

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

February 4-5, 2010

Kennewick, WA

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

Executive Summary

Board action

The Board adopted three pieces of advice concerning 1) the Central Plateau Cleanup Completion Strategy, 2) modeling and characterization, and 3) an independent review of the U.S. Department of Energy's (DOE) beryllium program. The Board also authorized its chair to send a letter to DOE regarding its response to Advice #217 and #218.

Board business

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

- April Board meeting topics
- Board self-evaluation will occur prior to or at the April Board meeting
- A Committee of the Whole will be held on February 17 to hear a report from the Board's independent expert and develop draft advice on the draft Tank Closure and Waste Management Environmental Impact Statement
- A special Board meeting will occur on March 4 to discuss and adopt advice on the draft Tank Closure and Waste Management Environmental Impact Statement
- Committee leadership selection will be announced at the April Board meeting
- 2009 HAB annual report will be available at the March Board meeting, depending on the review and printing process
- Board members were asked to confirm committee membership and update contact information

Presentations and updates

The Board heard and discussed a number of presentations on the following topics:

- Tri-Party Agreement (TPA) agencies update
- Long-term stewardship and institutional controls
- Overview of the Mission Support Alliance contract

Public involvement strategic planning

The Board heard from the Public Involvement and Communications Committee on its efforts toward strategic public involvement planning with the TPA agencies. The Board conducted a Sounding Board to collect input on the benefits, challenges and principles for public involvement.

Public comment

No public comment was provided.

HANFORD ADVISORY BOARD
February 4-5, 2010 Kennewick, WA

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 agency and contractor representatives and members of the public.

Three seats were not represented: Franklin and Grant Counties (Local Government), Physicians for Social Responsibility (Regional Environmental/Citizen), and the Confederated Tribes of the Umatilla Indian Reservation (Ex-Officio).

Welcome, introductions and announcements

Susan Leckband welcomed the Board to Kennewick. She identified new proposed members for the Board who are awaiting confirmation from DOE-Headquarters (HQ):

- Jerry Peltier, primary (City of West Richland)
- Jeff Serres, primary (Columbia Riverkeeper)
- Brett VadenHeuvel, alternate (Columbia Riverkeeper)
- Greg deBruler, alternate (Columbia Riverkeeper)
- Dave Davis, primary (Central Washington Building Trades)
- Will Smith, alternate (Central Washington Building Trades)
- Akram Hossain, primary (Washington State University)

Mike Keizer, former primary member for Central Washington building Trades, is retiring and leaving the Board. Susan Leckband thanked him for his service.

Steve Pfaff, U.S. Department of Energy – Office of River Protection (DOE-ORP), introduced Jonathan Dowell, the new deputy manager for DOE-ORP. Jonathan thanked the Board for its work and said he looked forward to working with them. Steve also introduced Frank Russo, the new Waste Treatment and Immobilization Plant (WTP) manager for Bechtel. Frank said he was happy to be in the Tri-Cities and looked forward to finishing out his career building WTP and accomplishing cleanup for his grandchildren and their grandchildren.

The Board meeting agenda was slightly revised to allow time for a DOE-Richland Operations Office (DOE-RL) Central Plateau Cleanup Completion Strategy (CP Strategy) update. Susan Hayman, EnviroIssues, reviewed the ground rules and questions/comments procedures. Susan Leckband reviewed Board meeting goals:

- Receive an update from the Tri-Party Agreement (TPA) agencies
- Receive a presentation on long-term stewardship and institutional controls
- Receive an introduction to, and overview of, the Mission Support Alliance (MSA) contract
- Conduct a Sounding Board to collect input on the benefits, challenges and principles for public involvement
- Discuss the draft letter to DOE on beryllium advice response
- Discuss draft advice for:
 - CP Strategy
 - Modeling and characterization
 - Independent review of beryllium program
- Conduction routine Board business, including:
 - Committee reports and national liaison update
 - Upcoming committee leadership selection
 - Annual report (March)
 - Overview of March 4 special Board meeting
 - Board evaluation – April

- April Board meeting topics

The Board meeting was audio-recorded.

Confirm November meeting summary adoption

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

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

Committee reports

National Liaison

Shelley Cimon reviewed some national issues of interest to the Board:

- There is congressional activity regarding the importation of waste from Italy for processing in the southern United States and disposal in Clyde, Utah. A bill was passed by the House to ban the importation of foreign nuclear waste into the country, but it may not pass the Senate. Shelley said a Utah senator seems to favor the importation of waste because of the new jobs it would create in his state.
- The Nuclear Regulatory Commission (NRC) is revising their rulemaking, specifically Rule 61. The NRC asked for public comments about how the agency should conform with the White House's Open Government directive. NRC would like to voluntarily comply with that directive and must have a plan by April 7. Comments are due by February 10, 2010; more information about the comment period is at www.regulations.gov, document "NRC-2010-003." Work on this rulemaking began in 2009; the proposed rule will be published in 2011 with planned implementation in 2012. Shelley thought this was relevant to DOE Environmental Management (EM) sites because it affects decisions about waste blending. Shelley said NRC will share information at the April EM Site Specific Advisory Board (SSAB) meeting in April.

Susan Leckband noted that she, Shelley and Bob Suyama will attend the EM-SSAB meeting in April.

River and Plateau Committee (RAP)

Pam Larsen, City of Richland (Local Government), said RAP will meet on February 10. Pam will be out of town so Maynard Plahuta, Benton County (Local Government), will lead the meeting. Topics to cover include:

- Status update on the interim Environmental Assessment (EA) for the Non-Radioactive Dangerous Waste Landfill (NRDWL)
- Review the 100 N Area work plan and associated documents and identify areas of focus for the committee [issue managers: Shelley Cimon, Public-at-Large, and Dale Engstrom, Oregon DOE, (State of Oregon)]
- Long-term stewardship tool box [issue managers Bob Suyama, Public-at-Large, and Doug Mercer, University of Washington (University)]
- Draft advice on base assumptions and identify action items for issue managers resulting from the base assumptions Committee of the Whole (COTW) meeting held in December 2009
- Reviewing the Tank Waste and Environmental Management Environmental Impact Statement (TC&WM EIS)

Health, Safety and Environmental Protection Committee (HSEP)

Keith Smith, Public-at-Large, said HSEP has been busy drafting the letter to DOE regarding DOE's response to their beryllium advice. HSEP also developed the new draft advice that builds on past beryllium advice. The committee will consider have a meeting in March; topics will include an update on tank vapors. Keith noted that there was a case of West Nile virus at Hanford.

Tank Waste Committee (TWC)

Larry Lockrem, Non-Union, Non-Management Employees (Hanford Workforce), reviewed some TWC activities and issue tracking:

- Waste Treatment and Immobilization Plant (WTP) design and safety control update (joint with HSEP)
- System Plan Revision 4: Issue managers met with DOE yesterday. Dick Smith, City of Kennewick (Local Government), thought it was useful. Ken Gasper, Benton County (Local Government), issue manager, compiled comments and provided them to DOE prior to the meeting. A set of questions was also discussed. Dick said one useful outcome was DOE's commitment to developing a list of assumptions for System Plan Revision 5. Dick thought that was a good and transparent step.
- Rob Davis, City of Pasco (Local Government), and other committee members participated in the Single Shell Tank Integrity Workshop last week. Issue managers will discuss their assessment of the workshop at the next committee meeting.
- Continued review of the TC&WM EIS; worked together with RAP to complete the scope for the independent review of the TC&WM EIS. Larry said the Board should see a report from the consultant within the next couple weeks.

Public Involvement and Communications Committee (PIC)

Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), noted that Liz Mattson, Hanford Challenge (Hanford Workforce), has been nominated to serve as new committee vice chair. PIC has been very busy, holding two workshops since the November Board meeting. They are currently working on and discussing:

- A comprehensive strategic public involvement plan to help the agencies plan for public involvement. Steve said many issues at Hanford have multiple public involvement components.
- There are four remaining TC&WM EIS public hearings. Steve said Board members should attend and provide him with feedback about the meetings. He heard they have been going well so far and have been productive. Steve thanked Susan Leckband and Ken Niles, Oregon DOE (State of Oregon), for providing feedback on the TC&WM EIS hearings and other public activities in which they have participated.
- Steve said the Sounding Board today will help PIC collect input on the benefits, challenges and principles for public involvement from Board members. PIC wants to compare Board member opinions with those of PIC and the agencies.
- PIC is trying to promote broader participation between itself and the technical committees. Steve will be working with the technical committees to establish liaisons to bring forward issues with public involvement components to PIC.
- Steve thanked Ken Niles for the flyer the State of Oregon produced; he thought it was helpful and shared an example of how it reached unexpected audiences.

Steve said all Board members are members of PIC and reiterated that they should send him information about public involvement efforts. PIC will have a conference call on February 18.

Budgets and Contracts Committee (BCC)

Gerry Pollet, Heart of America NW (Regional Environmental/Citizen), reviewed some BCC activities and topics of interest:

- The president's Fiscal Year (FY) 2011 budget request was recently released, and funding at Hanford was increased. BCC will examine the allocations and what might happen when funding through the American Recovery and Reinvestment Act (ARRA) ends.
- DOE-HQ will provide FY 2012 budget guidance soon. BCC is planning to have a full day public workshop to discuss FY 2012 budget priorities, tentatively scheduled for March 23. Draft advice for the April Board meeting is likely.
- Gerry said BCC is working with RAP and TWC to help identify key issues, including characterization funding to help ensure work can transition smoothly to the Central Plateau after ARRA funding runs out. Gerry said the FY 2012 budget is key and critical for transition. He noted that some work and ARRA funding may continue beyond 2011, but it will run out when River Corridor work ramps down and work on the Central Plateau ramps up.
- BCC is discussing public access to information about Integrated Priority Lists (IPLs).

- BCC is considering how the lifecycle cost and schedule report should be scoped. Gerry said they are eager to see if scoping reflects the Board's advice; he noted that the Board has not yet seen a response from the agencies to its advice about the report.
- BCC had a good briefing from MSA, and will try to schedule briefings about contract structure and work scopes with other contractors.

BCC will have a conference call in February.

Executive Issues Committee (EIC)

Susan Leckband discussed the EIC meeting, held as usual the evening before the Board meeting. The discussion last night focused on the TC&WM EIS COTW on February 16 and 17. Susan encouraged Board members and the public to attend. A special Board meeting will be held on March 4 to adopt advice on the TC&WM EIS.

Susan strongly encouraged Board members to become more involved at the committee level. She said this is where the "real work" happens.

Central Plateau Cleanup Completion Strategy update

Matt McCormick, DOE-RL, provided an update on DOE's Central Plateau Cleanup Completion Strategy (CP Strategy). Matt said the CP Strategy is key as DOE completes River Corridor cleanup and 300 Area demolition activities. He said they need to be in a position to use money freed up from those accomplishments and use them on the CP.

Matt reviewed the proposed approach, and the differences between the proposed decision structure as of September 20, 2009 and the revised proposed decision structure as of February 3, 2010.

Previous proposed decision structure (as of September 30, 2009)

Inner Area

1. 200 West Inner Area
2. 200 East Inner Area
3. Balance of Inner Area
4. 200-PW-1/3/6 and 200-CW-5

Outer Area

1. Outer Area

Groundwater

1. 200 West groundwater
2. 200 East groundwater

Revised and current proposed decision structure (as of February 3, 2010)

Inner Area

1. 200 West Inner Area
2. 200 East Inner Area
3. 200-SW-2 (burial grounds)
4. Tank farm environmental media/deep vadose zone
5. 200-PW-1/3/6 and 200CW-5 canyons and associated waste sites
 - o PUREX
 - o B Plant
 - o REDOX
 - o T Plant

Outer Area

1. Outer Area

Groundwater

1. 200 West groundwater
2. 200 East groundwater

Matt said the added emphasis on the deep vadose zone was based on public input. He said the TPA change packages the public will see contain more commitments, holding DOE accountable for treatment technologies, especially for technetium-99 and uranium. There will also be separate decisions for PUREX, B Plant, REDOX and T Plant.

Matt showed a graphic of the decision areas in the Inner Area. He said the decisions for the Inner Area increased from four to nine. Matt said in approximately the next year and half, DOE will propose a remedy for all the waste sites. They will use interim removal actions with cleanup levels comparable to the River Corridor to clean up those sites now, and not wait for a record of decision (ROD).

Matt said the groundwater approach has not changed. They are constructing a large pump and treat system in the 200 West Area to remediate the carbon tetrachloride plume.

Matt described how public input influenced the CP Strategy. The review and discussion of the strategy with tribal nations, HAB, the State of Oregon and other stakeholders provided valuable input on the path forward for the Central Plateau cleanup. The agencies factored public input into the discussions and negotiations on changes to be made to the TPA. Matt said DOE will revise the CP Strategy to incorporate public input and agency discussions.

Matt said the collaborative discussions with Ecology and EPA will result in draft TPA change packages that revise the approach to Central Plateau cleanup. He said they will have a tentative agreement in mid to late March. Draft change packages will be available for a 45-day public comment period at that time. He hoped to finalize change packages in early summer 2010.

Discussion

Gerry asked about the order and schedule for the proposed decision structure. Matt said Slide 4 (Proposed Approach) lays out the structure. He described some general timeframes:

- Submit a feasibility study (FS) and proposed plan in late 2012 for the 200 West Inner Area (waste sites, not burial grounds).
- 200 East Inner Area in spring 2014.
- SW-2 and solid waste burial grounds in the Central Plateau in the 2015-2016 timeframe. Matt said DOE wants to allow time for public dialogue.
- Tank farm environmental media will occur in the 2015 time period, and coinciding with the closure plan for the C Farm.
- 200-PW-1/3/6 and 200 CW-5 canyons in late spring or early summer of 2010. Matt said milestones for canyons will require submitting a work plan for remedial studies in 2013-2020.

Keith asked about T Plant use and disposal. Matt said DOE will use T Plant to package TRU waste. After that work is complete, they will evaluate if T Plant could serve any other purpose before commencing remediation. He thought that remediation/disposal work would be one of the last actions.

Susan thanked Matt for the update. She thought it sounded like DOE made some changes in response to public comment.

Advice on the Central Plateau Cleanup Completion Strategy

Maynard introduced the draft advice on the CP Strategy. RAP started developing the advice in the fall. The advice is based on official products from DOE that were issued prior to September 30, 2009. RAP wanted to make sure the Board formally stated its position, which is why the advice still includes recommendations DOE has already incorporated. Maynard thanked DOE for already addressing some of the issues in the advice. Some of those issues included the number of decision points and the deep vadose zone. Maynard said the advice includes concerns about canyons and capping waste sites adjacent to canyons, pre-1970s TRU waste and the need to characterize it, using the Comprehensive Land Use Plan (CLUP) to determine exposure scenarios, concerns about unlined trenches, and the costs of long-term stewardship.

Maynard noted that the committee decided to provide a short background and commentary section to provide context to the advice. He thanked issue managers Dale Engstrom, Wade Riggsbee, Yakama Nation (Tribal Government), and Ken Niles for their efforts.

Agency perspective

Ecology

John Price, Ecology, said Ecology is issuing a letter about the CP Strategy today or tomorrow. He said it will be very similar to the advice. He said the strategy is not a decision document and does not include “real” milestones. The TPA agencies will discuss decisions for many years to come and all want to get on with cleanup. John said they need to consider budget priorities and “how clean is clean.” He commended DOE for writing down a strategy for all to see. He also congratulated DOE on changing some of their positions, and noted how difficult it is to try to please everyone (e.g. the fine line between comprehensive decisions and decisions that need to be split into smaller and more manageable components).

EPA

Craig Cameron, EPA, said EPA wants the Board to focus on how to go forward with TPA changes. He said DOE’s CP Strategy does not really have a legal standing, so rather than DOE revising the strategy, EPA would like the Board to focus what is or will be included in TPA changes, changes that are reviewed by the public. He asked the Board to consider that as it issues advice on Central Plateau cleanup.

DOE

Chris Kemp, DOE-ORP, thanked Ecology for their help with the CP Strategy. He said Steve Pfaff and Stacey Charbonneau, DOE-ORP, have worked hard over the past year and try to be responsive to Board requests, including looking comprehensively at tank farm and vadose zone cleanup.

Matt thanked the Board for its work and for engaging DOE and the regulators. He thought there have been good, frank and fruitful discussions on all sides. He specifically noted that the fourth bullet in the draft advice says the HAB urges DOE to drop the “presumptive remedy approach.” He said DOE is not taking the presumptive remedy approach on any waste site or burial ground on the Central Plateau. Matt said they go through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process. He also noted that the bullet regarding closure pursuant to Resource Conservation and Recovery Act (RCRA) is confusing because the burial grounds discussed are radioactive so they cannot be closed under RCRA. He said DOE has to use a regulation to cover the radionuclide part of closure decisions, and uses CERCLA to address hazardous and radioactive contaminants.

Discussion

Ken Niles thought the background and commentary sections are too long and suggested that the Board avoid this in the future. He provided proposed edits to Maynard. Ken also noted that the commentary section is a new concept. He said it may be incidental, but it seemed like a leap to go from background to commentary. He was not comfortable creating a new type of section called “commentary.” Keith noted some pieces of the commentary should be in the advice section; he provided suggestions to Maynard.

The Board discussed making the commentary section an attachment, but decided attachments to advice are seldom read. The Board decided to delete the “commentary” title and add the content to the background section at the beginning of the advice. The background section provides an explanation of the issue from a public perspective and illustrates Board values.

Pam thanked Matt and the contractor team for coming to RAP and the Board early, and for looking at comprehensive cleanup decisions. She thought it was a collaborative and constructive effort.

Keith commented on Craig’s statement about how the TPA is the document that “counts.” He said the Board does not get to be involved in TPA discussions; they only get to see this CP Strategy, which is why it has focused on providing advice on it.

Dick asked the Board to consider deleting some of the issues raised in the advice that DOE has already addressed. It could be changed to thank DOE for making such changes, which would also help maintain the

Board's position on an issue. Maynard thought it was important to keep all the advice points because they speak to the actual document the Board is working from, and provide a record of the Board's interest.

Natural resource damage assessment

Harold Heacock, TRIDEC (Local Business), said the Board is not involved with natural resource damage assessment (NRDA) and though it was inappropriate to comment on it. Emmett Moore, Washington State University (University), agreed the NRDA reference should be eliminated. Ken Niles said NRDA, and natural resource assessment on a more holistic level, has been discussed many times at the committee and Board level. Ken commented that it has taken over a decade for DOE to recognize its responsibilities and liabilities for natural resource damage and costs. Assessing the cost of damage to natural resources should not happen after cleanup is finished. Ken did not think the agencies could compare costs of proposed actions without looking at long-term stewardship costs and the costs of NRDA responsibilities. He said the advice point is asking for a full accounting of total costs of cleanup actions.

Betty thought instead of calling out NRDA specifically, the Board could couch the advice point in terms of long-term stewardship, federal control issues and the potential for future damage compensation. She said the Board often discusses the need for better coordination with NRDA and final costs for clean closure.

Ken said NRDA money is supposed to go toward restoration, which is part of cleanup. He said the Board has as much right to comment on that as anything. Larry noted the Board probably does not have consensus on addressing anything related to the Treaty of 1855.

The Board agreed to say "natural resource restoration" instead of referring directly to damage assessment and NRDA.

RCRA versus CERCLA cleanup of unlined trenches and cribs

Emmett wanted to remove the second to last bullet regarding monitoring and subjecting unlined trenches and cribs to RCRA (instead of CERCLA) as Matt discussed. He thought it was an incorrect statement.

Gerry disagreed and said the law and permit indicate the cribs and trenches should be cleaned up under RCRA if they potentially include mixed waste, which he said they do. He said DOE has not characterized or proven otherwise. Matt said those burial grounds contain waste with hazardous and radioactive constituents, and RCRA does not cover radioactive components. He said it was clear that CERCLA should be used to remediate radioactive material. Gerry said closure and monitoring are very different under CERCLA and RCRA; he said RCRA exceeds CERCLA requirements. He did not see a reason to abandon RCRA closure and monitoring requirements.

John thought DOE recognizes the importance of past practice burial grounds. Ecology will remain the lead regulatory agency for those burial grounds. Ecology has RCRA authority. The environmental protection standard is the same. John said the same state standards must apply whether it is an EPA-lead operable unit or a state-lead operable unit.

Wade said the advice intentionally said "unlined trenches and cribs," not solid waste burial grounds in general. He thought they were discussing two different things.

Maynard thought the Board did not really care whether unlined trenches and cribs are monitored and closed under RCRA or CERCLA, they just want them cleaned up to meet state standards. Matt thought it would be helpful to clarify what the Board is really after with that advice bullet, at a policy level. The Board revised and clarified the language to say the most stringent standards should be used, instead of referring to RCRA and CERCLA specifically.

Jeff Luke, Non-Union, Non-Management Employees (Hanford Workforce), asked for clarification on the advice point asking DOE to reconsider the concept of covering waste sites adjacent to canyons or other structures that will be capped. Ken explained that RAP intended this to mean that just because a canyon facility will be capped does not mean DOE should extend the cap to cover adjacent waste sites. The Board would like DOE to examine and characterize adjacent waste sites, and remove, treat and dispose of waste if possible.

Washington State regulations and industrial cleanup standards

The Board discussed how it should describe its position on cleanup standards and scenarios, and the state's position on using cleanup standards.

Ken Niles wanted to make certain the Board did not incorrectly refer to Washington State law or make incorrect references to the law. Jane Hedges, Ecology, said instead of saying Washington regulations "forbid" the use of an industrial cleanup standard, the Board might say regulations "assume." Gerry thought "precludes" would be more appropriate, and he and Jane discussed various language options, what zoning industrial means, who has access to industrial sites, and if a site is an exclusive industrial site. To avoid misstating Washington law, Jeff suggested phrasing the statement as "it is the Board's belief that..." Ken thought that would normally work, but it is difficult to for the Board to collectively interpret state law.

Dennis Faulk, EPA, said he was confused about what the Board wanted regarding cleanup standards, and it seems to be contradicting some of the base assumptions that he formed from the Site Technical Working Group. He thought the assumption was that the core zone of the Inner Area was going to be an industrial site cleanup, and the goal is to shrink it to the smallest site possible. If the Board is now saying it should not be an industrial site cleanup, then it needs to clearly state that as Dennis thought that was a fundamental shift.

Gerry said state law says industrial properties that qualify for industrial site cleanup standards are properties that have been characterized and will be committed and zoned for industrial use. He said the cleanup level has to be protective of a 40 hour per week worker for exposures inside a building or on asphalt. He said there is an issue if cleanup only has to be protective of someone only working 10 hours a year – that will result in much more waste left in an area. Dennis said the Board should be clear about that.

The Board decided to delete the sentence. It did not feel deleting it reduced the effectiveness or intent of the advice.

The Board moved sections of the background that were more like advice to the advice section.

After the suggested revisions were included, the advice was adopted.

Advice on modeling and characterization

Wade introduced the draft advice on modeling and characterization. Dale Engstrom was the issue manager. The advice evolved from a series of RAP meetings followed by the December 16, 2009 Base Assumptions Committee of the Whole meeting. He said RAP struggled with how many assumptions were based on characterization and how many were based on modeling.

The commentary section was moved to the background section and the title "commentary" was deleted. Doug Mercer provided suggestions for consolidating the background section.

Agency perspective

EPA

Craig said modeling is a tool that is applied where it makes sense. He said modeling often encourages more data collection and reanalysis. He thought modeling helps DOE self-police on the use and role of models. Craig noted that characterization data should not be replaced by models and reiterated that modeling is a tool.

Ecology

Jane agreed that modeling is an important tool, but characterization is key. She said the saying "garbage in, garbage out" applies to characterization and modeling. She asked the Board to clarify its statement that cleanup will cost less if more characterization is performed. She said it is not a given that cleanup will cost less with more characterization, although it can reduce costs in some cases.

DOE

John Morse, DOE-RL, agreed that there are many types of models that need to be applied appropriately. He said they use a suite of data that can be used in a simple or complex model. Such models often help identify data gaps. He said the uncertainty must be recognized in analysis and evaluation of alternatives. John noted that they always do their analysis in the context of a known value at a certain point in time.

Chris said DOE is extensively characterizing at tank farms to meet the closure deadline of 2019. He said they have developed data quality objectives with the regulators. Chris said they have and will take advice into consideration when they develop characterization plans and use models. He noted that they are drilling 27 wells in three years.

Discussion

Ken Niles asked how deep the 27 wells are. Chris said they are drilled within a few feet of groundwater.

Mike Korenko, Public-at-Large, said the advice assumes that Hanford needs both characterization and modeling. He said DOE could characterize themselves to death; for example, they could drill 30 wells, but might only need three to test the validity of a model. Mike suggested adding a bullet saying that the cost of characterization can be reduced by using a model to help guide characterization. The Board agreed.

Betty Tabbutt, League of Women Voters (Regional Environmental/Citizen) participating by phone, said modeling might save money, but time is also important. She thought time constraints will determine whether more characterization is done or if managers decide to rely on models (e.g. if a source needs to be quickly contained).

Floyd Hodges, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen), said Hanford is geologically heterogeneous and one or two boreholes can paint an incorrect picture of what is actually occurring. He thought DOE should rely more on characterization than models because of the nature of the site. Floyd said the Board should say modeling provides a bounding limit for what can be expected in reality. Larry commented that modeling “gets you on the dart board,” but modeling outputs and real data can be very different.

Emmett thought the advice was good. He hoped EPA takes a look at modeling and risk; he was not satisfied with the definition of risk in the TC&WM EIS. Emmett said the advice will be a helpful reference at the upcoming TC&WM EIS COTW. Cathy McCague, EnviroIssues, will bring copies of the final advice as a reference at the COTW.

Jeff asked Jane and Dennis if the statement in the advice that DOE is increasingly reluctant to do as much characterization as EPA and Ecology would like to see is true. Jane and Dennis said they would like to see more characterization.

Floyd said the advice should be clear that the Board wants DOE to recognize the synergistic and relative roles of modeling and characterization.

After the suggested revisions were included, the advice was adopted.

Presentation from Mission Support Alliance, LLC

Frank Figueroa, Mission Support Alliance (MSA) president and general manager, provided a presentation on the Mission Support Contract (MSC), MSA, and service highlights and opportunities.

Frank discussed DOE expectations for the MSC:

- Enable cleanup contractors to focus on cleanup
- Reduce the overall cost of site services, providing more dollars for cleanup
- Establish portfolio management function
 - Helps allow “what if” scenarios, e.g. planning for the end of ARRA funding
- Establish a site-wide environmental management system
- Create common Hanford Site safety processes

Frank said he has seen many situations at DOE sites, some where one large contractor performs many different functions, and some where contractors focus on specific pieces. He said at Hanford, there is a lot of specialty work which favors having a contractor like MSA to focus on services so cleanup contractors can focus on cleanup.

Five primary functions of the MSC scope include:

- Safety, security and environment [e.g. Hanford Patrol, the Volpentest Hazardous Materials Management and Emergency Response facility (HAMMER), fire and emergency response]
- Site infrastructure and utilities (e.g. roads, utilities, biological control, analytical services)
- Site business management (a “potpourri,” e.g. property management, external affairs, websites, mail services)
- Information management (e.g. telecommunications, record management)
- Portfolio management (e.g. project acquisition and support)

Frank noted a sixth function called company-wide support, which includes Integrated Safety Management Systems (ISMS) and project management.

Frank said MSA’s purpose is to make their customers extraordinarily successful in their unified mission of cleaning up the Hanford Site for the community to prosper safely and securely. He said MSA values are listed in order of priority:

- A culture of safe and secure operations
- An ethos of integrity and ethical behavior
- An attitude of excellence in customer service
- A mentality of continuous learning and improvement

Frank said he has worked with DOE frequently, and Hanford did not always enjoy the greatest reputation for safe operations. He commented that over the past decade, Hanford has greatly advanced and now has a good safety reputation. Frank said MSA preaches that the safety “bubble” is always around each employee – no matter where they are, the safety bubble applies. Frank added that a continuous learning and improvement environment helps make workers more capable tomorrow than they are today. He said the Board helps with that process.

Frank said MSA has three owner companies – Lockheed Martin, Jacobs and Wackenhut. There are 12 teaming subcontractors. Many are local, some are national. He said the Contractor Leadership Council, with representatives from each company, will have its first meeting soon.

Frank said MSA’s client is DOE; their key customers are the other contractors, the ones doing cleanup or research. As a services company, MSA provides support to the contractors (e.g. CHPRC, Bechtel, PNNL). He said all of these customers have choices – they can use their own resources or they can use MSA. MSA has to earn their business.

Frank described the MSA approach:

- Ensure value to stakeholders
 - Deploy a commercial-like, customer-focused serviced delivery model
 - Reduce infrastructure operating costs to allocate more dollars to cleanup
 - Improve Hanford Site integration

Frank showed a video about MSA and described how MSA supports environmental cleanup with an innovative service model. He said MSA’s portfolio management is the first of its kind. MSA aligns information technology services to enable their customers’ success, including bringing the power of information technology to the field (e.g. high speed networking, wireless networking anywhere, single, integrated emergency communications).

Frank described MSA’s environmental integration, site-wide standards and monitoring:

- Achieved environmental management system conformance ahead of schedule
- Leading accelerated development of standard safety programs during FY 2010

- Monitoring environmental media at/near facilities, ambient air, soil and vegetation, direct radiation and small wildlife

Frank said all major site contractors are participating in the Contractor Leadership Council, which will address site-wide tactical and strategic issues (e.g. facility consolidation, work force restructuring, traffic planning). Frank also reviewed some MSA investments and cost savings approaches.

Discussion

Keith said workers have wanted common site-wide safety standards for a long time; he was happy to see MSA working to implement a site-wide system. Frank said they are excited to be doing that. He noted that MSA does not have contractual authority over the contractors to require that they use the site-wide system, but DOE does.

Ken Niles asked if MSA was in charge of cyber security and asked how often Hanford is a target of cyber security attack. Frank said Hanford is a target and is attacked hundreds of times a day. He said Hanford's systems are good and they pass all cyber security audits. Lockheed Martin is the lead contractor for cyber security.

Laura Hanses, Non-Union, Non-Management Employees (Hanford Workforce), asked Frank to elaborate on traffic management. Frank said there is an increased amount of traffic on the roads at Hanford, especially with new workers coming to the site. MSA is looking at simple solutions to improve the traffic situation, such as one route in/one route out, roundabouts, introducing haul routes, and changing speed limits.

Pam asked for an example of how MSA has to compete with the cleanup contractors to get work. Frank said some pieces of work are solely provided by MSA, such as Hanford security. Others are optional, such as information management activities. For example, cleanup contractors, MSA's customers, have an option to hire MSA to build a website for them or do it themselves.

Pam asked if MSA is looking at improving rail systems to provide the possibility of transporting waste to and from the site by rail. Frank said the rail system is part of their scope and MSA is preparing a rail study for DOE-RL.

Larry asked if MSA was looking at fixing a specific traffic problem at Highway 240. There is a hill right before the entrance to the site, and often there is only one guard at the guardhouse, which causes traffic backups, rear end collisions and pile ups. Frank said they have a safety logbook at every entry location, where any employee can enter a concern for review. He said in that particular case, Hanford Patrol is working on immediate fixes – opening earlier, posting more than one guard and looking at what can be done about the hill itself.

Doug Mercer asked for examples of portfolio management at other sites, and for more information about the site business management “potpourri.” Frank said portfolio management has been tried in other places. In the MSC, MSA is bringing major software tools that will allow greater compatibility among companies. MSA also has the ability to run “what if scenarios.” Frank said DOE is interested in exploring such options at other sites if MSA proves its worth at Hanford. Regarding the site business management “potpourri,” Frank said it really is the “everything else” category. He said they can make changes over the life of the contract, but that is how the request for proposal was released and the way they bid it. It will evolve over time.

Doug Mercer asked if the way the Board receives information will change now that MSA is working at the site. Frank said their activities are in support of DOE, so the Board will not notice a change. DOE is still the interface and point of contact for the Board.

Bob Suyama thought MSA's scope has many applications to long-term stewardship, starting with lifecycle cost cleanup planning processes, property management, safeguards and securities, and information technology. Frank said when the River Corridor Contract is complete, MSA will receive specific guidance from DOE to implement actions and management.

Dick asked if MSA is looking at light rail systems for transporting employees to and from the site. Frank said they are looking at more short-term, traffic safety solutions first. There will be some analysis to look at how to accommodate the growing population in the future. There are many timeframes and many customers. Jeff Frey, DOE-RL, said DOE will be looking at alternative transportation options in the future.

Susan Leckband asked if the Contractor Leadership Council meets as a whole with DOE. Frank said the council is still in its infancy, but their intent is to look strategically at issues with DOE.

Larry asked if MSA also looks at economic development opportunities in the Tri-Cities, such as the Energy Park concept. Frank said they are looking at how to come together for the benefit of the community, and economic development could be part of that. Their primary mission is to satisfy their customers and clients. Frank noted that MSA initiated a United Way giving campaign where MSA covers the portion of the gifts that would have gone to administrative costs, so 100% of individual gifts go directly to the program.

Keith noted that past contracts with incentives to keep spending under a certain dollar amount resulted in strange outcomes. Frank said MSA is incentivized in some ways, but they have service level agreements that must be met. They cannot just cut costs.

Art Tackett, Benton-Franklin Regional Council (Local Government), encouraged MSA to look into Hanford area loan programs, Vivid Learning and other economic development opportunities.

Strategic planning for public involvement

Liz introduced PIC's work on strategic public involvement planning. The committee is working toward creating a foundation for developing a strategic plan and flowchart for the TPA agencies to use when planning public involvement. She said PIC completed Step 2 of a three part process, which focused on how Hanford is a unique setting for public involvement and the appropriate goals for public involvement. PIC will share its joint definition of public involvement with the Board soon. Steve added that the Board should read the PIC meeting summaries to learn more about their full discussion.

Susan Leckband reminded the Board that all members have a responsibility to represent their constituents, to educate, and to involve the general public. She added that the agencies thought a Sounding Board would be a useful tool to get the "full flavor" of Board opinion on public involvement.

Board members were asked to consider and focus their statements around the following three questions from PIC's Step 1 effort:

- Public involvement is important because...
- Public involvement is challenging because...
- Some principles of public involvement are...

Sounding Board

Not all Board members opted to provide comment during the Sounding Board. Only those that provided comment are listed below.

Margery Swint, Benton-Franklin Public Health (Local/Regional Public Health)

Margery said public involvement is important because the public needs to be knowledgeable about Hanford cleanup problems and best ways to solve them. She said getting people together to just complain has no value. She thought public involvement is challenging because most people who have lived here for some time do not have concerns that they have not already stated. Margery thought they do not stay involved after they have their concerns and questions addressed.

Doug Mercer

Doug said one problem with public involvement is that public expectations and understanding of public involvement does not match the actual role that the public has in a decision. He said there are ideals that he, the Board and the public have about what public involvement should be, and that sometimes sets their expectations too high for what role they might have in a process. He said communicators need to identify any limits for public involvement to ensure expectations are accurate.

Maynard Plahuta

Maynard said public involvement at Hanford has always been an issue. He thought one problem is that the public thinks Hanford issues are too technical, or they do not know enough and cannot contribute. He said if they try to identify values, they could be more successful in stimulating discussions and obtaining meaningful public input. Maynard thought some organizations, like the League of Women Voters, know how to involve the public. He reiterated that the Board should emphasize to the public that they do not have to have a technical background to get involved with Hanford decision-making.

Art Tackett

Art said he is a planner and has been involved with many public involvement efforts. He said he has been at many public meetings with poor attendance. He thought Maynard was right – if people do not know something about a topic, they will not participate. If you put it into terms they are interested in, Art said you can get them involved.

Steve Hudson

Steve read a quote from the PIC white paper that discusses the importance of public involvement. Steve said public involvement is important because it supports general democratic principles, that those who bear the consequences of decisions should have equal part in making the decisions. Steve said public involvement can be messy; it can be an art. Many things can go wrong; nice, neat decisions are not always the outcome. Steve thought that is what makes it so interesting. He commented that public involvement must begin early and provide adequate and reliable feedback. Steve added that decision-makers must be accountable for decisions they are making.

Steve White, Columbia Riverkeeper (Regional Environmental/Citizen)

Steve said he was glad the Board and Hanford are attempting to strategically plan for public involvement. He hoped to gain agency buy-in to the creation of a strategic plan. Steve said differing knowledge levels are always challenging, and it is hard to get the public to a basic level of knowledge they need to participate. Steve also thought it was challenging to keep people involved.

Gerry Pollet

Gerry described a public meeting that Heart of America NW participated in to help save a stream and wetlands from development. Gerry said the meeting had excellent turnout, but the developer's presentation took so long that by the time the local government got around to taking public comment, it was late in the evening and half the people had left. Gerry said that was not democracy. He said sometimes people leave a Hanford meeting saying they will never again attend. He thought it was necessary to have a strategic public involvement plan built around a set of principles. Gerry said public notifications need to be effective and describe how a decision affects the public. Gerry added that the TPA mailing list is tiny, with half the contacts for contractors or the agencies. He commented that the MSA video was very professional – if the Hanford Site can support contractor communications, it should be able to support a professional communications team or prepare more meaningful communications with the public.

Gabriel Bohnee, Nez Perce Tribe (Tribal Government)

Gabriel said public involvement is important because it allows stakeholders to say what needs to be said. The challenge is people sometimes do not show up. He said speaking from a tribal nation perspective, tribes have their own challenges. He said his government is often faced with decisions and only a handful of people want to be involved. Gabriel said multiple methods of communication are necessary to reach the public. He added that they have a joke – if there is food, they will come.

Todd Martin, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen)

Todd said public involvement at Hanford is not about influencing decisions, it is about putting issues on the radar screen of decision-makers. Issues like the public release of documents and worker health and safety

issues, for example, were not on the agendas of decision-makers. Todd said public involvement helps decision-makers know what they should care about.

Betty Tabbutt

Betty said public involvement challenges at Hanford include the technical nature of the cleanup, the long timeframe, keeping people engaged over many years, and the large geographic impact. She said there is a tension between involving the public and getting on with cleanup. Betty said the other tension is when the agencies have good intentions of giving the public a heads-up about a coming issue, but do not have enough information to satisfy the public at that time. She thought that public involvement includes listening to the public, not just telling them what is happening. She said translating complex issues into plain language is important.

Ken Niles

Ken thanked Liz for starting this strategic planning effort. He said there is still a lot of work to do, including defining goals and eventually developing a tool kit. Ken said public involvement is not a public meeting. The success of public involvement is more than how many people show up to a public meeting. Ken said he started doing public outreach with Hanford in the Dose Reconstruction Project in 1989, and the most effective efforts have been when there is meaningful dialogue. Ken said in the last ten days, he has participated in a Heart of America NW workshop and a living room meeting to talk about Hanford and the TC&WM EIS. They asked people what they thought and got reactions. Ken said good public involvement takes a lot of time, and he hopes the recent efforts will result in engaging new people.

Pam Larsen

Pam said public involvement has been a part of her job for the past 15 years. People care about Hanford but if they live in the Tri-Cities, they have people in their lives that can answer their questions. She thought it reduced the need to get involved elsewhere. Pam said it is sometimes difficult to gauge interest; she thought people would be concerned about shipping waste to the Waste Isolation Pilot Plant (WIPP) so they conducted a big outreach effort and had 12 people show up to a public meeting. She said HAB is a great tool to see what has worked well and to use similar things for the elected officials she works with. They have done TV panels with experts and agency managers, and have had recent programs on the consent decree and legal negotiations. She thought that worked and hoped to receive some feedback. Pam said she also produces a Hanford Communities newsletter.

Keith Smith

Keith said problems occur if people do not feel empowered; they become jaded and “Hanford-ized.” Keith thought they become frustrated and feel like management does not consider their opinions. He said the public wants to see evidence that their voice is heard.

Emmett Moore

Emmett said feedback is very important for effective public involvement. It is one thing to provide information to the public, which the agencies do well, but the other piece is providing feedback to those who participate and provide comments.

Norma Jean Germond, Public-at-Large

Norma Jean said public involvement is important because it engages the public and alerts the agencies to issues of concern. She said the process should result in better decisions, solutions and cleanup. Norma Jean said there are many public involvement tools that can be used. For example, the agencies could record public meetings and post them online or air on local television to reach different audiences. She thought Hanford needs a better suite of tools.

Liz Mattson

Liz said it is easy to get wrapped up in specific involvement efforts and not allow time for stepping back and looking at the big picture. She was glad PIC and the Board is now taking time to do so. She said it is important to have a strategy beyond a specific issue, and maintain a way for continued involvement. She encouraged taking a creative approach. She commented that the “default” is easy and when there is a time crunch, the agencies go with the somewhat boring default option.

Barry Beyler, Oregon Hanford Cleanup Board (State of Oregon)

Barry said he echoed Ken's comments – small groups or a one-on-one opportunity is where the HAB can be most effective. He said large meetings can have poor turnout, or the audience does not have the chance to speak because it takes so long to lay the groundwork. He thought people do not want to ask questions in front of others because they do not want to look ill-informed. He encouraged the agencies and the Board to avoid overselling – do not make something a crisis if it is not one. Barry added that Hanford needs to engage the younger generation; these issues are time consuming and have long-lasting effects. He said they have to make Hanford issues as interesting as possible without being threatening.

Bob Suyama

Bob said people are busy and have many commitments – if someone works all day, gets home tired and has to decide how to spend their free time, how will they spend it – with their family or at a meeting? He said the agencies need to tell them their comments will be considered and are important. Many people understand Hanford and its waste and do not feel the need to get involved, but there is a point where people need to get riled up, where they need to feel their voice will make a difference. Bob said squeaky wheels get the grease, but they may not represent the majority of the people; Bob said it is important to get the majority input. Bob added that the CP Strategy is an example of good involvement – DOE took the Board's input, made changes and showed the Board how they were incorporated.

Harold Heacock

Harold said he was on the commission that helped create Ecology. The governor used the commission and held meetings around the state, asking the public what the new department should address. Three main topics were identified – water quality, fluoride emissions from aluminum plants and solid waste disposal. Harold said these became priorities for Ecology, but now the public hears little about them because the problems are under control. Harold thought people are now more concerned about employee assistance, well hazards and vapor inhalation. If people really are concerned about something, they will show up at a meeting and tell you about it. Harold said DOE spent a lot of money on the TC&WM EIS hearings and turnout was poor. He said most of the people at the meeting held in Richland only wanted to talk about the Fast Flux Test Facility (FFTF). Harold reiterated that people will participate if they are interested in the topic.

Sam Dechter, Public-at-Large

Sam said public involvement at Hanford is important because taxpayers are funding the cleanup and the public should have a voice in how money is spent. Sam said public involvement is important because the direction and pace of cleanup directly affects the public and the environment. He thought public involvement is challenging because of the volume of issues and information – if someone goes to every public meeting, they will not have time for anything else. Sam added that the timeframe for cleanup poses challenges. For example, outreach for WTP design was conducted in 1992 but start up will not happen until 2019. Sam said they need to ensure the public feels they can speak, be heard and receive feedback on their comments. He thought the HAB is a great public involvement tool.

Susan Leckband

Susan agreed that public involvement is important because tax dollars fund cleanup. Decisions have long-term, lasting effects on the environment and her children and grandchildren. Susan said the government should work for the people, not the other way around. She said there are many good voices and perspectives, but outreach is challenging due to time commitments, learning curves, diverse audiences and different expectations. She thought one public involvement principle should be using speakers who care about listening to the people.

Mike Korenko

Mike said he looks forward to the next parts of this strategic public involvement process. He thought the first step should be to define success – of a project and a public involvement process. Does Hanford need an overarching metric? How do they know that they are not already successful? Mike said they need to identify who is responsible – a year from now if there is no progress, who is responsible? He thought there should be more accountability for both the agencies and the HAB. How does the HAB know if it has not succeeded? Mike said they need to identify vehicles and mechanisms for public involvement.

Shelley Cimon

Shelley thought it was easy to be “lazy” with public involvement. She described her past experience on the Oregon Hanford Cleanup Board where each member was charged with and essentially required to get out to different groups to talk about Hanford. She said reaching out at high schools, for examples, helps educate and get kids interested in Hanford and professional opportunities. Shelley said it was time for the Board and agencies to engage the next generation.

Nancy Murray, Public-at-Large

Nancy agreed with Norma Jean’s comments. She thought there were too few tools in the tool box, and described how she receives more engaging and interesting communications pieces from organizations far less sophisticated than Hanford. Nancy commented that public meetings are only one tool, and are limited to reaching those within driving distance of the event. She thought they should broaden and diversify opportunities for public involvement.

Tom Carpenter, Hanford Challenge (Hanford Workforce)

Tom thanked Liz and PIC for their hard work on this topic; he was glad PIC was taking the time for this important effort. He said he agreed with much of what he heard, and agreed that people participate when they feel they have a stake in decision. Tom thought they struggle with messages of crisis and the need to act, and how to balance that with the fact that people can do something about it and have hope. Tom said it is very difficult to get people to show up to a public hearing about Hanford because the hearings are so dry.

Paige Knight, Hanford Watch of Oregon (Regional Environmental/Citizen)

Paige said it is important to not treat people like outsiders, as she has sometimes felt as someone from Portland. People should always feel respected, no matter their agenda. Paige felt messaging for meetings has at times been poor, and she has seen the public slam agency managers. She encouraged flexibility in meeting format, and commented that her favorite meetings were ones where the format was thrown out and people discussed what they were really interested in. Paige asked the agencies to think more creatively about increasing meeting turnout and using other technologies. She added that DOE and Ecology websites are difficult to navigate.

Susan Hayman said Board members could continue to provide comments to PIC directly. Steve thanked the Board for going through the exercise.

Karen Bowman, Physicians for Social Responsibility (Local/Regional Public Health), said her job is to teach nurses about Hanford and environmental health. She encouraged Board members to contact her if they could use her expertise at any educational events. Karen added that it would be great to have biographies or CVs of HAB members so everyone is aware of the vast amount of resources on the Board.

Advice on the independent review of DOE’s beryllium program

Keith introduced the draft advice requesting an independent review of DOE’s beryllium program. Keith said the advice was in response to a promised independent review that has not yet occurred. Keith said Inés Triay, DOE-EM assistant secretary, committed to a review of past recommendations and commitments, and separately DOE committed to the affected beryllium workers to have an independent review of the program. DOE recently indicated it planned to replace the promised independent review with one conducted by personnel from the Office of Health, Safety and Security (HSS), the independent assessment arm of DOE-HQ. Keith said the advice addresses how that is not what was originally promised, or what the Board believes to be the right action.

Keith clarified that this advice is separate from the letter regarding DOE’s response to past beryllium advice, *RE: DOE’s Response to HAB Beryllium Advice #217 and #218*.

Agency perspective

Doug Shoop, DOE-RL, provided some background on beryllium protection and programs. When the Occupational Health and Safety Act (OSHA) was enacted, OSHA agents went to different industries and agencies and developed consensus standards. OSHA helped DOE develop beryllium exposure standards. In

the late 1990s, DOE completed various studies that showed that the OSHA beryllium standard may not be protective of human health. Doug said OSHA's process for changing the standard was fairly slow, so DOE took the initiative to develop its own standards. This standard is more restrictive. DOE sites developed chronic beryllium disease (CBD) prevention programs. Doug noted that the MSC requires a site-wide beryllium program.

Doug said DOE-RL and DOE-ORP are fully supportive of an independent assessment. He said DOE-ORP and DOE-RL would not be part of it. Doug emphasized that HSS, the independent assessment arm of DOE-HQ, is completely separate, and was the same group that initiated more restrictive standards than OSHA.

Discussion

Dick commented that most people would not consider a review by any branch of DOE to be independent. He asked Doug what he meant by saying DOE-RL and DOE-ORP support an independent review – did he mean an independent review conducted by HSS, the independent arm of DOE, or a review conducted completely by non-DOE employees.

Doug said DOE has an independent assessment function with the ability to have HSS conduct an independent assessment. HSS has the ability to bring in outside experts if needed. Doug said he is not in a position, nor should he be, to tell HSS who to bring as experts. Doug reiterated that HSS is completely independent of DOE-EM; HSS conducts these types of assessments throughout the country.

Steve Pfaff said a scoping meeting for reviewing the beryllium program will be held the week of February 22. This will help decide how to construct the review.

Maynard said the Board's definition of "independent" means outside of DOE.

Ken Niles thought it sounded like DOE was on a different path for an assessment, one that would not satisfy the Board.

Jeff thought the advice should be clear that the Board wants a non-DOE independent component to the beryllium review. He thought the advice should go to the scoping team as well as DOE-ORP, DOE-RL and DOE-HQ.

Gerry said Inés Triay committed to having a review, and the Beryllium Awareness group was promised an independent review with external experts nominated by the affected workers. Jeff asked for confirmation of that promise. Gerry described emails that illustrate such a promise. Maynard suggested adding a qualifier to indicate that the Board understands that such a promise was made.

Steve Pfaff suggested not getting hung up on past commitments – if the Board wants affected workers to participate in the independent reviewer selection, it should simply say so. Todd agreed and added that the language should also be revised to reflect that DOE is commissioning and paying for the review.

Gerry thought the scoping process should be totally independent as well.

Tom thought HSS does not have a sufficient amount of political clout to be effective. He said he was unimpressed that DOE calls their proposed review independent. He said Hanford has a long and sad history of beryllium exposure and disease. Tom reiterated that a non-DOE employee independent review is important and should be included in the advice.

Margery thought it was important to say that DOE's current plan for an independent review and for scoping that review does not meet the Board's definition of independent. She thought it was fine if HSS conducts a review as well, in addition to a non-DOE employee review.

Doug Mercer thought the workers would not respond to a review conducted by DOE. He also thought the advice should refer to the broken promise. He asked the Board to consider if an independent review would better achieve DOE's goal than a review by HSS.

Betty said perception is everything – if HSS goes through this whole process and the public and workers do not perceive it as independent, it is worthless.

Dick thought affected workers might not have the knowledge base to select experts to participate in an independent review. Karen thought they would have enough expertise and need to be active participants in the process to make it stronger.

Mike said it is difficult to hear DOE say they care about the program when there has been a ten percent increase in CBD since the last piece of advice was issued. He said something needs to be done now.

The Board decided to clarify that an independent review should be conducted by “non-DOE employees.” It also added that independent reviewers should be selected with the participation of the beryllium affected workers, as the Board understood was previously promised. The Board also revised the advice to state that the review will be essential to ensuring the adequacy of the Hanford Site’s beryllium program.

The Board thanked DOE for listening and participating in the discussion.

The advice was adopted.

Board letter regarding DOE’s response to HAB beryllium advice #217 and #218

The Board reviewed the draft letter that was prepared in response to DOE’s response to Advice #217 and #218 regarding the beryllium program at Hanford.

Gerry proposed bringing forward some concepts from the background of the advice (that the Board just adopted) for consistency and emphasis, including language that states that DOE has not implemented recommendations to which it agreed from prior independent reviews.

Mike thought that would be fine because they were not new concepts and help keep the letter consistent with advice.

Dick and Emmett thought if the letter was written because of a specific response to specific advice, it should not bring forward ideas or concepts that were not discussed in that specific advice and response. They did not disagree with Gerry’s point, but thought the letter should stay focused on DOE’s lack of response to their previous advice (#217 and #218).

The Board debated the issue and decided to include Gerry’s recommendations in the letter.

Discussion about long-term stewardship at Hanford

Bob Suyama introduced the discussion about long-term stewardship at Hanford. He said the Board has been extremely busy this year with urgent issues, such as the TC&WM EIS, but they felt the need to tackle the important issue of long-term stewardship. He said these urgent issues are only the “tip of the iceberg” when looking at how Hanford will look when cleanup is complete.

Bob introduced Jay Pendergrass with the Environmental Law Institute and Tim Brincefield with EPA (both participating by phone) who prepared some information to share with the Board about long-term stewardship and institutional controls. Tim has 24 years of Superfund experience, including many years as a site and policy manager. He represents EPA Region 10 in policy matters at a national level and can share his experiences with institutional controls at other sites. Jay has more than 30 years of experience in environmental law and is a nationally recognized expert on instituting mechanisms to protect health at contaminated sites. Bob said Jay’s solutions have been adopted by the U.S. Department of Defense, DOE, EPA and most states. Bob said Jay could describe legal situations that may affect what the Board and Hanford are trying to accomplish. Jay also has knowledge about funding and cost estimating for long-term controls.

Tim Brincefield

Tim introduced himself and remarked that he did not have a formal presentation but would like to share some of his experiences with the Board. He said EPA and other agencies have learned a lot about long-term stewardship and institutional controls over the past decades. He said they are doing a better job of planning, implementing and monitoring institutional controls. He said many earlier remedy decisions, including institutional controls, were not well thought out, evaluated, designed, or implemented, so there have been both large and small institutional control problems over the years. EPA and others have focused on how to improve and deal with shortcomings from the past.

Tim said the initial paradigm in CERCLA was the thought that contaminants could be completely addressed. He said they discovered the cost and physical ability to do so was far harder than anticipated. Institutional controls have a role to play and are an important component of many remedies. Tim said at Hanford, it is critical to evaluate institutional controls just as thoroughly as any other component of a remedy. Objectives and how they will be met, mechanisms for implementing institutional controls, monitoring and enforcement need to be evaluated. Tim said the plan for Hanford institutional controls is well-documented, updatable and enforceable should DOE become noncompliant. He noted that another area of improvement is looking at institutional controls in the context of CERCLA Five Year Reviews. He said that is a good time to evaluate the status of controls, their compliance and how they will meet objectives over time.

Tim commented that EPA, other agencies and Hanford are doing better. He noted that no agencies have experience with institutional controls beyond 50 years, and most experience in the field is from the past 20 years – ten of which were “learning years.” Looking forward, Tim said they need to continue to look at mechanisms, long-term monitoring and scheduled reviews very carefully. Tim commented that there is a reasonable expectation that the federal government will be able to fulfill its responsibilities over the long-term.

Tim thought EPA has tried to better understand the true costs of institutional controls. The database of long-term stewardship costs is not extensive, and many of those costs are subsumed in other costs of remedial action. There is not a wealth of detailed cost experience to refine estimates going forward. Tim said one example is at the Bunker Hill Site in Coeur d’ Alene, Idaho. He said there is a very robust and extensive long-term stewardship plan that has been operating for a number of years, and will continue to operate. It is managed by the local health district and deals largely with soils remaining on residential properties. The top level of soil was excavated but contaminants were left at depth, which requires management. Tim said it has been effective, but not inexpensive – he thought the cost of long-term stewardship will prove greater over time than estimated.

Tim said the standard is to do as much active cleanup as reasonably achievable and limit the use of institutional controls to the extent possible. At Hanford, institutional controls are unavoidable. Tim said one positive example of cost estimating was at the 200 Area where the estimated time to achieve cleanup goals for groundwater was 125 years for the selected alternative, and the team appropriately used a cost estimate over that period. Tim recommended that going forward, federal facilities should perform a non-discounted cost of cash dollars over time to look at out-years in a non-discounted way. Tim thought it would be valuable to show the non-discounted costs against present dollars.

In closing, Tim commented that institutional controls are much better now than they used to be, and Hanford and other sites will have to continue monitoring and reevaluating institutional controls over time.

Jay Pendergrass

Jay appreciated the interest and attention the Board was putting toward institutional controls. He noted that it is important to consider institutional controls holistically, as part of long-term stewardship, which is possibly broader than the definition of institutional controls as defined by EPA. At a minimum, institutional controls are designed to protect human health at contaminated sites and protect constructed remedies from actions that might harm or lead to breaches of the remedy. Jay said he sees long-term stewardship more broadly, including components such as financing and review and reevaluation processes. He thought the definition of institutional controls should include such components; avoiding compartmentalization is something they have learned over the past 50 years.

Jay said the main message he typically tries to convey is institutional controls are active, requiring regular and periodic monitoring, review and reevaluation; they are not the kinds of tools that can be left to operate on their own for an extended period of time. Human institutions are affected by the behavior of people, which means it has to be dynamic.

Jay said Washington has adopted the Uniform Environmental Code, which is state of the art in terms of property-based institutional controls. He said this is somewhat less critical because the federal government will continue to own and monitor the land. Jay agreed with Tim that EPA and DOE have given attention to figuring out how to make long-term stewardship programs work better, and learn from lessons in the past. He thought the practice of figuring out the costs of institutional controls is far from where they want it to be, especially when it comes to assessing costs to local governments. Local governments will be significantly involved in long-term stewardship activities, and the division of responsibility and how to pay for controls has not always been clearly worked out. Jay said the differential costs that is attributable to long-term stewardship activities varies significantly from communities that only have a few Brownfields to communities like Coeur d' Alene or the Tri-Cities where stewardship will be a major enterprise.

Jay commented that DOE, EPA and the states have also learned that long-term stewardship programs work best when they are "layered" with fail safes and redundancies to provide multiple ways to protect people. This includes having multiple tools and institutions at varied levels of government to help prevent things from falling through the cracks.

Tim agreed and added that layering controls and information systems works well. He said tools such as evaluations initiated in an RI/FS, a ROD, implementation, and Five Year Reviews help maintain responsibility for maintenances and monitoring of properties, even if ownership changes. Tim said it clearly does not work to figure out institutional controls down the road. In his experience, poor planning leads to difficult or no implementation, particularly on the private side. Tim reiterated that active management and dynamic attention are needed to make institutional controls work.

Jay added that very few states have been able to allocate funds and staff to implementing and monitoring institutional controls. He said it happens sometimes, but not always on a national basis. Jay thought coordination between the federal government and states could improve, but that coordination is in better shape than coordination with local governments. Tim agreed with that general concern.

Agency perspective

DOE

Nick Ceto, DOE-RL, said he did not disagree with the Tim and Jay's comments. He was involved with the Bunker Hill system development and observed that controls are best when they are built from the bottom-up. He thought the HAB, tribes and local community can significantly help DOE to analyze what makes sense for Hanford and its varied communities. Nick said institutional controls do not replace cleanup, but they will be part of making sure cleanup works over the long-term. Institutional controls complement cleanup; they do not replace cleanup.

Ecology

Jane agreed with Jay and Tim's remarks. She said institutional controls are not a substitute for good and thorough cleanup, but they are a partner. They are allowed and used in all of Ecology's regulatory work to address many issues at Hanford. The state of Washington has experience with controls in the private sector, such as at landfills and local dumps, and has worked on financial systems for long-term care and maintenance. Jane agreed with the statements made about good cost estimates and data systems. She added that institutional memory is key. States do not often have the resources to dedicate someone to long-term monitoring. Jane said the HAB can be of great assistance both with institutional memory and working with local governments.

Discussion

Ken Niles said the Board has been concerned about cost comparisons at many projects at Hanford, and feels the true costs of institutional controls versus removing, treating and disposing of waste have not been adequately compared. He said when costs are compared, including the discounting of dollars, yearly

monitoring costs, the cost of replacing a failed or damaged cap, and the cost of loss of use of resources, the Board does not feel they are adequately judged or a fair representation for comparison. Tim agreed that there is more to be done on fully capturing the costs of institutional controls.

Betty commented that sometimes actions intended to be interim end up becoming permanent institutional controls. She asked if a control fails or if new technology emerges, do some institutional controls preclude the opportunity for change or improvement. Tim said the CERCLA Five-Year Review is important to ensure that controls are operating as intended and ensuring the remedy remains protective. The review also provides the opportunity to see if more can be done. He said they do not want to preclude the opportunity for more comprehensive cleanup later. Jay said most of the time, institutional controls are not preclusive, and especially not in cases where the federal government maintains control of a site. He said the CERCLA Five-Year Review is an appropriate method for review and reevaluation. Institutional controls should be flexible enough to revise in the future. Jay added that property law in Washington is flexible enough to be revisited with Ecology as part of the process.

Jay noted that it is important to maintain records even when areas are determined to be not actionable. Standards are always reevaluated and oftentimes made more stringent.

Doug Mercer asked about a scenario where an institutional control allows commercial development, but later it is shown that the remedy is not effective. He asked how a government can make a reversal and go back to a lower use status (e.g. if a building is there). Tim said the CERCLA Five-Year Review process is still the best mechanism for evaluation. He said they would deal with something immediately if it poses an immediate threat, but they most likely would not tear down a building if a threat was not immediate. Instead, they would most likely put in place controls that would deal with contamination under the building at the end of the buildings useful life, for example.

Nick added that the agencies select cleanup goals they think are protective, and if something happens they have the option to make them more restrictive or go back and dig up soil. He thought the example Doug provided would rarely occur.

Dick said the HAB has long been concerned about properly estimating future costs of institutional controls. He said using discounted costs does not make sense at Hanford. He said the contractors told him they were directed by EPA regulations to do so, and EPA said the Office of Management and Budget directed them to do so. Dick asked if there will be any changes made to this direction in the future. Tim said EPA guidance does require calculating and comparing discounted costs, and he expected that to continue. There is a provision in the cost guidance for a non-discounted cost analysis to be developed to help provide an additional basis for evaluation. Tim thought it was a useful tool to include and recommended it for future decisions.

Jay said EPA and OMB guidance attempts to ensure sites compare “apples to apples.” The intent is to have an idea of the full cost over a period of time for each item. Jay commented it does seem to create an apples-to-apples situation out of an apples-to-oranges situation, but that is its intent. He added that it seems very appropriate for EPA, state and local governments to request for planning purposes a determination of annual and periodic costs in a non-discounted fashion.

Norma Jean commented that long-term at Hanford is very long. Will there be a good long range plan that can be managed effectively by some government agency into the future? Jay said DOE did some creative studies to identify how to provide warnings to people in the far-off future, such as 1,000 or 10,000 years out. He said it was somewhat fanciful, but it was serious in that sites like Hanford need to consider potential changes in language, loss of existing government systems and more. There is no reason to believe the United States of America will exist in 1,000 years, let alone maintaining the same kinds of electronic records systems. Jay noted that adaptive management is very important, and requires people from all levels of government and ensuring the public living near the site has a direct interest in maintaining a solid level of knowledge. Nick said they do not pretend to have all the answers, but do recognize the importance of such planning. DOE established the Office of Legacy Management in recognition of the need to be good stewards of its properties into the future.

Pam said local governments maintain knowledge of land through parcel records, and review parcel information when considering development requests. She said if land remains in federal ownership, local governments have no role in regulating or maintaining knowledge about the land. She asked Tim to discuss the EPA information mapping system and Jay to share examples of both institutional controls working and not working, and why.

Tim said each EPA region has been building information mapping systems for their sites. EPA is working with an outside contractor on a more interactive system that they hope to complete this year. Tim said they think that system will be robust and useful, allowing people to access information online about where contaminants are left in place and their associated controls. He added that local government has a role in being involved early and staying involved; even if ownership is not transferred, local governments need to be knowledgeable about properties in their community.

Jay agreed that the relationship is different when local governments do not own the land under control, but thought they do play a role. He thought that is the situation where he has seen more failures because of poor communication between local governments and states about what is going on at a site. He said the state either does not provide full information about contaminants at a site, or they only give it to one agency that does not have land use authority, or an agency makes an inappropriate decision about land use. Jay thought EPA mapping was a promising development that the private sector picked up on, and is showing their relative nimbleness in developing such a tool.

Doug Mercer said given that there is a need to understand the effectiveness of institutional controls and how to respond to threats, who will do the research to fill this need and pay for it? Tim said EPA has been paying more attention to this over the past ten years. There is an ongoing process to better understand sites with institutional controls, their purpose and how to track information. He thought EPA is doing a better job of sharing information with other agencies. Tim added that EPA continues to fund development and maintenance of institutional control tracking systems and supports states to improve their own systems. Jay thought it was great EPA is doing some research internally, but there is still a role for external involvement. He did not think there was a very large effort going on now, but noted there is some interest by state solid waste management officials for adapting cost estimate spreadsheets for states.

Doug asked if the costs of institutional controls could be frontloaded. He commented that investing in research could constitute a legitimate claim for more upfront costs, so there is funding to evaluate institutional controls. Jay said that makes sense but it comes down to funding. Pam noted that sometimes trust funds are set up for events related to institutional controls, but states are at times not responsible and use the funds for other unrelated needs.

Maynard asked if Tim or Jay saw a need for an improved RI/FS process to require consideration of long-term stewardship needs. Tim did not think there is a need for additional code. Jay agreed and said the regulations are as clear as they can be, they just need to be implemented.

Rob said the federal government should bear all costs for institutional controls, not the state. He thought institutional controls are a way of taking responsibility away from the contaminating organization and making another party responsible. Rob said Rocky Flats is having issues with their institutional controls, with gaps in monitoring traced back to equipment failures and lack of funding to fix equipment. Rob asked if it will be necessary for the HAB to continue to live on through the lifetime of institutional controls in order to represent communities in the region. Rob also asked if institutional controls are appropriate for Hanford given the volume of waste and equipment that will be left behind, unlike Rocky Flats.

Jay said it is critical to continue to involve the public and use institutions, whether or not it is the HAB in particular, to continue to be a useful part of long-term stewardship. He thought institutional controls are appropriate and essential wherever contamination is left behind. They take on different forms depending on the status of the contamination. Jay commented that it is interesting to think about institutional controls maybe being even more important at a site like Rocky Flats where it is not obvious that the site is contaminated. Tim agreed.

Rob said he meant if long-term stewardship is necessary and if it can be empowered. Jay said no site should fall in the trap of thinking long-term stewardship is passive. There is always a need for active management.

Tim commented that he puts a high level of trust in the federal government, but there is definite value and importance for continuing public involvement and oversight. He said it is necessary to facilitate that without devolving the responsibility for contracting and active management to the public.

Keith asked what kind of training will be needed for implementing and maintaining institutional controls. Are there any principles? Tim said there is always the health and safety aspect of training, but he encouraged the need to train for communications and information management and retention. He said training will be necessary to keep the right organizations involved to ensure continued responsibility and to avoid breakdowns. At Hanford, DOE will have to pay attention to the changes in the use of the site, the organizations and community to ensure the plan evolves to deal with changing circumstances. Jay added that specific training will come after identifying the principles of active management, adaptation and maintenance. All management levels at multiple organizations will need to be trained to recognize issues and maintain records; other people will need to be trained about legal and technical aspects.

Floyd said he was struck by the short-term nature of institutional control discussions. He said the TC&WM EIS indicates that there will be significant groundwater contamination for 4,000 years. Floyd provided examples of events from 4,000 years ago to illustrate how different the world will be 4,000 years from now. He thought it was ridiculous to talk about institutional controls hundreds of thousands of years from now. He said modern laws are not designed nor capable to deal with such timeframes.

Tim did not think institutional controls are a smoke screen or are used to hide anything. He said they acknowledge the challenges and advocate doing the most cleanup technically possible. Tim did not think it was technologically nor financially possible to address every molecule of contamination on a site like Hanford. Jay added that people understand that there is no solution beyond one or two generations that is of absolute certainty.

Mike said he was glad the CERCLA Five-Year Review allows consideration of new technologies, but he was concerned about the vadose zone. He said the stewardship of the vadose zone seems too passive. He said an active plan is needed to resolve risk at the vadose zone if no technology exists at the time. Mike said the vadose zone poses the biggest long-term risk. He asked if it was possible to include a mandatory review of new technologies that could resolve contamination in the vadose zone as part of the CERCLA Five-Year Review.

Tim said the CERCLA Five-Year Review does not require reviewing long-term stewardship and institutional controls; it focuses on the protectiveness of the remedy. If there is a problem with the remedy, the review may include the evaluation of additional remediation to ensure protectiveness. Nick added that there are opportunities to consciously evaluate remedies, long-term stewardship and protectiveness. He said DOE does not pretend to have all the answers now, but they would be smart to pursue new technologies that address long-term risk in order to cut down on their subsequent responsibilities.

Pam commented that the Rocky Flats advisory board was dissolved but they have since formed the Rocky Flats Stewardship Council, consisting of local governments. She believed that it was established by Congress. Paige said it was critical that each member of the Board individually and collectively find a way to get young people interested and involved.

Doug Mercer asked what the Board can do to advance long-term stewardship planning and implementation at Hanford and nationally. He thought there were three potential areas of advice: 1) asking for full cost accounting, 2) asking the agencies to establish information management and training programs that are integrated with existing tracking mechanisms at the state and local level, and 3) research the effectiveness of institutional controls. Susan Leckband asked Doug to work with RAP to develop advice.

Bob Suyama thanked Jay and Tim for their time and participation. Bob said they are working with Boyd Hathaway, DOE-RL, who is developing an update of DOE's long-term stewardship plan. A long-term stewardship Committee of the Whole meeting is being planned for March 3.

TPA agency update

DOE-ORP

Steve gave an overview of the DOE-ORP budget requests. The FY 2010 appropriation for tank farms was \$408 million. DOE-ORP's request for tank farms in FY 2011 is \$418 million. The FY 2011 request for WTP is \$740 million. Steve noted that ramped up construction over time is typically necessary to meet schedules. Steve also noted that there used to be more control points for WTP that made it difficult to move money around within the program; now there are fewer control points, which provides for greater flexibility.

DOE-ORP is holding public hearings around the region on the draft TC&WM EIS. The public comment period is October 30, 2009 – March 19, 2010. A schedule of regional public hearings was provided. Steve encouraged Board members and their constituents to participate. The TPA agencies will review comments and assess if modifications need to be made.

The WTP project has logged 1 million hours without a recordable work injury and is at 2.9 million hours without a lost-time injury. Steve said the reportable case rate is 26% below the 2008 rate and 60% below general industry rates. Steve showed some photographs of WTP construction, including rebar wall construction, high-level waste melters, and the low-activity waste vitrification facility.

Steve provided an ARRA status update. DOE-ORP has completed 187 prime direct hires and spent \$44.8 million as of December 2009. 77% of the contract release dollars went to small businesses. Significant contract milestones were completed in the last quarter of 2009 including:

- 242-A evaporator condenser room decontamination
- SY-Farm transfer line upgrades (90% design)
- Replaced 19 pit drain seals

Steve provided some tank waste retrieval updates and showed many photographs:

- The proposed consent decree requires all tank retrievals in C Farm be complete by 2014. Retrieval at C-104 has begun. C-111 will be the thirteenth single-shell tank retrieved.
- Steve described sleeving surrounding risers and showed a video of sluicing at C-104. It is a closed circuit system, meaning they use liquid from a contaminated double-shell tank to sluice C-104, so no new liquid is contaminated. There is about eight feet of sludge at the bottom of the tank that is suspended by hitting it with a direct water stream. This modified sluicing is effective at removing 85-90% of contamination. Because that does not meet TPA requirements, DOE is developing the mobile arm retrieval system (MARS). They will still use modified sluicing because it is cost effective and useful for removing most of the waste. Steve said they will use MARS at C-107 sometime in the 2011 timeframe.
- Steve said workers have complained about tank vapors at C-104 so work has been shut down. WRPS met with workers and will keep operations shut down until they figure out what caused lung trouble in one worker. Steve said they are looking at methods to minimize exposures, such as using respirators. Industrial hygiene results have not shown exposures above the limits, so using respirators would be above and beyond the requirements.

DOE-RL

Doug Shoop provided an update from DOE-RL. Throughout the presentation, he quizzed the Board with true or false statements about cleanup at Hanford, such as “a cone penetrometer is hydraulically pushed into the ground at up to 20,000 pounds of pressure” (fiction – 40,000 pounds of pressure). Doug also showed many photographs of work activities on site.

Doug said they are progressing well in the River Corridor to complete cleanup there by 2015, and switch their focus to cleanup on the Central Plateau. DOE-RL wants to have TPA milestones in place for the Central Plateau; Doug briefly reviewed the CP Strategy.

Doug reviewed some cleanup activities at various waste sites and areas (some were reviewed more thoroughly than others):

- 618-10 burial ground

- Good progress using ARRA funding. Cone penetrometers are being used around vertical pipe units to collect data, perform isotopic analysis and determine if and how much radiation is there.
- 327 building
 - Removing debris and de-energizing in preparation for removing hot cells. Cells will be removed by crane, transferred to boxes, grouted and disposed of in a disposal facility.
- 324 cell vacuuming
 - Steve showed a video of vacuum hosing and remote work using cameras and hoists. He said it takes a long time and there have been some surprises.
- Other 300 Area demolition
 - 3718 is demolished and crews are working on 338 panel removal.
- Archaeological dig
 - At a waste site by the old Hanford Town Site, workers removed overburden material and sorted for artifacts. Many were collected and logged and will help provide information about the Hanford Town Site. Remediation of the waste site is complete.
- B/C Control Area
 - Crews are removing soil for transport to ERDF.
- B 27
 - Excavation is complete on the B 27 site and confirmation samples show no chromium remains. The site is being backfilled and will be revegetated.
- 100-C-7
 - Dichromium contamination could have contributed to hexavalent chromium contamination. Crews are building a large wall to contain the plume. A critical water line used for transporting water from the river to nuclear facilities on the Central Plateau is nearby; construction is being done carefully to prevent damage to the water line.
- ERDF super cell 9
 - Excavation is complete and crews are ready to start work on liners,
- ERDF access roads
 - Access roads are being built using ARRA funding.
- ERDF scale
 - There are new scales at ERDF; Doug noted they are building a new fuel facility for trucks.
- MASF knockout post testing
- 118-K waste site
- K West and East demolition
- K East soil remediation
 - Crews will dig 15 feet below the floor of the K East Basin, or 35 feet below ground surface.
- 100 N demolition
 - Removed the “golfball” structure. Spray fixative was used to prevent radiological releases.
- 100 D waste site remediation
 - Anticipate completing in March, ahead of the TPA milestone.
- 100 D water tower
- Groundwater wells
- PFP de-inventory
 - PFP is no longer a protected area.
- PFP glove boxes
 - Glove boxes are grouted and sent to ERDF.
- N, P and R areas
- U Plant
 - Substantial work, including preventing exposure to radionuclides that could be in the building. Tank 30 has higher levels of radiation than anticipated, will have to move it to the Central Plateau.
- TRU waste retrieval
 - There was a large plume release; the contractor backed away and put work on hold. They expect it was a compressed gas cylinder.

- Arid Lands Ecology Reserve (ALE)
- ZP-1 site
 - Crews are drilling many wells.

Steve reviewed the congressional budget request and ARRA funding. The president's budget request for FY 2011 was favorable at \$1.041 billion. Steve said this in conjunction with ARRA funding will keep cleanup aggressively moving forward.

Steve encouraged the Board to plan a site tour in June.

Ecology

Jane said Ecology has a new director, Ted Sturdevant, who will come meet the Board in the near future. Ecology is a cooperating agency for the TC&WM EIS and is currently reviewing the draft. Focus sheets are available that give Ecology's opinion on the review of the issues and their concerns. She encouraged the Board to let them know if they find those helpful. Jane said Ecology is also working with the other TPA agencies on Central Plateau negotiations and will review comments and release a response to comments at some point during the process.

EPA

Dennis said many people from EPA are reviewing the TC&WM EIS and will make their comments available to the Board. Dennis agreed that the vadose zone will require a lot of attention over the next 15 years and described it as the "new frontier." He thought the TC&WM EIS illuminated the fact that the TPA agencies need to learn how to deal with it.

Dennis said they are working hard on River Corridor cleanup, including 200-ZP-1. He noted EPA has a new regional administrator, Dennis McLaren.

Discussion

Due to time constraints and the need to maintain a quorum for advice adoption, the Board decided to limit their questions to the agencies.

Gerry said there was a recent conference call with the TPA agencies and EIC. He said the agencies said they wanted to sign the TPA change packager for the Outer Area in a few days, and asked EIC if it was appropriate to forgo a public comment period. Gerry said it was an inappropriate request and forum; it should have been publicly vetted. He felt it was not transparent. Doug said he was glad to discuss that further with Gerry; he thought it was a miscommunication. Dennis offered to review it, too.

Larry commented that there are many activities to complete between when the analytical lab is built and when it needs to be operational, such as equipment purchase and Standard Operating Procedure development. Larry also thought the budget was small for such activities. Steve said the spend forecast for the lab in FY 2011 is \$2.6 million and they have flexibility to move money between facilities. There will still be substantial construction activities at the lab in FY 2011.

Ken Niles asked if DOE was confident in leak detection when spraying at C-104. Steve said dry wells are installed with instruments to detect leaks and radioactivity. He said C-104 has no indication of leakage. There are also high-resistivity systems to detect changes in conductivity around the tank to detect leaks. A hose-in-hose transfer system helps prevent leaks as well.

Jeff said he was concerned that the TPA agencies are not considering entering into a dialogue with those who submitted public comment. He said the agencies have been negotiating the consent decree for years behind closed doors and the public has not been able to participate until recently. He said he would not be bothered if public comment was reviewed, considered, and used or disposed of – if that is the commitment from the beginning. He said it was important for the agencies to ensure that they understand comments received, and should get clarification from commentors if needed. Jeff said it is important for the agencies

to give the public a chance to be heard, and the only way to do that is to listen fairly to comments – and that is only achievable if you ask the public if you properly understood their comments.

Jane said they did not mean they would not consider comments received or that they would not respond. It was a question of will the agencies meet with commentors to review the comments received. Jeff said a dialogue does not necessarily mean a meeting. He said he was disturbed that the response to comments will come out after the consent decree is signed and entered in court, preventing a full dialogue.

Pam noted that the Hanford Communities had a good dialogue with the attorney general's office. She felt their advice was being considered. Jeff did not consider the Hanford Communities the general public.

Gerry said review and response to comments needs to be more iterative. The public wants a more complete dialogue.

Liz asked how many people were affected by the vapor release at C-104. Steve said about seven to eight people had scratchy throats; about five to seven people went to Kadlec Hospital to get checked out. Liz asked if there were other complaints besides smelling vapors. Steve said he had heard about the scratchy throats, but was not in direct contact with the individual workers. Liz asked how many workers DOE-ORP is concerned about. Steve said they stopped work because there was one worker a doctor was concerned about. They are not proceeding with retrieval until there is closure on the issue.

Public comment

Craig Hall introduced himself and said he was an affected beryllium worker. He was diagnosed with CBD in 2006. He asked the Board to request an independent investigation into the beryllium program at Hanford. He said 34 people have CBD and 93 people have tested double positive, which means they will develop CBD. Craig said DOE has only tested 25-30% of Hanford workers. He said over the past ten years, he has been involved with the Joint Hanford Council Report. The first prevention plan was released in 2002 and they just initiated another one in 2010. Craig asked why DOE would do a second plan if the first one had been effective. And if it was not effective, why did DOE not look into why it was not working? Craig wrote a letter to Inés Triay and was told DOE would conduct an independent evaluation. He said a review by HSS was not appropriate. Craig said he wants DOE to find out why the program is not working. Craig has been involved with many efforts with DOE, and often the affected people are not involved with decision-making. He said it does not sit well with the people affected.

Craig said he no longer works at Hanford. He went through the beryllium rule and was sent home because he was too sick to work. He was the third person to go through that process; there are five total so far. He said he wants to help the Board get DOE to do an independent investigation. Craig said he does not want anyone else to get CBD.

Board business

Committee leadership selection

Committee leadership selection will take place by the March committee meetings or by conference call. Committee leadership will be formally announced at the April Board meeting.

Committee lists

Susan Hayman asked Board members to fill out a form to confirm what committees they are on, even if they are not changing committees. It is to confirm the committee lists and latest contact information. Board members can be primary members on two committees; everyone can be on PIC without it counting toward the two committee limit.

Annual report

Typically, the HAB annual report is available at the February Board meeting. Review cycles are taking longer because of pressing Board business. Assuming all Board leadership and agency comments are

received in time to meet the printing schedule, the annual report will be available at the March Board meeting.

Self-evaluation

The annual Board self-evaluation will be conducted by or at the April Board meeting. EnviroIssues will send links to an online survey. The Board will review responses in April.

March 4 Board meeting

The special March 4 Board meeting is intended to specifically adopt advice on the draft TC&WM EIS. Susan Hayman said there will be a discussion in the morning and presentation from the Board's independent reviewer, K.D. Auclair and Associates. The afternoon will be dedicated to advice finalization and adoption. There may be a Wednesday evening "refresher" for anyone who needs more information about the TC&WM EIS. There is a DOE public meeting about a mercury EIS that may be in conflict, so the TC&WM EIS session is only tentative. EnviroIssues will coordinate with EIC.

TC&WM EIS Committee of the Whole

The Committee of the Whole meeting on February 17 is planned to hear an overview from DOE-ORP and discuss the draft the TC&WM EIS, and hear a preliminary report from the independent reviewer. Cathy said Board members who have been involved with their own review of the draft will have the opportunity to share their own presentation and perspective. It will be a full day meeting. The final report from the independent reviewer will be available at the March 4 Board meeting.

April Board meeting

Susan Hayman, EnviroIssues, said some Board members have expressed concern about the date of the April Board meeting falling on a religious holiday (April 1-2). Three options were available: Move the meeting to March 31-April 1; move the meeting to the following week (April 8-9); or keep it as scheduled. Steve Pfaff noted that he would not be able to represent DOE-ORP for the currently scheduled meeting; he could attend April 8-9. Board members indicated their preference on a matrix at the back table, but did not reach a decision and did not select the date for the April meeting. EnviroIssues will coordinate the date selection process over email within the next week; the Board will make a decision within a week. PIC will meet the day before the Board meeting, regardless of the date.

April Board meeting topics

The Board identified potential topics and activities for the April Board meeting:

- New Board member orientation
- System Plan Revision 4 and 5
- CP Strategy
- Central Plateau negotiations and change packages (potential advice)
- PIC strategic public involvement planning, Step 3
- FY 2012 budget (potential advice)

Liz offered to plan a celebration for new members.

Margery commented that it would probably be better to schedule Board actions in the mornings since people tend to leave before the meeting is over.

Susan Leckband thanked Board members for their participation and adjourned the meeting.

Attendees

HAB MEMBERS AND ALTERNATES

Barry Beyeler, Member	Maynard Plahuta, Member	Floyd Hodges, Alternate
Gabe Bohnee, Member	Gerald Pollet, Member	Steve Hudson, Alternate
Tom Carpenter, Member	Howard Putter, Member	Mike Korenko, Alternate
Rob Davis, Member	Keith Smith, Member	Larry Lockrem, Alternate
Earl Fordham, Member	Bob Suyama, Member	Liz Mattson, Alternate
Norma Jean Germond, Member	Margery Swint, Member	Emmett Moore, Alternate
Harold Heacock, Member	Gene Van Liew, Member	Nancy Murray, Alternate
Becky Holland, Member		Wade Riggsbee, Alternate
Paige Knight, Member	Al Boldt, Alternate	Dave Rowland, Alternate
Pam Larsen, Member	Karen Bowman, Alternate	Dick Smith, Alternate
Susan Leckband, Member	Shelley Cimon, Alternate	Betty Tabbutt, Alternate
Jeff Luke, Member	Gerry Dagle, Alternate	Art Tackett, Alternate
Todd Martin, Member	Sam Dechter, Alternate	Steve White, Alternate
Doug Mercer, Member	Ken Gasper, Alternate	
Ken Niles, Member	Laura Hanses, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Paula Call, DOE-RL	Madeleine Brown, Ecology	Sonya Johnson, CHPRC
Nick Ceto, DOE-RL	Jane Hedges, Ecology	Janice Williams, CHPRC
Jeff Frey, DOE-RL	John Price, Ecology	
Matt McCormick, DOE-RL	Ron Skinnerland, Ecology	Sharon Braswell, MSA
John Mong, DOE-RL	Ginger Wireman, Ecology, CCAN	J.M. Dennison, MSA
John Neath, DOE-RL		Frank Figueroa, MSA
Doug Shoop, DOE-RL	Craig Cameron, EPA	Rob Gizzo, MSA
	Dennis Faulk, EPA	Debra Hovley, MSA
Jonathan Dowell, DOE-ORP	Larry Gadbois, EPA	Barb Wise, MSA
Chris Kemp, DOE-ORP	Robin Paul, EPA	Tammie Gilley, EnviroIssues
Steve Pfaff, DOE-ORP	Tim Brincefield, EPA (phone)	Susan Hayman, EnviroIssues
		Hillary Johnson, EnviroIssues
Mike Priddy, WDOH		Cathy McCague, EnviroIssues
	Janice Parthree, PNNL	Emily Neff, EnviroIssues
	Frank Russo, Bechtel	
	Peter Bengston, WCH	

MEMBERS OF THE PUBLIC

David P. Davis, Central Washington Building Trades	Annette Cary, Tri-City Herald	Kristi Paulus, KVEW-TV
B.C. Smith, Central Washington Building Trades	Jeff Serres, Columbia Riverkeeper	Sarah Trowbridge
Jerry Peltier	Craig Hall, Beryllium Affected Workers	Chuck McClellan
Jay Pendergrass, Environmental Law Institute (phone)		