

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

April 2-3, 2009

Portland, OR

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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 three pieces of advice concerning the 1) draft Tri-Party Agreement (TPA) change package, 2) beryllium disease protection at Hanford and 3) workers' compensation regarding beryllium disease. The Board also sent a letter of appreciation to the U.S. Department of Energy – Richland Operations Office (DOE-RL) and the U.S. Department of Energy – Office of River Protection (DOE-ORP) thanking them for their efforts to secure cleanup funding under the American Recovery and Reinvestment Act (ARRA). The Board did not take action on a draft letter regarding DOE-RL systems criteria for reducing Hanford waste. It will consider this letter at the June Board meeting.

Board Business

The Board heard committee, national liaison and agency updates. The Board will have committee calls in April and committees will meet in April. The Board will review the results of the 2008 HAB self-evaluation and select a new vice-chair at the June Board meeting.

TPA agencies update on ARRA

The Board heard an update from the TPA agencies on the latest information related to ARRA (stimulus) funding.

Central Plateau cleanup completion strategy

The Board learned about the Central Plateau cleanup completion strategy. A full briefing on this strategy will be provided at the June HAB meeting.

“Landscape view” of public involvement

The Board heard a presentation on a “landscape view” of public involvement and the viewpoints of the primary entities who engage in Hanford-related public involvement activities, including agencies and

organizations. This presentation was shared at the Public Involvement and Communications Committee meeting in December 2008.

Public comment

One member of the public provided comment related to beryllium disease.

HANFORD ADVISORY BOARD

April 2-3, 2009 Portland, OR

Susan Leckband, Non-Union, Non-Management Employees (Hanford Work Force) 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 ongoing opportunities for public comment.

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

Five seats were not represented: Franklin and Grant Counties (Local Government), the University of Washington (University), Washington State University (University), Citizens for a Clean Eastern Washington (Regional Environmental/Citizen), Physicians for Social Responsibility (Local/Regional Public Health), and the Confederated Tribes of the Umatilla Indian Reservation (Ex-Officio).

Welcome, Introductions and Announcements

Susan welcomed the Board to Portland. She apologized for the flurry of emails leading up to the meeting and explained that she, the Board leadership and facilitation team were attempting to meet the needs of all Board members and ensure the Board had all the latest information. She asked Board members to be succinct with their comments to ensure everyone has a chance to provide their thoughts. The meeting agenda was slightly modified to accommodate agency representative availability.

Susan Hayman, EnviroIssues, encouraged the Board to review the ground rules and thought it was good to remember how they work together at Board meetings, especially during sensitive discussions. She asked Board members to be attentive and keep side conversations and use of laptops to a minimum.

In the early responses to the Board 2008 evaluation, Susan Hayman said some Board members commented that they would like EnviroIssues to provide more active facilitation. In response to those comments, she and Cathy McCague, EnviroIssues, will intervene more during Board meetings, especially if speaking time seems uneven. She asked Board members to hold themselves to one comment and one follow-up question; after other people have a chance to speak, they can then follow up with more questions or comments. Board members agreed.

Ken Niles, Oregon Department of Energy (State of Oregon), introduced Dale Engstrom, a new staff member that is in the process of being appointed as the State of Oregon alternate for the HAB.

Susan Leckband noted that 2009 is the 20th anniversary of the Tri-Party Agreement (TPA) and the 15th anniversary of the Board. The Board will celebrate at the June meeting.

Keith Smith, Public-at-Large, announced the Hanford Safety Expo at TRAC in Pasco on May 12 and 13. He said it is a great event and everyone is welcome.

Rob Davis, City of Pasco (Local Government), announced the final workshop for the single-shell tank integrity panel at the end of April. He said it is open to the public and encouraged everyone to attend. He will provide detailed information to EnviroIssues.

Ron Skinnarland, Washington State Department of Ecology (Ecology), said there is a workshop on April 21 about the U.S. Ecology Site at Hanford. U.S. Ecology, a private company, operates a commercial low-level radioactive waste disposal site on 100 acres of the Hanford Site. The HAB does not advise the TPA agencies about this site. Ron said they have performed many studies over the years to ensure the trench coverings are protective. There was data from the last phase of investigation and a project fact sheet available at the Board meeting. Ron also noted that there is a planned modification to the Waste Treatment and Immobilization Plant (WTP) permit. Ecology has to update the permit as designs for WTP develop. He said Ecology will add new designs to the permit and have a public comment period, which was supposed to begin on March 9 but has been delayed. Ron also encouraged the Board to respond to the TPA public involvement survey that was sent out to contacts on the Hanford listerv.

Pam Larsen, City of Richland, announced that there will be a DOE technology workshop on June 9 and 10. The Board had expressed its interest in learning more about science and technology needs and development at Hanford, and DOE responded by hosting this workshop. Pam thought it was a great opportunity and encouraged Board members to participate. She noted that now it seems DOE-Headquarters (DOE-HQ) better recognizes science and technology needs.

Board meeting goals included:

- Discussing the draft letter on DOE-RL systems criteria for reducing risks from Hanford waste.
- Discussing draft advice on the TPA change package.
- Discussing draft advice on protecting employees and contractors from beryllium.
- Receiving a brief report on the Central Plateau cleanup completion strategy, particularly on the proposed seventh Record of Decision (ROD).
- Receiving an update on the American Recovery and Reinvestment Act (ARRA) funding and its implications at Hanford.
- Receiving a presentation on a “landscape view” of public involvement at Hanford.
- Conducting routine Board business, including hearing reports from committees and the national liaison, and reviewing the results of the 2008 HAB self-evaluation.

The Board meeting was audio-recorded.

Confirm February Meeting Summary Adoption

Board members did not submit any major changes to the February meeting summary. The February meeting summary was finalized and adopted over email within the operating ground rules requirement of 45-days after the meeting.

The adopted February summary was confirmed. It is available on the HAB website.

Committee Reports

Tank Waste Committee (TWC)

Larry Lockrem, Non-Union, Non-Management Employees (Hanford Workforce), said TWC met on March 12 and discussed the single-shell retrieval plan from DOE-ORP. Larry provided some updated information about tank farm activity: DOE is retrieving waste from tank C-110 (some hard heel is still at the bottom of the tank) and C-104 is being prepared for sludge retrieval. DOE is using portable ventilation for all of these tanks to control the spread of alpha particles. Larry said the next tank in the retrieval queue is C-111. DOE is also looking at different technologies, including the Modified Arm Retrieval System (MARS); TWC will receive a presentation on MARS at their next committee meeting.

TWC also received a briefing on the single-shell tank integrity panel workshop that was held in January that focused on the potential for failure during a seismic event. The panel consisted of technical experts and found that the tanks should be able to withstand a seismic event, but also made some recommendations that will be evaluated and presented in an April workshop. Larry said TWC also received an update on the 242 evaporator and will look into potential areas of concerns since it is an old piece of equipment and is needed for long term WTP support.

TWC will continue to discuss the pre-treatment (PT) engineering test platform that was used for core scale tests starting in 2008. He said DOE anticipates completing all tests and issuing a report in June. TWC will continue to follow issues including sodium management plans, system plan revision four, single-shell tank retrieval, and the Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS). TWC also hopes to plan a WTP tour.

Health, Safety and Environmental Protection Committee (HSEP)

Keith said the committee developed the beryllium exposure advice that the Board will consider today. Moving forward, HSEP will discuss how new contractors are protecting employees from tank vapors. Keith

noted HSEP will also look into concerns about increased traffic on site and worker safety driving to and from job sites.

Budgets and Contracts Committee (BCC)

Harold Heacock, TRIDEC (Local Business), said BCC has been busy. BCC participated in the recent Committee of the Whole meeting that reviewed the draft TPA change package and how it aligns with TPA milestones and funding that was available at the time the change package was developed. Harold said the emphasis now is on funding and cleaning up the River Corridor, which is consistent with Board priorities and advice.

BCC is looking forward to receiving information on the 2010, 2011 and out-year budgets. Harold anticipated that BCC will prepare budget advice. Gerry Pollet, Heart of America Northwest (Regional Environmental/Citizen), said the agencies will hold a workshop on 2010, 2011 and out-year budgets in May or early June. He said the agencies will not host public meetings around the region because of other public involvement needs. Gerry hoped the Board will see dollar amounts and schedules for the ARRA funding and commented that it is difficult to review budgets and baselines without knowing how much money is coming from ARRA.

Public Involvement and Communications Committee (PIC)

Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), said PIC continues to work on improving how it meets its public involvement responsibilities. It is reviewing public comment periods and the Board public involvement white paper, synthesizing past public involvement advice and responses, and is developing a rubric as a sort of public involvement "checklist." Steve said PIC will also review a draft revision of the TPA agencies Community Relations Plan (CRP).

Steve reviewed other issues PIC is tracking and working on:

- Heart of America Northwest and TPA agencies' public involvement survey results
- TC&WM EIS public involvement
- Resource Conservation and Recovery Act (RCRA) site-wide permit public involvement
- TPA change package draft fact sheet (provided comments to the agencies)
 - The comment period was extended to May 15; the agencies are planning meetings in Seattle on May 5, 6, or 7 and in Portland on May 15.
- Purgewater treatment proposal public involvement
- Model group waste sites
- Facility consolidation/Rattlesnake Mountain
- Hexavalent chromium
- Environmental Restoration and Disposal Facility (ERDF) expansion

Steve asked the technical committees to notify him of any issue with a public involvement component and PIC will add it to their workload. PIC is also considering becoming part of committee week so it has more time to develop advice and meet its goals. Steve said PIC is looking forward to a more proactive role.

River and Plateau Committee (RAP)

Maynard said RAP has been busy and is working on the following issues:

- Plutonium toxicity – RAP is preparing a plutonium toxicity tutorial for the June Board meeting
- Central Plateau cleanup strategy and the seventh ROD
- DOE-RL systems criteria – RAP developed a draft letter in response to DOE-RL's request to have advice similar to the DOE-ORP systems criteria advice the Board adopted in February. The Board will consider the draft letter today.
- 618 burial grounds
- ERDF expansion and changes to cell configuration – potentially a joint issue with PIC
- Long-term stewardship
- 200-ZP-1
- Brown bag science and technology needs and applications

Maynard noted that some members of RAP developed a letter of appreciation to DOE, thanking them for the conference call about ARRA funding and how it will be applied at Hanford. He said they did not follow

usual Board process and it does not have RAP consensus, but felt it was time sensitive and important to recognize DOE's efforts to share the information with the Board.

Executive Issues Committee (EIC)

Susan Leckband said the leadership retreat will be held on May 13 and 14 in Cle Elum, Washington. Board leadership will discuss the past year's work and develop goals for the coming year. She encouraged Board members to talk to their committee leadership if they would like any particular issue brought forward. The Board will develop its priorities for 2010 and integrate them with agency priorities for Board work.

National liaison

Susan Leckband said she and Shelley Cimon, Public-at-Large and Board national liaison, attended the Office of Environmental Management Site Specific Advisory Board (EM-SSAB) meeting in Augusta, Georgia in March. She said these national meetings are very important and are attended by DOE-EM decision-makers. Susan encouraged Board members to review the presentations that were emailed to them by EnviroIssues. Ines Triay, acting DOE-EM assistant secretary, recognized HAB advice on the clarity and readability of public documents and took the presidential memo about government agencies being more transparent very seriously. The HAB is one of the more experienced Boards in the country, and DOE-EM often looks to it as a benchmark.

Susan said the DOE Savannah River Site put together a helpful federal budget process presentation (copies were available at the HAB meeting) and the EM-SSAB came to agreement on a piece of advice that the HAB will review at the June Board meeting. Susan is also crafting a piece of advice about a public process for identifying a national waste repository.

Susan said they had the opportunity to discuss common issues with other boards around the country, and is helping a new board get started. She encouraged Board members to contact her if they want more information about the EM-SSAB.

Shelley shared additional information about some of the issues the EM-SSAB learned about and is addressing:

- Ines Triay shared program priorities and described central activities to maintain safety throughout the complex, radioactive tank waste stabilization, and special nuclear material consolidation. She also described footprint reduction, the need for more jobs, lifecycle cost reduction and more. DOE-EM is focusing on cleaning up certain small sites to "get them off the books" in the near term.
- ARRA stimulus funding: DOE-EM is getting approximately \$6 billion. Ines discussed operational readiness; Shelley noted that HAB members could access a full debrief on the EM-SSAB website (www.em.doe.gov). Ines described ARRA implementation principles, including schedule, ensuring contracts are in place, and using proven technologies. Ines asked the EM-SSAB to focus on ARRA funding and opportunities for the public to engage on environmental justice issues.
- Frank Marcinowski, DOE-EM regulatory compliance, discussed programmatic issues, including siting a mixed low-level waste site in Nevada involving land withdrawal from the Bureau of Land Management. DOE-EM is also considering enlarging the scope of a low-level waste site in Texas to accept mixed low-level waste. Shelley commented that could open the door for the private sector to get involved in waste disposition.
- DOE-EM successes include Idaho's transuranic (TRU) waste removal to the Waste Isolation Pilot Plant (WIPP) and the re-negotiation of Hanford's TPA milestones. DOE-EM is still involved in litigation with the State of Washington.
- DOE site employees are aging and DOE-EM recognizes the need to obtain younger people to work at sites around the country.
- March 9 is the tenth anniversary of WIPP's operations. The U.S. Environmental Protection Agency (EPA) is in the process of recertifying WIPP.
- Nickel waste stream: Shelley said it is a waste stream people do not often hear of. Nickel could possibly be used if it is decontaminated, or used in an alloy in a radiological licensed facility without being fully scrubbed.
- Mercury is another waste stream whose flow in and out of the country is strictly controlled. DOE-EM is siting a 2010 storage facility to dispose of mercury.

- The EM-SSAB will discuss a national repository at its next meeting. Susan will be the primary author on the advice that the SSAB will consider.
- Savannah River has an FBI forensics lab to investigate sources of nuclear materials.

Susan Leckband noted that it is important for HAB members to understand what she and Shelley do on a national level. The next EM-SSAB meeting will be in Idaho. Board members that would like issues brought forward should discuss them with Susan or Shelley.

Appreciation letter

Maynard introduced a letter of appreciation to thank DOE for a conference call briefing on March 18 about ARRA funding and how it will be applied at Hanford. The letter was developed by several Board members; Maynard noted that they did not follow usual Board process and it does not have RAP consensus, but they felt it was time sensitive and important to recognize DOE's efforts to share the information early with the Board.

Discussion

Gerry objected to the letter and said its development did not follow Board process. He said it does not have RAP consensus and thought it opened the door for any letter to be brought forward out of process. Gerry thought the Board did not need to do an appreciation letter because he did not think DOE gave appropriate notice for the conference call and thought they should have made it more available to the public. He thought it violated the Federal Advisory Committee Act (FACA).

Paula Call, DOE-RL, said the conference call briefing was an attempt to quickly provide ARRA information to a major stakeholder group, the Board. She said the local DOE offices wanted to turn the information around very quickly once they got direction from DOE-HQ. She explained that there was a phone line issue that could have caused problems depending on the number of people who called in; there was never any intent to close the call. DOE carefully checked FACA rules and Paula said it was not a briefing held under FACA and there was no violation of FACA.

Pam recognized that Gerry did not agree with the current draft of the letter and noted there are ways to identify his disagreement while still issuing the letter. She noted on the day of the call, the local DOE offices did not have direction from DOE-HQ on specific dollar amounts for each project. She thought the Board should be positive about this ARRA stimulus funding and recognize DOE's efforts to share the information they had.

Harold thought the Board should send the letter. He said the ARRA funding is not a general appropriation. It is a legislative action that includes specific instructions for the type of work it should fund. He did not think it serves any purpose to complain to the agencies about public input. Harold thought the agencies did a good job of keeping the Board informed once money was appropriated by Congress. Harold also said that public input may have been more appropriate at the legislative level.

Jeff Luke, Non-Union, Non-Management Employees (Hanford Workforce), wanted to better understand the time constraints DOE was under when it scheduled the briefing and why they could not schedule a more traditional public meeting. Steve Pfaff, DOE-RL, said he would try to find this out before the end of the day.

Ron said from Ecology's perspective, DOE has done a good job sharing information about ARRA stimulus funding. He said the agencies had known that the stimulus funding would be approved, but there are constraints about where the funding will go and when it will be released. Ron said Ecology wanted information as early as possible, and he thought DOE was trying to respond to that, and included the Board in the briefing.

Jeff said DOE may have a very good idea for how they should spend the stimulus funding. He asked if the delay necessary to hold a public meeting would have been acceptable to the local DOE offices and DOE-

HQ, or even possible. He said he wanted to move forward with the letter, but needed answers to his questions.

Dennis Faulk, EPA, thought the Board should revisit the letter after they learn more about the stimulus package (on the agenda for later in the day).

Keith did not object to the letter but thought it should have had more committee discussion. He suggested waiting until the Board hears more about ARRA funding from DOE-RL and DOE-ORP senior staff, which is scheduled for later on the agenda. Keith noted that on the briefing conference call, DOE said it would take public comment when there are dollars associated with the work.

Julie Jones, City of West Richland (Local Government), asked about the usual process for a letter of appreciation. Susan Leckband said products are most successful when they go through typical Board process, which means getting committee consensus prior to coming to the full Board. She noted that there have been circumstances when the Board does not go through its usual process. Susan agreed that the letter was developed outside the Board's usual process.

Dick Smith, City of Kennewick (Local Government), said the Board often complains that DOE waits too long to share information. He thought DOE went above and beyond their typical effort and deserves a letter of appreciation. He said the Board would not have learned anything if they had gone through the time-consuming process of setting up a meeting. Rob also supported going forward with the letter.

John Stanfill, Nez Perce (Tribal Government), said process is very important to a large group like the HAB, but process fails if it is too rigid. He said the Nez Perce encourages DOE to share information with them as early as possible and DOE is improving all the time. John said the Nez Perce tribe thanks DOE for sharing the information early even if there were still many unknowns.

Maynard apologized that the letter was not developed early enough to gain committee consensus. He agreed with John and Dick that the Board has been critical of DOE in the past for not sharing information early and directly, and the briefing was an example of them doing just that.

Gerry said in addition to being out of Board process, he did not think the Board should thank DOE for a conference call when other DOE sites had public meetings on the stimulus package and Ines Triay committed to sharing information for public comment. He agreed that it was good to have a briefing, but the DOE process was bad and does not merit a thank you letter. Paula clarified that Ines committed to engaging stakeholders to discuss the proposed work scope. She said scoping has moved quickly and there is no defined public involvement process. Paula said the briefing was set up immediately after the local DOE offices were given permission to share information. The proposed work scope closely aligns with Board advice.

Nancy Murray, Public-at-Large, asked how the Board usually decides if an agency action merits a letter of appreciation. Susan Leckband said in the past, the Board has crafted letters of appreciation at Board meetings when it feels something deserves recognition.

Mike Keizer, Central Washington Building Trades (Hanford Workforce), said job creation is the primary purpose of the stimulus package. He did not oppose the letter and commented that DOE has been open with Central Washington Building Trades.

Jeff commented that everyone is working hard to figure out what projects will benefit the most from stimulus money. He asked if the briefing was intended to provide information or to gather input. Paula said it was supposed to brief the HAB as a major stakeholder group and discuss the draft work scope.

Susan Leckband said according to the Board process manual, letters of appreciation do not require consensus. However, she was not comfortable signing a letter to which some Board members were strongly opposed.

Jeff asked Dave Brockman, manager of DOE-RL, if other sites held public meetings to discuss stimulus money and why DOE-RL and DOE-ORP were unable to hold a public meeting. Were they limited to a

conference call briefing? Dave did not know if other sites had the opportunity to hold public meetings. The Hanford DOE offices were told to hold a briefing with major stakeholders, tribes, and regulatory agencies within a week of receiving information, and they did.

Gerry said the Board only had 24-hours notice of the conference call briefing. He reiterated that there should have been earlier notice and it should have been open to the public and press. Paula clarified that they shared information as soon as they received approval, just as they shared everything they knew at the time of the February Board meeting. She said the phone briefing was a quick response to their ability to share updated information and was intended to brief a major stakeholder group (the HAB). Erik Olds, DOE-ORP, added that at the time of the call, they did not have specific dollar amounts for each piece of the proposed work scope. Dave said they did not have the option to host a public meeting. Jeff said his questions were answered.

Pam said she appreciated the call and invited the Tri-City Herald to participate. She thought the Board should be very excited about the stimulus funding and thank DOE for bringing information to the Board early.

Gerry did not want the Board to issue an appreciation letter. Liz Mattson, Hanford Challenge (Hanford Workforce), did not want the letter to go forward.

Susan Leckband said the Board could not go forward with the letter with this level of disagreement and ended the conversation on the first day of the Board meeting.

Discussion about the letter continued on the second day of the Board meeting. Susan Hayman noted that a number of people were concerned about the Board's decision process about the letter, both before and during the first day of the Board meeting. Betty Tabbutt, Washington League of Women Voters (Regional Environmental/Citizen), submitted changes to the letter that reframed it from a letter of appreciation for the conference call, to a letter of appreciation for the application of stimulus funding for work that is consistent with Board priorities. With this new framing, Board members were able to reach consensus and adopted this letter.

Protecting employees from beryllium

Mike Korenko, Public-at-Large, introduced the draft advice on protecting employees from beryllium and provided background information about beryllium. He compared beryllium sensitivity to a peanut allergy – those with the allergy are in danger, but those without the allergy are fine. Becoming sensitized to beryllium can lead to chronic beryllium disease (CBD) and lung cancer. There is a test to detect sensitivity to beryllium. Mike explained that a worker has to be previously exposed to beryllium for the test to identify if that worker is sensitive to beryllium. Mike said only two to six percent of exposed workers will react to beryllium. At Hanford, between 42% and 100% of people volunteering for testing were previously exposed. Mike commented that some people consider beryllium exposure more dangerous than exposure to radiation.

Mike said if current statistics hold, about 25 employees will test positive out of every 1,000 untested employees, and six might develop CBD. He said the big question is how to get more employees to volunteer for testing. Mike thought DOE and AdvanceMed Hanford are doing a good job to advance the Hanford Site CBD Prevention Program; the draft advice should not be interpreted as criticism.

The draft advice is related to four issues: detection, prevention, volunteer testing, diagnosis and compensation. Beryllium exposure begins with detection. DOE then identifies where employees were exposed or became sensitized. Mike said the advice recommends precautions to ensure people working near potential sources of beryllium understand the risk (e.g. proper signage). The advice also recommends that DOE ask beryllium workers to test every six months or every year, and after working around beryllium. Mike reiterated that routine testing is important since beryllium sensitivity cannot be detected unless a person has been exposed to beryllium. The advice asked DOE to consider what it takes to get workers to volunteer for testing. The advice also asks how to improve the compensation and diagnosis process. Mike said it is difficult for workers to move from sensitivity to CBD classification.

Mike reiterated that DOE is working hard on this issue, and the advice is meant to reinforce their effort.

Agency perspective

DOE-RL

Steve Burtness, DOE-RL, appreciated the Board's recognition of DOE's efforts. He said DOE recognizes the seriousness of beryllium exposure, sensitivity, testing and CBD and has made it a priority. DOE's safety regulations go above and beyond the private sector's worker protection programs. Steve said they understand it is a hazard and are developing a site-wide program to ensure consistency. DOE expects to approve the beryllium program in the next thirty days, after which contractors will implement the program. Steve noted that DOE cannot influence the Department of Labor and Washington's Labor and Industry eligibility requirements about compensation, but will work with them to get the problems under control.

DOE-ORP

Ken Hoar, DOE-ORP, said the site-wide program takes a more conservative approach than existing laws require. For example, the program language states that sensitive workers will only be put in situations where there will be no chance of beryllium exposure. Ken thought the plan's biggest value is in consistent facility characterization. The committee tasked with the beryllium program will stay in place to monitor the program and keep it up to date.

Ecology

Beth Rochette, Ecology, said Ecology supports the advice.

EPA

Dennis said EPA supports the advice. He said EPA takes beryllium exposure and subsequent health effects seriously and has its own beryllium awareness program. He commented that he now personally wants to get tested for beryllium sensitivity.

Discussion

Pam commented that beryllium has been a topic for the Board for many years. She asked for more information about where beryllium might be encountered, such as in 300 Area buildings slated for demolition or in household tools. Mike said beryllium is used in spark-free tools and the average person would probably not be exposed. He said in the 300 Area, Battelle researched beryllium and found that, for example, fluorescent lights used to contain beryllium. If those lights are pulverized into dust, workers may be exposed. Mike commented that even a janitor or secretary could be exposed if they are in the wrong place at the wrong time.

Steve Burtness said 42 buildings in the 300 Area were contaminated or potentially contaminated with beryllium; approximately seven of those are still standing. Washington Closure Hanford (WCH) collects personal samples and Battelle runs continuous air sampling and has not reported beryllium samples above allowable levels. Steve said they are not seeing levels that trigger sensitivities in beryllium-sensitive people. He said controls and protective measures used during decontamination and decommissioning (D&D) are good at controlling exposures to the workforce. Mike added that since 2006, there have been four new cases of CBD.

Rick Jansons, Benton-Franklin Regional Council (Local Government), works on the beryllium program and said the advice should recommend that when a beryllium source is identified, it should be removed as any other hazard would be. When a source is removed, the hazard is often removed. Rick provided draft text to incorporate into the advice.

Larry suggested making it easier to get tested for beryllium sensitivity. For example, when a worker receives a notice for their physical, the form could have a section where the worker could indicate if they want to be tested for beryllium sensitivity at the time of their physical. Larry said the way it works now is a person goes in for their physical and is asked if they want to be tested; they then have to schedule another appointment.

Mike Keizer thanked HSEP and supported the advice. He said CBD is devastating and anything done to prevent it is important. Keith said if the advice persuades one person to get tested, it is a success. He said beryllium should not be trifled with and is easily transported; for example, a worker could accidentally expose their family to beryllium if they have a minute amount of dust on their clothes.

Liz asked why testing cannot be mandatory. Mike Korenko said it is voluntary because of privacy laws. He said if people understand the risk, they are more likely to be tested.

Gerry said he was involved with reviewing the beryllium program for Hanford. In 2001, Hanford made a commitment to implement outside recommendations into a site-wide program, including an individualized program similar to Rocky Flats. Gerry said Hanford has not done a good job communicating about public health and the advice should recommend a much stronger site-wide educational program. When people know the risk, they are more likely to get tested.

Gerry said almost all people who are sensitized to beryllium will get CBD; everyone with CBD has a shorter life span, whether or not it is the disease or trauma that actually kills them. He said the lack of knowledge about this is evident. Gerry did not think ambient air testing is sufficient and said the advice should recommend establishing a goal to test every worker every five years. Gerry provided draft language to incorporate into the advice.

Bob Parks, City of Kennewick (Local Government), is a beryllium worker and has been tested. He said CBD is a preventable disease and agreed with Gerry that regularly scheduled testing at effective times is necessary. He thought beryllium testing should be required for every person to work at Hanford. Bob provided draft language to incorporate into the advice.

The advice identified the Hanford beryllium facilities list. Rob said the advice should identify which of those facilities have been decontaminated and demolished. Mike said the committee asked DOE for that list.

Rob said the University of Washington's beryllium testing program could serve as a basic framework for DOE's program. He emphasized that DOE should champion the beryllium program for current and former workers.

Gerry Dagle, Benton-Franklin Public Health (Local/Regional Public Health), said CBD has a long incubation period and can show up in former employees. He said retirees and their families should have a way to get tested. He thought DOE could also work with universities to devise better testing methods, such as one that requires smaller blood samples; workers may then be more apt to get tested.

Sam Dechter, Public-at-Large, asked if there is a "down-winder" concern with beryllium. He will ask HSEP to look into the issue.

Keith agreed that DOE should better communicate the hazards of beryllium and beryllium sensitivity. He said if people are concerned about keeping their job, they may not want to get tested. However, they may reconsider if they fully understand the life-threatening risk.

Susan Kreid, Washington League of Women Voters (Regional Environmental/Citizen), said the advice should recommend that DOE develop a comprehensive program to educate the local medical community about the early signs of beryllium sensitivity and CBD. Susan provided draft language to incorporate into the advice.

Liz did not think the peanut allergy reference was a good metaphor. She thought a peanut allergy was quite different from beryllium sensitivity and CBD. Liz asked if beryllium causes lung cancer. Mike said he tried to be conservative in the statements about beryllium and lung cancer because he is not a medical expert, but information is available online. The Board decided to state that beryllium is linked to lung cancer.

The Board discussed the hazards of beryllium and how it compares to radiation. Liz suggested saying that beryllium is a more pernicious and uncontrollable hazard than radiation for which many protective measures are available. She said people know how to protect against radiation but not beryllium. Jeff

disagreed that beryllium is uncontrollable. Keith added that beryllium is harder to detect than radiation. Rick did not think adding such a statement adds anything to the advice. He said radiation at any amount involves a risk of cancer in the future. He did not think the advice should describe risk, especially with such specificity. Ken Niles thought the advice already communicated that beryllium is a very bad hazard and the Board does not need to add additional language. Liz commented that workers view beryllium as a higher risk than radiation, and the advice should preserve that concept.

Susan Leckband reminded the Board that substantive changes are supposed to be made on the first day of the Board meeting. The second day is reserved for wordsmithing, and if the Board does not stick to its process, advice finalization takes much longer. She said if the Board cannot reach consensus today, the advice would go back to the committee. Cathy added that products are better when the Board stays within its process.

The Board discussed percentages of people who were sensitized and how studies conclude the percentage exposed. It was also discussed at the last HSEP meeting. Susan Kreid asked if the advice should stay away from technical number-crunching. Susan Leckband commented that the audience is DOE and the regulators; the public is the secondary audience. Nancy Murray thought the numbers helped show that real people suffer the consequences of beryllium exposure.

Gerry commented that it will cost money to test 90% of the people on site. Mike Korenko asked if testing is funded through DOE-EM. Steve Pfaff did not know.

Ken Gaspar, Benton County (Local Government), thought the advice created an awareness about beryllium sensitivity. He thought at the time of hire, people should fill out a questionnaire asking them if they have been exposed to beryllium in the past. He explained that he was heavily exposed to beryllium, and no one ever asked. He thought the education system at Hanford should address beryllium and past worker exposure. Larry agreed that there is no system to obtain beryllium health histories. Cathy thought HSEP could track the issue.

Gerry suggested adding that because beryllium cannot be effectively removed, workers in buildings with potential beryllium contamination should be monitored and given personal protective equipment whenever potential dust disturbing activities occur. In addition, monitoring and characterization results should be posted for workers. The Board had a very technical discussion about the statement. Rick reiterated that the goal is always to remove or contain the hazard, or keep people out of the area. He wanted to make sure that was included in the advice. The Board agreed.

The Board simplified language about privacy laws and restrictions within the law regarding beryllium testing.

The Board decided to split the advice into two pieces of advice, Advice #217 "Beryllium disease prevention at Hanford," and Advice #218 "Workers' compensation regarding beryllium disease." Mike Korenko noted that there is upcoming legislative action relative to the advice, and said both pieces are timely. Nancy agreed and thought both should go forward today if there is a chance of influencing legislation. The Board agreed.

Gerry added language about ending the practice of requiring multiple medical exams to receive workers' compensation after a worker has already been diagnosed under DOE's beryllium program.

Betty thought the Board should send a copy of the advice to Dr. Tim Takaro, a former Board member who worked on beryllium issues. The Board agreed. It also decided to copy Senator Tom Udall, a senator working on beryllium issues and legislation.

The two pieces of advice were adopted.

TPA agencies update on ARRA stimulus funding

DOE-ORP

Fiscal Year (FY) 2009 omnibus funding

Shirley Olinger, DOE-ORP manager, briefed the Board on the FY 2009 omnibus bill and funding. She said DOE-ORP received an additional \$30 million for radioactive liquid tank waste stabilization and disposition. It is an improvement over past years of virtually flat funding. Shirley noted that DOE priorities do not change from year to year: when more funding becomes available, DOE revisits and applies stakeholder and regulator priorities.

Shirley reviewed planned communications and briefings about omnibus funding:

- March 30-April 3: Briefings with the State of Oregon, tribes and HAB on the FY 2009 funding and omnibus
- Late April/early May: DOE receives FY 2010 president's budget and DOE-EM FY 2011 budget guidance
- Mid-May (week of May 18 or 25): Provide briefing on FY 2010 budget and scope and FY 2011 budget request to EPA, Ecology, State of Oregon, tribes, HAB, and host a local budget workshop

Shirley described planned tank farm accomplishments in FY 2009:

- Base operations (\$218 million):
 - Double-shell and single-shell tank operations, surveillance, and maintenance
 - Safety, quality, and radiation protection programs
 - 222-S laboratory (and upgrades)
 - Tank sampling
 - Double-shell tank space management
 - Double-shell tank integrity
 - 242-A evaporator campaigns (and upgrades)
 - Environmental compliance
 - Engineering
 - Radiological controls
 - Site services
 - Business services
 - Waste management
 - Training, procedures, and standards compliance
 - DOE-ORP Tank Operations Contract management administration
 - WTP electricity
- Retrieval and closure (\$101 million)
 - Complete retrieval of C-110 (about 85% complete, the contractor is investigating new retrieval technologies)
 - Complete construction and initiate retrieval operations on C-104 (retrieval continues to focus on C-Farm)
 - Initiate design of C-111
 - Remove hose-in-hose transfer lines
 - Conduct proof-of-concept for enhanced chemical cleaning
 - Complete design, fabrication and initial testing of MARS
 - Complete liquid mitigation from UX-302A catch tank
 - Complete 244-CR vault sump pumping
 - Single-shell tank integrity
 - Complete near surface characterization for TY interim barrier
 - Complete design of TY farm interim barrier
 - Complete near surface characterization at SX farm
 - Deploy surface geophysical exploration in S-SX and C farm

WTP received full funding through the omnibus bill (\$690 million). Shirley also noted that DOE-ORP completed all testing at the PT engineering test platform. This testing addressed flowsheet review team concerns primarily about filtration at the PT facility. Shirley considered this the biggest technical problem for the PT facility. The PT platform testing confirmed the results of the bench scale testing and that PT

facility equipment will work. Shirley said the first funding allotment in February 2009 was allocated to tank farms and:

- A direct push in C Farm
- Accelerated C-104 retrieval activities
- Sampling and analysis of C-108
- S-102 exhauster
- C Farm HIHTL removal and shipping
- Lab testing of a beta detection system
- Prepare criteria document for interim barriers
- Accelerate procurement for C-111

Shirley anticipates receiving the second funding allotment in April and will use it for:

- New technology (MARS)
- Critical spares
- Retrieval infrastructure
 - Shirley noted that infrastructure usually takes the backseat to retrieval, but this cannot happen anymore or else the site will not be prepared to feed WTP in 2019
- Radiation instrumentation
- Outdoor nationally recognized testing lab-rated continuous air monitors
- Leak detection monitoring and mitigation efficiencies
- Permanent crane pad at the cold test facility
- Closure demonstration off site
- Ventilators/exhausters
- Hard heel strategy
- SX duct removal
- Removal of sludge cooler S/SX

FY 2009 WTP planned accomplishments include:

- Complete testing to resolve outstanding technical issues (PT engineering test platform, mixing).
 - DOE-ORP needs to know how, if any, technical issues affect the design of WTP
- Complete approximately 75% of the WTP design, and approximately 47% of construction.
- Low activity waste (LAW) facility will be 68% complete overall, construction will be 58% complete, and design activities will be 91% complete.
- Analytical laboratory (LAB) will be 43% complete overall, construction 66% complete, and design activities 84% complete.
- Balance of facilities will be 52% complete. Design is 73% complete and construction is 61% complete.
- High-level waste (HLW) facility will be 48% complete overall, design at 80% complete, and construction at 26% complete.
- PT facility will be 46% complete overall, design at 66% complete, and construction at 29% complete.

Shirley noted there are a number of management changes on the Bechtel team. DOE-ORP will share information when it is final.

ARRA

Shirley said Ines Triay was clear with the new administration that investment in DOE-EM now will reduce lifecycle costs and overall risk. She has been working with larger cleanup sites on analytical building blocks, and the Hanford offices have provided information about how cleanup could look with additional funding (consistent with what they have shared with the HAB). Shirley thought Hanford can get ahead of the curve with infrastructure to make retrieval and other needs more predictable.

There is a new level of transparency and accountability associated with ARRA, and a public website is available to track funding and work (www.recovery.gov).

DOE-EM received \$6 billion through ARRA. Shirley noted that because Hanford was ready to explain how it could hit the ground running with a clear work scope and hiring plan, it got the majority of the DOE-EM funding (\$1.961 billion).

Shirley said DOE-EM developed proposals for stimulus funding to be spent between 2009 and 2011 with three priorities in mind:

- Creating/saving jobs – this funding will save or create up to 4,000 new jobs at Hanford
- Shrinking the footprint of active site cleanup – Shirley noted that this was a hard point to sell because Hanford will not really reduce its footprint
- Saving on lifecycle costs – Hanford demonstrated how funding will reduce overall lifecycle cost and risk

The work scope is intended to be consistent with priorities of regulatory agencies, tribes, and stakeholders, and should be covered by existing prime contracts for most work could commence immediately. DOE-EM was looking for predictable scopes of work that include a quick hiring process. Shirley noted this is why many of the jobs are not highly technical or complex; DOE wants to focus on work with high certainty and low risk.

ARRA funding at tank farms includes:

- Waste feed delivery readiness for the WTP/reduce lifecycle costs
 - Replace and/or upgrade of aging tank farm infrastructure and facilities
 - Secondary waste treatment
 - Storage and shipping facility
 - Tank waste mixing and sampling capability to ensure predictable and consistent waste feed to WTP

Tank farm ARRA funding focus areas:

- Tank, infrastructure and facility upgrades (\$192M)
 - Tanks ~\$100M
 - Single-shell tank integrity and life extension
 - Double-shell tank upgrades and life extension
 - Double-shell tank ventilation, electrical, control system, instrumentation upgrades
 - Infrastructure~\$30M
 - Increased evaporator capability (wiped film evaporator)
 - Cross-site transfer line upgrade for slurry feed
 - Core sampling truck
 - Facilities ~\$62M
 - 242-A evaporator upgrades and life extension
 - 222-S laboratory upgrades and life extension
- Waste feed, treatment and storage (\$134M)
 - Shirley said it is an exciting scope and will help WTP treat waste more predictably and consistently
 - Waste feed ~\$80M
 - Design – With the ARRA funding, DOE will be able to determine infrastructure needs and exactly how to ensure waste gets to WTP
 - In-farm field work (transfer and condensate line upgrades; clean out boxes isolation)
 - Support facilities construction
 - Tank waste mixing and sampling demo
 - Mixer pumps fabrication
 - WTP secondary waste treatment and effluent treatment facility (ETF) upgrades ~\$44M
 - Design high-level waste canister storage/shipping facility ~\$10M – Shirley noted this is to investigate the best design strategy, not to necessarily build a new facility. The canister storage building is an expensive place to store fuel and DOE wants to investigate the right type of storage facility to store canisters until there is a final disposition plan. Shirley said WTP startup cannot be delayed.

Shirley did not review additional slides that described in detail activities at the tank farms and WTP, but encouraged Board members to contact her if they have any questions.

DOE-RL

Dave Brockman, DOE-RL manager, said the omnibus funding helps keep DOE-RL on track. As they entered into FY 2009, DOE-RL had to decide at what rate to spend since they knew the president's budget and had some confidence that the omnibus or FY 2009 budget would be higher than the continuing resolution budget. Fortunately, DOE-RL chose to spend at a rate that matches well with the current omnibus funding. Dave said they are on track and are focusing on meeting groundwater milestones.

Dave reviewed DOE-RL cleanup priorities:

- Maintain safe and compliant facilities and provide essential services
 - Safeguards and security
- Execute DOE-RL 2015 Vision and achieve regulatory/TPA compliance
 - Columbia River Corridor cleanup/demolition of facilities, waste sites, and groundwater along the Columbia River Corridor
 - Sludge treatment –Remove nine year pause from certified baseline
 - Plutonium Finishing Plant (PFP) D&D
 - Central Plateau groundwater remediation
 - Central Plateau waste site remediation (with outer area priority)
 - Repack TRU waste for certification and shipment
 - Retrieve suspect TRU waste from underground storage
 - Continue remedial investigation/feasibility study (RI/FS) process for Central Plateau
 - Central Plateau D&D activities (other than PFP)
 - Mixed low-level waste treatment
- Community and regulatory requirements
- Reliability upgrades

Dave said DOE-RL is taking a more geographical look at the Hanford Site and divides it into four areas: River Corridor (~210 square miles), Central Plateau Outer Zone (~65 square miles), Central Plateau Inner Zone (~10 square miles), and Hanford Reach National Monument (~300 square miles, including the Arid Lands Ecology Reserve). The Hanford Reach National Monument and Rattlesnake Mountain have some debris sites that need to be cleaned up, and potentially some sites on the other side of the Columbia River. By 2015, DOE-RL wants to shrink the entire Central Plateau footprint to the ten square miles of the Inner Zone. Dave noted that DOE-RL is incorporating the 2015 Vision into all materials and briefings to stay focused on its goals.

Dave reviewed specific activities funded by the omnibus package:

River Corridor

- 100 K Area
 - Complete K East Basin D&D
 - Initiate soil remediation under KE Basin within 30 days of completion of basin substructure removal
 - Demolish 1706 KE, 1706 KER, and 1706 KEL to grade
 - Clean and close 1706 KE treatment storage disposal facility
- Complete remediation of the 618-7 burial ground (TPA M-16-61) (now complete)
- Complete interim remedial actions at 100-F (TPA M-16-49)
- Restart remediation of waste sites in the 100-BC area
- Continue remediation of waste sites and burial ground in the 100 D area
- Completion of waste site 618-13 and burial ground 100-D-41 load out along with waste site and burial ground remediation in and near the 300 Area along the Columbia River
- Completion of burial ground 118-H-1 remediation
- Continue risk assessment activities in support of final end state and River Corridor closure
- Continue deactivation and demolition of 324 building (chemical engineering laboratory) and building 327 (post-irradiation test laboratory) in the 300 Area along the Columbia River

- Constructed two new ERDF cells (7 and 8)
- Complete shutdown of support systems no longer required for long term FFTF surveillance and maintenance
- Initiate long term FFTF surveillance and maintenance
- Groundwater protection
 - 100 K Area (contain/treat chromium): Achieve proposed milestone in K Area for 900 gallons per minute capacity by May 2009
 - Operate and maintain existing groundwater remediation systems
 - Drill monitoring wells as prescribed by TPA M-24-00
 - Continue groundwater monitoring
 - Complete groundwater River Corridor tentative agreement work plans
 - Continue groundwater integration activities and environmental data management

Central Plateau Inner Zone

- Waste site remediation
 - Complete remedial design/remedial action work plan and design for 200 West pump and treat system
 - Operate/maintain remediation systems
 - Drill monitoring wells and continue groundwater monitoring
- PFP
 - Maintain PFP complex facilities
 - Maintain safe and secure storage of special nuclear material
 - Ship plutonium offsite
 - Prepare to ship spent fuel to interim storage area
- Maintain surveillance and maintenance for Central Plateau waste sites and facilities awaiting final disposition.
- Perform essential infrastructure replacements and upgrades
- Support infrastructure activities such as steam, occupational medicine and service contracts
- Operate treatment facilities
 - T Plant
 - Waste receiving and processing facility
 - 200 effluent treatment facility
- Support work on TC&WM EIS
- Continue suspect transuranic retrieval (250 cubic meters)
- Continue minimal repackaging of TRU waste
- Continue minimal treatment of waste
- Continue support of offsite plutonium shipments from the PFP
- Maintain protection of special nuclear materials
- Maintain site-wide security

ARRA

Dave reviewed the DOE-EM economic recovery funding goals that Shirley discussed earlier.

Projected ARRA funding:

Work scope	Project ARRA funding
<ul style="list-style-type: none"> ▪ PFP (glove box, hoods, and duct removal, PRF Canyon decontamination; facilities ready for demolition) 	\$316.9M
<ul style="list-style-type: none"> ▪ River Corridor footprint reduction ▪ ERDF super-cells 9 & 10 ▪ K Area D&D and waste site remediation ▪ Disposition K East Reactor ▪ River Corridor 618 remediation 	\$520.3M
<ul style="list-style-type: none"> ▪ Central Plateau Outer Zone (200 North and other waste sites) ▪ 25% of the U Plant Zone Canyon and Structures ▪ D&D 15 industrial facilities ▪ 75% of semi-works zone structure D&D 	\$423.2M

<ul style="list-style-type: none"> ▪ Construction of groundwater remedies in the 100 Areas within the River Corridor ▪ 200 Area Groundwater remedial actions 	\$145.8M
<ul style="list-style-type: none"> ▪ 85% retrieval of contact-handled TRU ▪ Repackaging of 90% of CH2M Hill TRU waste inventory ▪ Eliminate backlog of current legacy waste 	\$228.5M

Dave reviewed proposed ARRA funding for each area:

River Corridor

- 100 K Area: Demolish excess facilities, remediate waste sites, and disposition of K East Reactor (\$266M)
- Waste site remediation: Remediate 618-10 burial ground trenches (very hazardous waste sites), remediate newly identified waste sites in the 100 Area (\$194M)
- Groundwater remediation (\$145M)
 - 100 K Area (contain/treat chromium)
 - Install additional wells for the new pump and treat system (KR-4)
 - 100 D/H Areas (contain/treat chromium)
 - Accelerate construction of pump & treat facility, expand current pump & treat operations, install additional wells
 - Accelerate bioremediation test
 - Complete improvements to chemical reactive barrier (In-situ redox manipulation) in 100 D Area
 - Retrofit existing facility to regenerate resin from pump and treat facilities (currently sending off-site for regeneration)
 - Evaluate effectiveness of hydraulic control (maintain high-river stage groundwater gradient throughout the year)
 - 100 BC Area
 - Remediate chromium contamination in soil
 - 100 N Area (contain strontium-90)
 - Drill ~170 injection and monitoring wells to support apatite barrier expansion across the width of the Sr-90 plume (2,400 ft.)
 - Conduct field test of treatment methods for strontium-90 above the water table
 - 300 Area (contain uranium)
 - Accelerate polyphosphate treatability test to fix uranium contamination in place
 - Accelerate drilling of 15 wells to be used for sampling/treatment

Central Plateau, Outer Zone (\$420M)

- 200 N Area
 - Demolish spent fuel transfer storage facilities (212 N/P/R)
 - Remediate waste sites
 - Dispose of locomotive and rail cars
- Complete cleanup of BC control area (contaminated area surrounding the BC Cribs)
- Remediate up to 20 waste sites
- Decommission 350 wells (funded out of groundwater allocation)
- Complete closure plans/design for remediation of Non-Radioactive Dangerous Waste Landfill (NRDWL) and solid waste landfill (SWL)
- NRDWL was used for non-radioactive, hazardous waste (e.g. batteries, old fluorescent lights)
- SWL was used for non-hazardous solid waste (e.g. office refuse)

Central Plateau, Inner Zone

- PFP (\$320 million)
 - Remove glove boxes, laboratory hoods, and pencil tanks
 - Facilities prepared for demolition
 - Puts it slab-on-grade by 2013 (three years ahead of TPA milestone)
- Central Plateau D&D and soil remediation (\$420 million)
 - U Plant Canyon (about 20% of funding)

- Demolish 5 remaining ancillary facilities
 - Disposition cell 30 tank contents
 - Clear off canyon deck and grout-fill cells
 - Facility demolition
 - Costly to maintain facilities; D&D will save lifecycle costs
 - Demolish 14 industrial facilities in 200 East and West Areas
 - Demolish 209-E Facility (plutonium criticality laboratory) in 200 East Area
 - Waste site remediation
 - Non-intrusive remedial investigation (e.g., ground penetrating radar) of radioactive waste burial grounds in the 200 East/West Areas (SW-1, SW-2 operable units)
- Groundwater remediation (\$145 million)
 - Accelerate construction of pump & treat system for groundwater contaminants in both 200 West Area operable units: 200-ZP-1 (northern portion of 200 West) and 200-UP-1 (southern portion)
 - Objective is to contain/treat carbon tetrachloride, technetium-99 and uranium
 - Contain contaminants to the Central Plateau
 - Restore groundwater to highest beneficial use (drinking water standards)
- ERDF (\$60 million)
 - Construct two new disposal cells (9 and 10); “super cells”
 - Expand operations to accommodate additional disposal activities
- TRU and solid waste (\$228 million)
 - Continue retrieving and repackaging contact-handled TRU waste
 - Initiate retrieval of remote-handled TRU waste
 - Continue building backlog of waste for shipments to the WIPP
 - Upgrade T Plant (e.g., canyon crane, epoxy floor)
 - Complete treatment of current backlog of legacy mixed, low-level waste
 - Transport plutonium 238 drums off-site
- Hanford Reach National Monument (\$10 million)
 - Arid Lands Ecology Reserve
 - Demolish 11 excess facilities
 - Clean up nearly 300 debris areas (not contaminated)
 - Does not require extremely skilled workers; broadens the type of subcontractor DOE can employ right away

Dave said the next steps are to provide ARRA funding to Hanford contractors and authorize them to begin work. Contractors will begin ARRA work where current staffing allows and begin hiring new personnel for the bulk of work. DOE and the Hanford contractors will begin weekly reporting of progress on ARRA work. Dave hoped to have the notice proceed within the week and plans to have commitment-ready schedules ready by September 2009.

Ecology

Ron said DOE-RL and DOE-ORP’s budget and work align well with Ecology and Board priorities. The DOE-ORP budget for retrieval is much higher and will help meet the State of Washington’s top priority for getting waste out of single-shell tanks. Ron commented that it is good to see funding for infrastructure upgrades and WTP to ensure waste is treated on schedule.

Ron noted that DOE and the regulators are closer to making a decision about supplemental treatment. He thought the outlook would have been bleaker without supplemental funding. DOE and the regulators reached consensus on cleaning up the River Corridor and groundwater, and are working to contain and treat waste plumes. Ron commented that a year or two ago, the funding profile make it look like that work would be forced to slow down.

Ecology will work with DOE and EPA on baseline funding, project integration and reconciling regulator decisions that need to be made. Ron will keep the Board up to date as they move forward in the next couple months.

EPA

EPA did not have any comments.

Discussion

Ken Gaspar thanked DOE for the presentations and commented that they contained an excellent level of detail. He looks forward to how focusing on high certainty and low risk work frees up Hanford to address more technical and complex issues; perhaps FY 2010 and outyear budgets will be able to focus on more difficult work, including single-shell tank retrievals, PT engineering test platform "Phase 2" and supplemental treatment.

Ken Niles was concerned that a few years down the road, the Office of Management and Budget (OMB) will reduce Hanford's annual budget because it sees this ARRA funding as "extra" money. He asked DOE if they were confident about the adequacy of future budget levels. Dave thought that was a tough question – the ARRA money has many requirements, including that it needs to be spent by 2011. There is some concern about ramping down funding in the future. DOE will continue to request and push for funding required for compliance. Dave thought the best thing they can do is show that the ARRA funding is a good investment and manage it well; the pressure is on Hanford. Shirley added that overall lifecycle costs will be reduced after the ARRA work is complete. For example, demolishing buildings will reduce future costs. Dave said DOE believes the ARRA funding will roughly save \$1 billion in lifecycle costs.

Jeff understood the ARRA funding restrictions, but commented that Hanford will have a real problem if WTP does not start on time. Single-shell tank retrieval is constrained by double-shell tank space, which is constrained by WTP starting on time. He knows the money cannot go to building additional double-shell tanks, but thought the Board should emphasize that single-shell tank waste will have to go into double-shell tanks if WTP does not start on time.

Pam thought the ARRA funding is an exciting and wonderful thing for Hanford and the region. She asked about progress on supplemental treatment, and if there is an opportunity to pursue new technology for secondary waste treatment. Shirley said the effluent treatment facility will handle secondary waste, and DOE has extensively researched treating secondary waste. They are evaluating if removing technetium and mercury from the secondary waste stream will reduce lifecycle costs. DOE is also evaluating if they can use ARRA funding for secondary waste stream evaluations. Shirley added that ARRA funding frees up other money that can be used for retrieval. The 2010 funding proposal includes as much retrieval as possible, knowing that Hanford wants to have an established work force and avoid lay-offs. The supplemental treatment effort is looking at issues such as sodium management and aluminum removal.

Pam said DOE-ORP and its contractors plan to hire approximately 1,000 new people. Is DOE-RL adding 3,000 jobs? Dave said yes, approximately. DOE-RL and its contractors held a job fair last weekend and are ready to hire about 150 people. Another job fair is coming up and Dave expects to hire another 150-200 people. Over the next four to five weeks, DOE-RL expects to have several hundred people on board. Dave added that 300 layoffs were also recently avoided.

Keith was glad to hear about infrastructure upgrades. He said infrastructure has been neglected in the past and needs to be maintained into the future. He asked about the potential need for a blending facility and if that could provide some contingency waste space if WTP starts late. Shirley said they are doing some bench scale mixing studies; the new contractor is skeptical about mixing. She remarked that the worst thing they could do is send inappropriate waste to WTP; consistent WTP feed is critical.

Keith asked DOE to ensure proper training for new employees during ramp up activities; sometimes in the hurry to get going, safety details are forgotten. Dave agreed and said they do not want to take shortcuts on safety; now is the time for even greater vigilance since there will be many new employees.

Susan Kreid asked DOE to consider what it means to renew an emphasis on transparency and how that will be constrained by security. Susan asked how many new employees are already residing in the Tri-Cities, how many are coming from outside the Mid-Columbia region, and if DOE expects a "whiplash" after the ARRA funding is gone. Will jobs be eliminated? Dave did not know how many employees and

subcontractors are coming from within the Mid-Columbia region, but many in the bargaining units and labor force are from the region. Regarding funding and job “whiplash,” Dave said there will still be an extraordinary amount work to do after the ARRA work is complete, and it will depend on annual funding. He commented that many current employees are temporary and do not invest in the Tri-Cities (e.g. purchase homes). He thought it will be tight, but the community will be able to handle temporary workers.

Mike Korenko commented on the aging workforce and how DOE might want to consider an early retirement package if work and funding slows. Shirley said DOE-ORP is hiring many younger and mid-career engineers for their mission (approximately 200 positions hired directly by DOE-ORP); subcontractors are hiring the other 800 positions.

Mike Korenko said he often hears questions about tumbleweeds and radiation uptake. He suggested that DOE analyze tumbleweed taproots to see if they contain radiological material. Dave said they prevent tumbleweeds from growing in areas of known contamination. DOE believes tumbleweeds blowing around are not from contaminated areas.

Dick referenced tank space and asked if DOE-ORP is looking into using wiped film evaporators in lieu of evaporators. Shirley said yes, they are looking into wiped film evaporators.

Dick thought grouting U-Plant is a mistake because it is an irretrievable step and eliminates options. Dave said the ROD’s disposition path is to collapse and leave U-Plant in place; DOE is not looking for another disposition path. Dick was not sure that is the best solution.

Dick asked if the first skim is complete in the BC control area. Dennis said they are making good progress and are about halfway done. He noted that the cleanup level is about twice that of an unrestricted use cleanup level; EPA is reviewing additional restrictions.

Larry asked about the status of the Mission Support Contract and commented that some staff may be wondering what will happen and looking at other opportunities. Dave said they are working on it and it is a high priority to award the contract. Fluor is currently executing the work.

Rob said the Hanford communities are looking forward to knowing more about the work force and how long they will be in the area so the Tri-Cities can plan for housing, schools, and other infrastructure. He commented that training can take years, so there may not be the opportunity to train new people that already live in the Hanford area. He thought the Board should track Hanford’s efficiencies and ensure that money goes to cleanup rather than administrative needs.

DOE-RL Systems Criteria for reducing Hanford waste

Bob Suyama, Public-at-Large, introduced the draft letter on DOE-RL systems criteria for reducing Hanford waste. At the February Board meeting, the Board issued advice on systems criteria to DOE-ORP and, with DOE-RL’s encouragement, decided it should provide guidance to DOE-RL as well. Since the Board has issued advice about many of the same issues to DOE-RL, RAP decided a letter would be more appropriate. It heavily referenced the DOE-ORP systems criteria advice (Advice #214) because that advice contains high-level guidance that is applicable to DOE-RL. The letter also references the Central Plateau and groundwater cleanup flowchart advice. The letter affirms moving forward with a joint strategic systems engineering task force to review how DOE-RL handles groundwater and soil waste as work on tanks moves forward. The letter included an appendix of topical criteria. Bob noted the individual criterion are not numbered so as not to imply priority.

Agency perspective

Dave thanked RAP for the draft advice.

Dennis agreed it was important to provide tank waste cleanup values and principles to DOE-RL as well. He thought the Board has been consistent on Columbia River and groundwater advice, and therefore initially thought the letter was a more appropriate product than advice. Dennis noted the letter contains a few ideas

that seem to be inconsistent with past advice, and it contains one new value regarding a deep geologic repository.

Ron commented that he was not sure what to do with the letter, but thought it could be helpful in identifying any missed opportunities for integration. He thought the Board could identify a shorter list of integration opportunities.

Discussion

Betty thought the bullets were confusing and asked how risks are reduced rather than mitigated. Bob Suyama noted those are the same statements that were made in Advice #214. He said the idea of mitigating risk simultaneously is to use a systems engineering perspective. For example, when DOE cleans out tanks, it should consider cleaning the areas around the tanks, too. It looks at the bigger picture and the intersection of different pieces of work.

Bob Suyama noted to Dennis that the letter started out as advice, but when it did not really say anything new, RAP turned it into a letter. It identifies key advice points.

Rob supported a systems engineering approach at Hanford and thought greater integration efforts are needed.

Pam was concerned if the regulators think the letter is confusing or inconsistent. She also thought it might be asking too much for DOE to set up a joint systems engineering task force in the midst of all the ARRA work. Liz commented that the letter recommends many approaches rather, not just actual work for DOE.

Jeff asked what the driver was behind the letter. Bob said at the February Board meeting, the Board issued advice on systems criteria to DOE-ORP and decided it should provide guidance to DOE-RL as well. Since the Board has issued advice about many of the same issues to DOE-RL, RAP decided a letter would be more appropriate. Bob said Doug Shoop, DOE-RL, asked for guidance and the Board committed to providing it. Bob did note that it is not very time critical, it simply provides systems criteria the Board thinks DOE-RL should consider.

Ron added that he thought the letter is fine, but noted that systems engineering typically needs a goal or a plan. As TPA milestones are finalized and a cleanup plan is developed, the concepts can be applied to the work.

Larry thought the letter was helpful in encouraging DOE-RL and DOE-ORP to integrate their respective work in groundwater and the vadose zone into one systems engineering program instead of two.

Cal asked if this would be DOE's first try at a systems approach. Dave said no.

Since the letter was not time critical and in the interest of completing the Board meeting agenda while there was still a quorum, the Board decided to table the letter until the June Board meeting. It also wants RAP to ensure it does not bring up any new concepts. If it does, it should consider making it a piece of advice.

Central Plateau cleanup strategy

Dennis said the Central Plateau cleanup strategy and the concept of the seventh ROD is to complete work in the Central Plateau Outer Zone, in the 200 Area that was formerly called the buffer area. Dennis handed out a map showing preliminary sites for the seventh ROD to help Board members visualize cleanup site locations.

The seventh ROD follows the River Corridor geographical cleanup plan. DOE is ready to use the same cleanup levels as along the Columbia River, which avoids negotiating new cleanup levels. Dennis said they will hit the ground running with the remaining sites in the 100 Area. The 100 IU 2 and 6 is already ongoing, and they will pick up waste sites that are scattered across the map through existing ROD processes.

Dennis noted that several Environmental Evaluation/Cost Analyses (EECA) will be completed over the next few months to make the projects “shovel-ready.” The TPA agencies plan to have the final ROD for the Outer Zone complete by summer 2010. Some of the work can be completed with ARRA funding, primarily in the 200 CW-1 and 3 cooling ponds. The TPA agencies agreed to the 200 UP-1 operable unit cleanup and will finish the RI/FS, get a proposed plan, and prepare an amendment to the 200 ZP-1 ROD.

Dennis said the final component is how to approach cleanup in the Central Plateau Inner Zone. The regulators believe the geographic cleanup approach makes sense and they want to have the regulatory paperwork in place to hit the ground running.

Draft TPA change package advice

Gerry introduced the draft advice on the TPA change package that was developed by the Committee of the Whole. He said the Board acknowledged that some TPA changes are warranted when technical obstacles are an issue, but does not support changing milestones because of inadequate budgets. The Board believed that delays may no longer be required because of omnibus and ARRA funding. Gerry said the TPA change package is based on level funding that is \$40 million less than the FY 2009 omnibus, and does not consider ARRA funding. Gerry said groundwater milestone changes reflect HAB advice, but not TRU retrieval and the treatment of mixed waste and remote-handled TRU.

Other advice points included:

- Revisiting the proposed delayed milestones when they begin new milestone negotiations before the end of calendar year 2009.
 - Accelerating clean up along the river, including groundwater goals and uranium contamination of groundwater in the 300 Area
 - Resuming retrieval and certification of TRU waste and treatment of mixed wastes
 - Accelerating PFP cleanout and removal
 - Accelerating groundwater cleanup in the Central Plateau with more specific goals than containing the spread of contamination to the Central Plateau by 2020
 - Accelerating characterization and cleanup of 200-SW-1 and 2 and not delaying cleanup of the 200-BP-5 unit
- Supporting the adoption of milestones for a new strategy to address the outer Central Plateau area soil units with the intent of moving quickly using retrieve, treat and dispose remedies to achieve unrestricted cleanup standards. This added scope of work will require new funding, which likely will require creating new milestones.
- Supporting the adoption of combined soil and groundwater units in single RI/FS documents for a holistic approach to cleanup.
- Unenforceable target dates and goals should not replace milestones and schedules. Ecology and EPA should not give up existing roles and responsibilities.

Gerry thought DOE should provide a cost and schedule report and said no further delays should be negotiated until there is a cost and schedule report identify funding requirements and how quickly projects could be completed if there was unrestricted funding.

The advice did not have full committee consensus because there were several language suggestions for the second bullet of the advice. Dick, Maynard and Gerry all provided different language for the second bullet.

Agency perspective

Dave thought he understood the advice. He described how the emphasis has been on groundwater because DOE was asked to move forward with meeting groundwater cleanup milestones. DOE moved money around to fund working toward those milestones and held off on other milestones until negotiations were completed. He asked the Board to understand the impact of implementing some of the advice points, which would mean stopping or de-funding groundwater work to fund Central Plateau cleanup. He did not think the Board or regulators would want that. Dave also noted that when they entered TPA negotiations, they

deliberately set draft milestones based on the funding they knew they had. DOE cannot count on ARRA funding until September 2009 when contractor agreements are in place.

Dennis agreed with Dave and said it would be a mistake to not move forward with a change package. Change package goals will help DOE and the regulators achieve the ultimate beneficial use for the site. Dennis said milestones are used to drive work; if DOE is already completing a specific piece of work, a milestone may not be necessary. He said they were strategic going into the negotiations, and the work that stopped because of negotiations was some of the most technically complex. Dennis said the regulators are not giving up hard milestones. If DOE proposes unacceptable milestones, the current dates in the TPA become enforceable. Dennis commented that DOE is the agency proceeding with risk. He thought the change package was good.

Ron thought the advice helps the agencies look at what work is possible, and as they understand what funding can be expected in the coming years, the agencies can come back to enforceable schedules. For example, Ron said they may not remove TRU by 2010, but they may not have to delay until 2014 now that there is some additional funding.

Discussion

Gerry said the advice does not recommend changing any of the work; it addresses whether to adopt changes now and negotiate again later, or leave them as they are now and negotiate after the funding situation stabilizes. Dave said he understood, but that would be an irresponsible decision for DOE. DOE cannot commit to a piece of work unless it can actually accomplish it. He said he would be irresponsible to leave a milestone in place that he believes he cannot achieve.

Jeff said procedurally, the Board has to make sure everyone agrees with all pieces of the advice, not just the issue of the second bullet language. He was unsure why people disagreed over the second bullet language.

Maynard said he originally advocated for accepting the negotiation process and milestones and get on with cleanup. He said they did not know what money was in the pipeline, and the agencies went forward in good faith and made commitments for groundwater and River Corridor milestones and delays to other milestones. He thought the groundwater commitments were a huge plus and wanted them locked in. Gerry said he would be fine with Maynard's proposed language along with some of Dick's ideas, that DOE should be held to new modifiable and enforceable milestones.

Maynard noted that adopting the TPA change package means adopting delays. Gerry said Heart of America Northwest opposes delays, but he will not oppose the advice and its concepts coming from the Board.

Harold thought the draft advice introduces a number of changes that not all Board members have heard. He thought the Committee of the Whole agreed to saying that the current TPA changes reflect the old budget, and while the Board supports the TPA changes, the agencies should revisit the TPA and make changes based on funding. Harold worked with Maynard and Gerry to ensure such a concept was included.

Ken Niles asked for clarification about proposed delays to milestones – are those milestones due in 2009 or later? Ron said some are in 2009 and some are later; they need to be changed now or else they will be missed. DOE notified the regulators that those milestones will be missed.

Ken Niles asked if public comments lead one agency to change its mind on one aspect of the change package, will the whole thing need to be renegotiated? Dennis said not necessarily. The agencies would discuss what makes the most sense.

Tom Carpenter, Hanford Challenge (Hanford Workforce), commented that money should not drive cleanup at Hanford; cleanup should drive funding. He supported the advice.

Paige Knight, Hanford Watch of Oregon (Regional Environmental/Citizen), supported the advice and agreed with Tom. She thought ARRA will help enhance accountability. Dave agreed and said DOE is required to report weekly on how ARRA money is used. He noted that ARRA accountability regulations should not be a substitute for TPA milestones.

Rob asked about DOE-RL vadose zone responsibilities. Dave said DOE-RL is responsible for groundwater and the vadose zone, and is working with DOE-ORP on addressing leak areas around some tanks. Larry said he was under the impression that DOE-ORP was solely in charge of the vadose zone in the tank farms. Dave said they have a working agreement with DOE-ORP and together they figure out who directs contractors to do what work. DOE-RL and DOE-ORP are still working to find the best way to handle the vadose zone in the tank farms.

Rob proposed deleting the last bullet about how Ecology and EPA should not give up existing roles and responsibilities. He was comfortable leaving it in the advice, but thought it was unnecessary since their roles are defined and required by law.

Dennis said the agencies intend to contain groundwater on the Central Plateau as soon as possible and before 2020. Gerry said the change package is unclear because it states groundwater will be contained as of 2020. Jeff agreed that the advice should include that statement for the agencies to respond. Dennis did not disagree, just clarified the intent. He thought the advice provides a good platform with which to talk to DOE.

Pam asked if it was necessary to say the Board supports, “with concern,” the adoption of newly negotiated milestones. Ken Niles said the Board does want to see groundwater acceleration, but is concerned about the adoption of new milestones. Susan Kreid agreed and said the Board supports the change package primarily to preserve groundwater acceleration.

Liz asked if the acceleration of groundwater work is causing other milestone delays. Maynard said no.

Dave clarified that DOE sometimes uses target milestones when they cannot commit to a milestone because there is no technical path and/or funding to achieve the work. He understood the advice but wanted to clarify how DOE uses target milestones as tools. Gerry said the regulators should not accept target milestones. Shelley understood the need for targets, but thought the advice should be clear that targets should not replace firm milestones and schedules.

The advice was adopted.

Landscape view of public involvement

Ken Niles said the Board has always struggled with public involvement strategies and tools. PIC held a workshop in December to work through some of the issues and review the results of an informal survey. PIC thought the survey identified some large disconnects in how the agencies, Board and interest groups view public involvement. Ken said it does not mean one view is necessarily right or wrong, it just means that the Board should recognize that different groups may have different goals for public involvement.

Organizations that responded to the survey are:

- Columbia Riverkeeper
- Hanford Watch
- Heart of America Northwest
- Washington Physicians for Social Responsibility
- Oregon Department of Energy (Oregon DOE)
- Ecology
- DOE-RL and DOE-ORP
- EPA

Ken described survey questions and participant responses.

Why does your agency/organization conduct public involvement?

Ken thought this is the key question, and one that helps illustrate why there are disconnects in public involvement. He said the objectives are not necessarily conflicting, but they are not the same and may provide some answers to why the Board and agencies sometimes have trouble reaching agreement on

public involvement strategies and tools. All respondents said they want to inform and educate through public involvement. Stakeholders said they want to influence cleanup decisions. Regulators said they want to reach sustainable decisions, and DOE said it wants to provide open, ongoing dialogue. Moving forward, Ken thought they should have a goal to reach agreement on public involvement objectives before trying to reach agreement on tools and details, like a meeting agenda. He also thought PIC and the Board should consider tools to augment public meetings.

Why haven't we been more consistently effective? Ken noted that these are just comments from some organizations.

- Public does not feel “heard” – in part because they rarely know the impact of their participation. Ken said he did not think formal responses are often useful or clear, and do not say how comments are used or not used. Ken said Ecology was responsive at last year’s State of the Site meetings by directly affirming what Ecology heard last year and explained what Ecology had done in response.
- Lack of agreement on goals and objectives: Ken said goals will always be somewhat different, but it is important for everyone to “get on the same page.”
- Lack of timely and effective notice.
- Public interest groups believe that the agencies rely on public interest groups to notify/inform the public.
- Short comment periods for complex and lengthy documents: Ken said even executive summaries can be daunting for the public. He said sometimes there is agreement on extended comment periods, sometimes not.
- Lack of early collaboration.

What public involvement activities have been the most effective (stakeholders)?

- Meeting turnout: stakeholders felt they have done a good job at turning people out for meetings. Ken noted that public interest groups sometimes feel like they carry the burden of making sure people turn out for meetings.
- Single topic meetings (e.g. Hanford Watch tank forums)
- Informational materials: Ken said there are many good quality materials available, but it is difficult and time-consuming to keep them updated.

What public involvement activities have you done that are fairly unique?

- Tank waste forums (Hanford Watch)
- E-list (Hanford Watch)
- Public involvement “Tool Kit” (Heart of America Northwest)
- Road shows: (Oregon DOE - Ken said these are effective but time-intensive)
- Activities targeting non-English speaking populations (Ecology)
- “Pie-chart” exercise – FY 2009 budget discussions (DOE)
- Transparent decision-making with 100 Area cleanup decisions (EPA and others)

Still effective?

- State of the Site meetings: Ken said there were good and bad responses to State of the Site meetings. Some organizations raised issues about effectiveness – have they run their course, what changes could make them more effective, etc.
- Hanford Update newsletter

Ken said the response compilation is available to anyone who wants to read it. He said PIC feels like its meetings are too short to be purposeful and needs more time to talk through some of these fundamental issues.

Susan Leckband asked if PIC will take the information and produce some kind of product. Ken said the survey and December workshop offered a snapshot of some of the issues; PIC needs more dialogue about the issues before discussing any type of product.

Agency perspective

Erik Olds, DOE-ORP, was interested in hearing how PIC will move forward and act on some of these ideas and issues. He asked if PIC plans to meet regularly during committee week. Steve said meeting the day before a Board meeting usually does not allow enough time for PIC to meet its responsibilities. He said PIC is looking at changing how it operates and supports the Board. Erik asked if there will be a final product. Ken did not think there was a desire for a particular product besides the goal of improving public involvement at Hanford. Erik thought the December workshop and presentation were great places to start.

Dennis appreciated Ken's presentation and survey, and PIC's willingness to help the agencies become more effective. He said everyone has a role in using public involvement to reach sustainable decisions.

Ron appreciated PIC's work and said there is a lot of interest in using different communication methods and tools. Ecology needs the Board's help on how to involve the public on some of the big upcoming issues, like budgets, the RCRA site-wide permit and the TPA change package. Ron said he is learning that the agencies need to be clear about what they want from the public, and the difference between informing the public and soliciting feedback for use in decision-making.

Discussion

Larry thought it would be beneficial for PIC and/or the Board to review FACA and ensure everyone understands its purpose and requirements.

Harold said many people used to attend Board meetings. Board meetings now have very low public attendance – why has there been a significant drop in public participation? What is the root cause for the apparent lack of public interest? Ken Niles thought it was a little of everything – it is hard to maintain interest for so long and the public is most likely worn out with all the Hanford issues. He said the Board and agencies should be conscious of this fatigue when planning public involvement activities. Ken also noted that the Board has put forth no effort to get the public to attend Board meetings. Steve Hudson added that people simply do not have time, may not understand the issues or may get their information from different sources.

Mike Korenko thought the presentation was insightful. He commented that communicating to the public about what you hear and how you did or did not use their ideas is very important. The feedback loop has to be complete.

Gerry said the agencies are supposed to perform an annual evaluation of public involvement. To make this more effective, they should set goals for specific issues and analyze if those goals were met (e.g. meeting attendance). He thought the agencies rely on citizen groups to do much of the public involvement work and thought the agencies could do more to interest the public in Hanford issues. To Harold's comment, Gerry said people do not attend Board meetings even when they are held in the Tri-Cities. He thought the agencies should have hosted a public meeting on the TPA change package in Portland during one of the evenings of the Board meeting. About 50 people attended a recent Heart of America Northwest public meeting in Portland concerning the draft TPA change package.

Gerry said this kind of public involvement analysis should be an ongoing process and the survey should be posted to the HAB website. EnviroIssues will submit the survey to the DOE webmaster for posting on the HAB website.

Jeff thought there were two relationships: The relationship between the Board and the agencies, and the relationship between the organizations that make up the Board and the agencies. Jeff commented this type of public involvement evaluation may result in greater trust. For example, if there was already a good public involvement process in place, the Board may have avoided the confusion around the TPA change package and worked better with the agencies. The agencies and Board have to figure out how to work together with trust before they can work effectively with the greater public.

Julie said as a public official, she has gone through this sort of analysis many times. Everyone struggles with involving the public and whether or not to focus on single or multiple issues. She commented that the public is often very quick to respond if an agency or the Board makes a mistake.

Susan Kreid agreed with Julie and said unless there is a specific reason, the public will not sacrifice their time to get involved. She said there are many ways to reach the public other than a public meeting. Public meetings require the public to come to the sponsor – why can't they participate from home or at their place of employment? Susan suggested some tools, like YouTube, blogs, and public access television. She encouraged the agencies to be extremely clear about what they want from the public and avoid wasting their time. Susan Leckband asked Susan Kreid to work with Steve and PIC on finding other ways to reach the public.

Pam said the City of Richland uses public television to reach the public and recommended it as an informational tool. The Hanford Information Network takes their programs and streams them online. She said Rob has done a remarkable job reaching out to high school students. Rob goes out to various high schools with information about Hanford, teaches why Hanford is important and leaves informational materials with teachers. He said he often reaches multiple classrooms or even entire schools.

Dave said DOE struggles with public involvement, and wondered if low meeting turnout or relatively low interests reflects that people do not care, if they feel like they do not have an interest in the work, or if they are comfortable with how things are going at Hanford. He said DOE gets overwhelming responses to site tours but very low turnout for public meetings.

Liz noted that developing new and creative ways to reach the public is very time and resource intensive. Organizations have to have enough capacity to develop new strategies and tools. Liz thought it may be a good time to make public involvement a priority; with the ARRA funding, it may be a good time to create full-time public involvement positions at Hanford.

Shelley thought the Board and agencies are missing the opportunity to use different and easy technologies to reach the public, such as YouTube or online surveys.

Nolan Curtis, Ecology, said the annual TPA agencies public involvement survey is now available online. The agencies notified their e-mail list and Nolan asked Board members to pass along the information.

Steve thanked the Board for the good dialogue and thought PIC is ready to make some changes to stimulate public involvement at Hanford. Susan Hayman asked Board members with specific public involvement ideas to get involved with PIC or work with Steve to bring ideas forward at the next PIC meeting.

Public Comment

Mecal Samkow introduced herself as a member of the Oregon Hanford Cleanup Board and a soon-to-be-alternate to the HAB. She commented that she talks to people every week that know nothing about Hanford. She remarked that it only takes talking to a few people to make a difference, because they then pass along the word. Mecal said she had detailed questions about beryllium and beryllium disease, and will talk to Mike Korenko. She asked what qualities make beryllium so useful, and is it still used in nuclear and non-nuclear industries. Mike said it is valuable because it is a spark-free, high strength, low density material.

Board Business

The Board lost its quorum before the meeting was scheduled to be adjourned and therefore did not attend to much of its typical business. The following discussions were impacted:

- Vice-chair nominations were not discussed. Vice-chair selection will take place at the June Board meeting. Susan Hayman will accept nominations via email.
- Results of the 2008 Board self-evaluation were not presented and discussed; this was postponed to the May leadership retreat and June Board meeting.
- Updates to the Board process manual were not discussed.
- Topics/activities for the June Board meeting were not discussed. This will need to be handled through an EIC conference call.
- Committee conference calls could not be set.

Attendees

HAB MEMBERS AND ALTERNATES

Tom Carpenter, Member	Ken Niles, Member	Maxine Hines, Alternate
Rob Davis, Member	Bob Parks, Member	Steve Hudson, Alternate
Greg deBruler, Member	Maynard Plahuta, Member	Mike Korenko, Alternate
Earl Fordham, Member	Gerald Pollet, Member	Larry Lockrem, Alternate
Harold Heacock, Member	Keith Smith, Member	Liz Mattson, Alternate
Rick Jansons, Member	Bob Suyama, Member	Robert McFarlane, Alternate
Julie Jones, Member	Gene Van Liew, Member	Nancy Murray, Alternate
Mike Keizer, Member		Wade Riggsbee, Alternate
Paige Knight, Member	Shelley Cimon, Alternate	Dick Smith, Alternate
Susan Kreid, Member	Gerry Dagle, Alternate	John Stanfill, Alternate
Pam Larsen, Member	Sam Dechter, Alternate	Betty Tabbutt, Alternate
Susan Leckband, Member	Ken Gasper, Alternate	Steve White, Alternate
Jeff Luke, Member		

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Dave Brockman, DOE-RL	Annette Carlson, Ecology	Janice Williams, CHPRC
Steve Burtness, DOE-RL	Nolan Curtis, Ecology	Dale Bignell, WCH
Paula Call, DOE-RL	Ed Fredenburg, Ecology	
	Beth Rochette, Ecology	Tammie Gilley, EnviroIssues
Erik Olds, DOE-ORP	Ron Skinnerland, Ecology	Susan Hayman, EnviroIssues
Shirley Olinger, DOE-ORP		Hillary Johnson, EnviroIssues
Steve Pfaff, DOE-ORP	Dennis Faulk, EPA	Cathy McCague, EnviroIssues
Ken Hoar, DOE-ORP		

MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald	Beverly Penny, CTUIR – DOSE	Dale Engstrom, Oregon DOE
Deane Morrison, Hanford Challenge	Mecal Samkow, Oregon Hanford Cleanup Board	