visitor center has normal operating hours. The land surrounding the site is being returned to private ownership. Weldon Springs does not have the lingering problems that we have at Hanford, but they do have a number of ICs, including the cap itself. The site is maintained by DOE's Office of Legacy Management.

Q. Does Weldon Springs conduct any monitoring?

R. They monitor the groundwater and for leaching, which they collect and send offsite for treatment (amounts to approximately .44 gallons per day). One area near the end of the landfill is a restricted wetland area; they will maintain it for plant intrusion until the native grassland returns.

C. DOE and contractors will work with current technologies to help maintain the height of the Hanford barriers. U Plant closure may see a barrier that would be 35 feet high or less, and that site is recommended for clean closure. Contractors in the future will be looking at clean closure with simple soil closures, so there may be no need for long term stewardship. DOE and contractors are analyzing different barriers now, and it behooves them to lower the height profiles of the barriers to reduce erosion and return the site to natural aesthetics.

Committee Reports

River and Plateau Committee (RAP)

Pam Larsen, City of Richland (Local Government), acknowledged RAP committee members and thanked them for their hard work. In March, RAP was the preliminary audience for EPA's presentation to the National Remedy Review Board on UP-1; the committee also discussed the 300 Area RI/FS and Proposed Plan, as well as the Site-wide Permit. RAP will discuss the 300 Area RI/FS and Proposed Plan advice during their meeting next week and will update it according to the Board's comments and edits. Pam reviewed the topics to be addressed during the April RAP meeting, including a discussion on TRU waste; an update on the 324 Building and its remediation strategy; an update on the 100-K Area RI/FS and Proposed Plan; and a discussion on the Site-wide Permit meetings and path forward. Pam asked RAP members to review the proposed agenda for the May 3 Site-wide Permit Workshop prior to the meeting. In May, RAP will revisit the 618-10 and 11 Burial Grounds vertical pipe unit issue and determine whether advice is necessary. Pam noted that RAP will also debrief from the May 3 Site-wide permit workshop during the May RAP meeting.

Dennis suggested that RAP consider a tour to the 200 West Pump and Treat Facility during the May committee meeting, as June would likely be too late to see some of the most interesting features of their work.

Budgets and Contracts Committee (BCC)

Jerry noted the recent change in BCC leadership; Jerry will be taking over as chair, while Gerry Pollet, Heart of America Northwest (Regional/Environmental Citizen), and Harold Heacock, TRIDEC (Local Business), will be co-vice chairs. Jerry said BCC will be looking towards the future and identifying issues that they can meaningfully comment on as a committee, given that the budget climate has changed and there is less and less information available. The BCC will have a call during committee week to determine their path forward and whether any advice is necessary for June.

Dennis said the scope of work for the 2015 Vision would be an appropriate topic for BCC to address. He noted that there seems to be disagreement between the agencies on what the 2015 Vision encompasses and how it will be funded.

Tank Waste Committee (TWC)

Dirk Dunning acknowledged TWC members and encouraged others to join to help with the workload. TWC has been working with HSEP to address safety culture issues at Hanford, and they are currently working towards a common understanding of safety culture. In March, the two committees discussed safety culture and the System Plan; both topics remain on their agendas for May as well. Dirk said the April TWC meeting will include topics on the RCRA permits and how they relate to tanks, plans for the interim storage facility, and Appendix H of the TPA. Dirk said a hot button topic for TWC in the coming months will be the recent report that identifies a better understanding of plutonium in the tanks; the committee will review the report and how it might lead to more conversations. Dirk thanked Larry Lockrem, Benton County (Local Government), for his years of service as vice-chair and welcomed Vince Panesko, City of Richland (Local Government), as the new TWC vice-chair.

Health, Safety, and Environmental Protection Committee (HSEP)

Keith Smith, Public-at-Large, noted that this will be his last update as HSEP chair, as Mike Korenko, Public-at-Large, will now be taking over as chair with Becky Holland, Hanford Atomic Metal Trades Council (Hanford Workforce), serving as vice-chair. Keith served as committee chair for 12 years. Keith spoke to the March 8 HSEP meeting that addressed priorities and planning for the out months, culminating in an updated work plan to address topics like radiation, chemical and biological issues, site maintenance, traffic, and safety culture. HSEP also discussed the February 22 site accident, and they look forward to learning more on what's being done to remedy the situation. HSEP will have a meeting in April to talk about tank vapors, receive an update on the asbestos issue and biological controls program, and discuss plutonium (joint with TWC) and radiological safety issues. HSEP will have a joint meeting with TWC in May to address safety culture issues, hopefully resulting in a significant piece of advice for the June Board meeting.

Mike Korenko spoke to the strategic planning session for the future topics that HSEP will address, noting that it is important for HSEP to bring advice forward that can speak to future safety risks at Hanford and how they can be prevented. Mike said there are a number of future topics that will be joint with TWC, including the waste transfer lines from the tanks to WTP. HSEP will be placing a little more emphasis on the environmental protection component of the committee's guidelines in the upcoming months.

The Board thanked Keith for his years of service to the HSEP committee.

Public Involvement and Communications Committee (PIC)

Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), thanked committee members for their hard work and noted that this is his last update as committee chair. Liz Mattson, Hanford Challenge (Regional Environmental/Citizen) will be taking over as PIC chair, and Ken Niles will serve as vice-chair. Steve will continue to serve the Board in other capacities. Steve said many of the issues already addressed in committee reports are also issue for PIC, as PIC participates in all other committee issues. Steve asked that Board members review the recently updated TPA calendar online to see how many public involvement activities will take place in the upcoming months. He noted that many of those meetings require support from individual Board members. Steve referenced a recent publication by the National Park Service that highlights the Hanford National Monument and quotes Board member Maynard Plahuta; he encouraged the Board to read the article. Steve said Shelley Cimon, Public-at-Large, recently spoke to a Whitman College class about the history of Hanford, based on DOE's *The Hanford Story* series. That class will be taking a site tour on April 17. Steve noted that this type of outreach speaks to the work Board members are doing on their own and in their own communities. Upcoming topics for PIC include State of the Site meetings advice/letter, debrief of the May 3 Site-wide Permit Workshop, strategic planning, and evaluating ways for HAB members to increase interaction with HAB colleagues.

Liz Mattson encouraged Board members to attend the Site-wide Permit meeting being held in Richland June 6 (during the June Board meeting week), as attendance can better inform the Site-wide Permit advice that will be coming forward.

Site-Specific Advisory Board (SSAB)

Susan Leckband said she will be attending an SSAB meeting in the upcoming week. She said she can bring forward one issue on behalf of the Board, and for this SSAB meeting she will be discussing the Board's concerns about WTP safety culture. Susan noted that DOE-Environmental Management Senior Advisor, David G. Huizenga, and his chief of staff will be present at the meeting to listen to concerns. The SSAB will receive information on the DOE-HQ budget during the meeting. Susan said information on SSAB officer appointees is not yet available.

Executive Issues Committee (EIC)

Susan Leckband said the EIC met the night before the Board meeting to work on the agenda for the May 2 Leadership Workshop. The EIC also drafted a white paper on the Board's values; this topic was brought to the EIC by Ken Niles. The white paper will be brought before the Board in June and may be used as a framework for advice development in the future. Susan said the annual leadership retreat has been scaled back this year to save on budget. The leadership workshop will now be a one-day meeting, held in a free location in Richland. Susan said the results of the workshop (priorities, calendar, etc) will be brought before the Board in June.

Board Business

Committee leadership announcements

Susan Leckband noted that both the current and new committee leadership has been asked to attend the leadership workshop in order to pass on any lessons learned.

Susan Hayman announced the new committee leadership appointments, noting that RAP is the only committee whose leadership has not changed.

- PIC:
 - Liz Mattson, chair
 - Ken Niles, vice-chair
- TWC
 - Dirk Dunning, chair
 - Vince Panesko, vice-chair
- HSEP
 - Mike Korenko, chair
 - Becky Holland, vice-chair
- BCC
 - Jerry Peltier, chair
 - Gerry Pollet and Harold Heacock, co-vice-chairs
- RAP
 - Pam Larsen, chair
 - Dale Engstrom, vice-chair.

Board vice-chair selection

Susan Hayman said the Nomination Committee determined not to issue a nomination report as there is only one nominee for vice-chair. Pam said the Nomination Committee is pleased to have a nominee that has volunteered to take on a leadership position and has the time to devote to the position.

Steve made remarks regarding his interest in the position of Board vice-chair. He said volunteers know that they do not need a reason to volunteer, but that they do it because they can. Steve said he used to donate blood on a regular basis, and he did it because he was physically able, he met interesting people, and it was a way for him to contribute to his community. Steve spoke to his other volunteer positions, noting again that he does so because he has the skill sets necessary to participate in the activities. Steve said he believes that when one gets accepted to an organization made up of volunteers, each volunteer has an obligation to donate their skill set and availability. This is the criteria Steve used when he volunteered to take on the role of Board vice-chair, and he looks forward to serving. Steve said he looks forward to the opportunity to listen to the quality conversations and to learning from the expertise of the people on the Board.

Susan Hayman excused Steve for the selection and asked Board members if they agreed to the selection of Steve as the vice-chair. The Board agreed. Steve was asked to return to the room and was notified of his selection.

Susan Hayman thanked Bob Suyama for his work as vice-chair, noting that the Board looks forward to his continued participation as a Board member.

Preliminary June Board meeting topics

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

- Update on the 2015 Vision.
- Site visit to the 300 Area, PFP, B Reactor, and 200 West Pump and Treat Facility (tentative).
- Draft advice:
 - 300 Area

- State of the Site meetings
- Safety culture.
- Discussion on HAB values.
- Preliminary 2013 Board priorities.
- HAB 2013 calendar review.
- HAB budget review.
- New member orientation (tentative).

Gerry Pollet suggested that the Board consider advising DOE to not take action on the decisions in the TC&WM EIS until the Board has had a proper amount of time to review the document. RAP, TWC, and PIC will track the issue and bring advice forward in June, if necessary.

Calendar review

Susan Hayman reviewed the remainder of the 2012 HAB calendar (Attachment 9), noting that Board members can access the calendar via the HAB website or SharePoint site. Credentials for the SharePoint site will be distributed next week. Susan reminded everyone that the May committee week is May 8-10, followed by committee calls the week after. The June Board meeting will be June 7-9, followed by the committee week June 12-14. Currently, no meetings are planned for the month of July, though committees are welcome to schedule calls if they feel it is necessary. Susan reminded the Board that the calendar is presented in June and set in September, so no one should be surprised by any of the dates on the calendar as they have not changed since last September.

Dennis noted that due to scheduling conflicts, EPA is only able to host River Corridor meetings during the June committee week. The EIC and TPA agencies will discuss scheduling conflicts during the May 2 Leadership Workshop.

Some Board members asked that the Events-at-a-Glance (EAG) emails include a listing of all upcoming meetings – not just those occurring within the next month. The EIC will discuss how much information should be provided in the HAB EAG emails. The HAB Events Calendar is already linked in the EAG; a link to the TPA Public Involvement calendar could be added. Susan Hayman noted that the EAGs and the SharePoint site are meant to be useful to the Board, so feedback is always welcome.

Susan Hayman asked Pam Larsen if the May RAP meeting could move to either Tuesday or Thursday to accommodate the joint HSEP and TWC two-day meeting. Pam agreed to the change, noting that the RAP meeting may include a site tour. Rebecca noted that a Wednesday-Thursday meeting would be more convenient for the HSEP and TWC leadership.

Public Comment

Dirk provided public comment as a private citizen, and spoke to the necessity of careful modeling considerations for testing and final decisions. Dirk said that as a professional chemical engineer, he and others in his profession are authorized to design and construct dangerous facilities while protecting the environment and human health and safety. Dirk reviewed his many qualifications as an engineer and said that the key in engineering is ensuring the basis for decisions is valid. Models are very important in understanding how things behave and are useful to the degree that they are accurate. Dirk said that un-validated models should not be relied upon. He encouraged the TPA agencies to validate all models or proceed with great caution on un-validated models. If models are set up incorrectly, the data provided will not be accurate. Dirk said random darts stand a better chance of being accurate than inaccurate models.

Closing Remarks

Liz asked anyone willing to be a mentor for the Inheriting Hanford project to contact her to sign up for groups, discussions, or one-on-one mentoring. She encouraged the Board to go to www.inheritinghanford.com to see the profiles of the active mentors.

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

Attachments

- Attachment 1: HAB Ecology Update
- Attachment 2: HAB DOE-ORP Update
- Attachment 3: HAB DOE-RL Update
- Attachment 4: Jean Vanni – CERCLA discussion introductory remarks
- Attachment 5: CERCLA discussion – issue manager documents
- Attachment 6: CERCLA 101 and Risk Assessments presentation (Larry Gadbois)
- Attachment 7: 2012 HAB/TPA Agency Priorities Tracking Table
- Attachment 8: Weldon Springs Site presentation (Ken Niles)
- Attachment 9: 2012 HAB Calendar

Attendees

HAB MEMBERS AND ALTERNATES

Tom Carpenter, Member	Maynard Plahuta, Member	Dale Engstrom, Alternate
Tony Brooks, Member	Gerry Pollet, Member	Laura Hanses, Alternate
Robert Davis, Member	Howard Putter, Member	John Howieson, Alternate
Earl Fordham, Member	Dan Serres, Member	Steve Hudson, Alternate
Norma Jean Germond, Member	Keith Smith, Member	Mike Korenko, Alternate
Harold Heacock, Member	John Stanfill, Member	Larry Lockrem, Alternate
Floyd Hodges, Member	Richard Stout, Member	Sarah McCalemont, Alternate
Rebecca Holland, Member	Bob Suyama, Member	Liz Mattson, Alternate
Rick Jansons, Member	Eugene Van Liew, Member	Emmett Moore, Alternate
Pam Larsen, Member		Vince Panesko, Alternate
Susan Leckband, Member	Al Boldt, Alternate	Richard Smith, Alternate
Jeff Luke, Member	Shelley Cimon, Alternate	Margery Swint, Alternate
Ken Niles, Member (phone)	Lynn Davison, Alternate	Betty Tabbutt, Alternate (phone)
Bob Parks, Member	Sam Dechter, Alternate	Art Tackett, Alternate
Jerry Peltier, Member	Dirk Dunning, Alternate	Jean Vanni, Alternate
		Steve White, Alternate

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Paula Call, DOE-RL	Dennis Faulk, EPA	Rob Pipp, MSA
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JD Dowell, DOE-RL	Larry Gadbois, EPA	Barb Wise, MSA
James Hansen, DOE-RL	Emy Laija, EPA	Peter Bengston, WCH
Kevin Leary, DOE-RL	Michelle Andrews, Ecology	Bruce Ford, CH2M Hill
Karen Lutz, DOE-RL	Dieter Bohrmann, Ecology	Sonja Johnson, CHPRC
Tiffany Nguyen, DOE-RL	Dib Goswami, Ecology	Joy Shoemake, CHPRC
Alex Teimouri, DOE-RL	Jane Hedges, Ecology	Susan Hayman, EnviroIssues
Mike Thompson, DOE-RL	Allison Ruppenthal, Ecology	Tammie Gilley, EnviroIssues
Dana Bryson, DOE-ORP	Ginger Wireman, Ecology	Jessica Ruehrwein, EnviroIssues
Stacy Charboneau, DOE-ORP	Sharon Braswell, MSA	Melissa Thom, EnviroIssues
Pamela McCann, DOE-ORP	Reed Kaldor, MSA	

MEMBERS OF THE PUBLIC

Steve Airhart, Freestone	Shannon Cram, UC Berkley	Rosenda Shippentown, CTUIR
Annette Cary, Tri-City Herald	Bob Legard, CWB/CTC	