FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD February 5-6, 2009 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 four pieces of advice concerning the 1) public comment period for the Tank Closure and Waste Management Environmental Impact Statement, 2) Fiscal Year 2010 budget and funding priorities 3) availability of a deep geologic repository space, and 4) systems criteria for reducing risks from Hanford tank waste. The Board also signed a letter from the U.S. Department of Energy – Environmental Management Site Specific Advisory Board, and sent a letter to the Tri-Party Agreement (TPA) agencies regarding institutional controls and long-term stewardship.

Board Business

The Board conducted their annual self-evaluation, held new member orientation and heard committee and agency updates. The Board will have committee calls in February and committees will meet in March.

Stimulus Funding Update

The Board heard an update from the TPA agencies on the economic stimulus plan and Hanford cleanup priorities.

Tri-Party Agreement Tentative Agreement

The Board heard agency updates and learned about the current draft changes to the TPA.

Public comment

No public comment was given.

HANFORD ADVISORY BOARD February 5-6, 2009 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 members of the public.

Three seats were not represented: Local Government (Benton-Franklin Regional Council), Hanford Work Force (Hanford Atomic Metal Trades Council), and one Public-at-Large seat.

Welcome, Introductions and Announcements

Susan welcomed the Board to Kennewick and announced that it was the Board's 15th birthday. Susan said the HAB 2008 Annual Report was available and that new member orientation would be held at noon.

Susan introduced Richard Campbell, acting manager for the U.S. Environmental Protection Agency (EPA) Hanford project office. He is from the Region 4 office in Atlanta and EPA plans to name a permanent manager for the EPA Hanford project office by May. Emy Laija is also new to the EPA Hanford project office.

Susan Hayman, EnviroIssues, announced that Board evaluations were distributed per Board process. The forms will help evaluate Board work, committee work and Board support (EnviroIssues and the Tri-Party Agreement [TPA] agencies) for the previous year. She asked for Board members to return the forms to Tammie Holm, EnviroIssues, by the end of the meeting on Friday.

Due to the full meeting agenda, Susan Hayman asked Board members to limit their comments to one comment or question, plus one follow-up, to make sure everyone has a chance to speak. Additional comments/questions could be made after everyone had a turn to speak.

Annette Carlson, Washington State Department of Ecology (Ecology), announced a 45-day comment period for proposed changes to the Waste Treatment and Immobilization Plant (WTP) Permit (March 2 – April 15). Copies of the 30-day notification were available on the back table.

Larry Lockrem, Non-Union, Non-Management Employees (Hanford Work Force), commended Ecology on its citizen's guide to tank closure that was distributed at the Tank Waste Committee (TWC) meeting. Larry said it is an excellent public document that provides a good picture of work at the tank farms. Copies were available at the Board meeting.

Board meeting goals include:

- Discussing the draft letter from the River and Plateau Committee (RAP) synthesizing HAB principles on institutional controls and long-term stewardship.
- Discussing draft advice from the Public Involvement and Communications Committee (PIC) on the comment period for the draft Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS).
- Discussing draft advice from the Budgets and Contracts Committee (BCC) on the Fiscal Year (FY) 2010 budget and funding priorities.
- Discussing draft advice from the TWC on systems criteria for reducing risks from Hanford tank waste.
- Discussing draft advice from the TWC on the availability of a deep geologic repository space.
- Discussing the draft letter from the U.S. Department of Energy Environmental Management Site Specific Advisory Board (DOE-EM SSAB) to the new DOE-EM secretary (to-be-named).
- Discussing strategic questions/concerns that the Board would like shared at the March DOE-EM SSAB meeting.

• Conducting routine Board business.

The Board meeting was audio-recorded.

Confirm December Meeting Summary Adoption

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

The adopted December summary was confirmed and will be posted on the HAB's website.

Strategic Questions/Concerns to Share at the EM-SSAB Meeting

Susan Leckband announced that she and Shelley Cimon, Public-at-Large and Board national liaison, will attend the EM-SSAB meeting in March at Savannah River. She offered to informally talk with some of the high-level officials that will be in attendance, such as Inés Triay, acting assistant secretary for DOE-EM, about overarching issues Board members feel are important. Board members should send questions and issues to EnviroIssues. Susan will review questions and comments and present them in a context consistent with past Board work and advice.

Committee Reports

Committee chairs introduced themselves and their vice-chairs, and recognized committee members. Susan Leckband encouraged Board members to increase their participation in committees. Committees perform the bulk of the Board's work. Susan also encouraged committees to work together on cross-cutting issues.

RAP

Maynard Plahuta, Benton County (Local Government), said at the January 8 committee meeting, RAP discussed institutional controls and received an informative science and technology briefing. He said it was encouraging to see the integration between the Office of Science, DOE-EM, and Pacific Northwest National Laboratory (PNNL) and other contractors. The committee will continue tracking technology needs. RAP worked with other committees on the draft FY 2010 budget advice and received a good tutorial on plutonium that they may bring forward at the April Board meeting. Maynard said they had another interesting briefing on 100 K Area work. RAP will meet not meet in February, but will meet in March to further discuss institutional controls, Central Plateau pathways, the Environmental Restoration Disposal Facility (ERDF) Record of Decision (ROD) amendment, and performance assessment activities.

TWC

Larry said TWC has focused on reviewing steam reforming technology that is underway at Savannah River. He said DOE will provide more information about radioactive waste disposition and a report on a secondary waste roadmap. At the TWC meeting in March, DOE-ORP will update the committee on WTP progress and sodium management planning.

Larry reviewed some key TWC work and identified issue managers:

- Evaporator issues: Vince Panesko, City of Richland (Local Government)
- Single-shell tank integrity report and workshop: Rob Davis, City of Pasco (Local Government)
- Systems criteria and deep geologic repository: Mike Korenko, Public-at-Large

Larry said TWC has collaborated with other Board committees on cross-cutting issues (e.g. budget).

Pam Larsen, City of Richland (Local Government), noted that past HAB advice asked for more information on how science and technology needs are identified and prioritized. She proposed having a Committee of the Whole meeting in May to plan a workshop to review such issues. She said the Board should look at a low-cost approach.

Health, Safety and Environmental Protection Committee (HSEP)

Keith Smith, Public-at-Large, said HSEP has not been meeting frequently, but heard presentations on site contractor changes and the potential impact to worker health and safety at their meeting in October. Keith said the committee hopes to have a presentation on tank vapors this spring. Keith noted the committee recently worked with the RAP on a presentation about plutonium and its health effects. RAP may bring the presentation to the full Board. Keith said Debra McBaugh, Washington State Department of Health, is leading the effort. Keith said Mike Korenko recently joined HSEP and brings expertise in beryllium and the effects of beryllium exposure.

Keith said HSEP will meet in the spring.

Budgets and Contracts Committee (BCC)

Gerry Pollet, Heart of America Northwest (Regional Environmental/Citizen), said BCC has been busy and expects to be even busier if Congress allocates stimulus plan funding to DOE-EM. He said the Board can play a key role in ensuring funding is prioritized and Hanford's footprint is reduced. Gerry said recent Board advice about FY 2009 will be helpful because it identified priorities for any additional money that may come to Hanford, and the second piece of advice adopted in December again emphasized those recommendations for specific cleanup actions. Gerry said the committee continues to struggle with the lack of a schedule for FY 2011, and will have to be flexible and schedule time with the agencies to review the FY 2011 budget in a short timeframe. There may not be a lot of time for FY 2011 budget workshops. Gerry hoped the committee will see Integrated Priorities Lists (IPLs) from DOE-ORP.

Gerry said BCC will review multi-year workplans with TWC and RAP. Harold Heacock, TRIDEC (Local Business), added that stimulus plan funding levels and conditions are up in the air, but Hanford will have to move forward and identify priorities.

PIC

Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), said PIC was very active in December and held a workshop that identified a long list of issues and activities PIC can undertake. The committee has been examining how best to deal with crucial and timely issues, including:

- Resource Conservation and Recovery Act (RCRA) site-wide permit roll-out
- TC&WM EIS roll-out
- TPA change package public involvement: PIC will review the draft fact sheet and Steve will consolidate and provide comments to DOE
- TPA Community Relations Plan (CRP): PIC will work with the agencies on CRP revision and public involvement process
- TPA Agencies Communications Strategic Plan (CSP): PIC is reviewing and providing updates to the CSP
- State of the Site meetings: PIC is working with DOE, EPA and Ecology on how to reenergize and reshape State of the Site meetings

Steve encouraged the committee and Board members to read the summary of the December PIC workshop. He said it captured discussions and ideas that were generated at the workshop. Steve said PIC will try to have longer meetings or another workshop to allow more time to develop ways to take action on the multitude of public involvement issues.

Executive Issues Committee (EIC)

Susan Leckband said EIC, composed of committee chairs and vice-chairs, discusses big picture issues, committee calendars and Board agendas. She noted the annual Leadership Retreat is coming up in May where Board leadership maps out upcoming issues and works with the agencies to develop a priorities list. She noted that committee members should communicate any issues they want discussed at the Leadership Retreat or at EIC to their committee chair.

National liaison

No national liaison update was given.

DOE-EM SSAB letter

The DOE-EM SSAB drafted a letter welcoming the to-be-named Assistant Secretary for Environmental Management and requesting to continue the positive and collaborative working relationship with DOE-EM. The DOE-EM SSAB will insert a name into the letter when someone is selected for the position.

The Board authorized Susan Leckband to sign the letter as Chair of the HAB.

Institutional Controls and Long-Term Stewardship

Bob Suyama, Public-at-Large, introduced the draft white paper and transmittal letter regarding institutional controls and their impact on long-term stewardship of the Hanford Site. Bob said there are a number of RODs coming up that will set a precedent for how to handle cleanup issues at Hanford. RAP felt it was important to convey the Board's consistency on the issue by compiling past advice into a white paper to send to the TPA agencies. The white paper can serve as a tool for the Board and agencies. RAP also drafted a transmittal letter to accompany the white paper.

Agency perspective

Doug Shoop, DOE-RL, said the white paper is timely and applicable to overall Central Plateau and River Corridor cleanup strategies.

Rich Campbell, EPA, thought it was consistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) by putting cleanup before institutional controls. Dennis Faulk, EPA, thought it was appropriate for the Board to reaffirm and bring forward past work, especially as agency leads change. He thought the white paper was a good companion to the Central Plateau flowchart and other tools.

Jane Hedges, Ecology, agreed that institutional controls should not be a substitute for cleanup. She said Ecology is concerned about DOE's separation of legacy management from cleanup and will work with DOE to make sure the two issues are integrated. She thought the white paper nicely synthesized past advice.

Discussion

Ken Niles, Oregon Department of Energy (State of Oregon), thought the white paper and letter were good, and suggested adding a sentence to clearly say the Board does not support institutional controls as substitution for quality cleanup.

Greg deBruler, Columbia Riverkeeper (Regional Environmental/Citizen), said there is more work and advice to come on institutional controls and long-term stewardship, and thought the letter and white paper should mention this. He said there needs to be an accounting mechanism for long-term stewardship and the cost of oversight now versus the cost in the future. Maynard noted that RAP plans to follow-up with advice in the future.

Todd Martin, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen), suggested combining the letter and white paper, rather than having two pieces that could be separated and lost. The Board agreed to combine the two and make the product a letter.

Susan Leckband said the letter will go the Inés Triay and the TPA agencies, and she will take it to the EM-SSAB meeting.

The letter was adopted.

Fiscal Year (FY) 2010 Budget, Out-Year and Economic Stimulus Funding Priorities

Harold introduced the draft advice on priorities for FY 2010, out-year and economic stimulus budgets. Harold said the advice discusses general priorities for cleanup using material provided in workshops held in the fall. He said there are many "unknowns," including operating FY 2009 on a continuing resolution, the outstanding president's request for FY 2010 and the stimulus bill. Given those unknowns, the advice addresses priorities rather than specifics.

Gary Petersen, TRIDEC (Local Business), provided information about funding and the stimulus bill:

- Continuing resolution: Hanford is operating under a continuing resolution. DOE is spending slightly above the continuing resolution to minimize the transition to omnibus funding (if passed by Congress). Gary said on the Senate side, the omnibus bill has an increase of \$220 million for Hanford; the House side has an increase of \$335 million. Gary said the difference has to be resolved.
- Stimulus bill: Gary said the Senate currently has \$5.57 billion allocated to DOE-EM and the House has \$500 million allocated to DOE-EM. The two have to be reconciled. He noted that the Senate version allows three years to actually allocate the funds and the House requires the funds be allocated within 18 months of passage. He said if funding is closer to what the Senate wants, then approximately \$1.8 billion would come to Hanford. Gary noted that there was a question of if direct contracts can be increased by more than 20%, but it turns out to not be a problem. Gary said the four major sites (Idaho, Savannah River, Oak Ridge and Hanford) are represented by Republican representatives who are voting against the stimulus bill. He did not expect the President to see a stimulus bill by February 16.
- FY 2010 budget: Gary said the FY 2010 budget guidance is typically released the first week of February, but he suspected it will be released in April.

Gary said the whole budget and funding situation is complex and fluid. He said it is good for the Board to identify general priorities for cleanup funding.

Gerry agreed that it is important to identify specific needs and where additional money should be directed. He said it is important to note that the advice (and the Board) does not lobby Congress, but clearly identifies cleanup gains.

Agency perspective

DOE-RL

Doug suggested adding groundwater funding to the priorities lists, as well as demolishing the Plutonium Finishing Plant (PFP). He said the advice does a good job describing facilities and the cost of long-term facilities and maintenance.

DOE-ORP

Steve Pfaff said the priorities correspond with DOE-ORP priorities. He asked the Board to double-check the advice to ensure consistency between pages regarding tank farms cost and minimum safe operations.

EPA

Dennis thought the advice should be clear that the priority list is not all-inclusive. He said there are many other important projects that are not identified.

Ecology

Jane said the Board's funding priorities align with Ecology's priorities.

Discussion

Maynard agreed that groundwater and vadose zone cleanup should be added to the advice, and the advice should be clear that the funding priorities are "overarching."

Ken Niles asked whether laboratory upgrades were a major priority and asked for DOE-ORP's opinion. Steve Pfaff said they have the lab capability they need right now, but do need a long-term plan. He said

WTP will have additional lab capacity. Larry noted that, for example, the 222-S laboratory and its equipment are over 50 years old, and the facility operates on a "shoestring" budget. He said the lab will be a major support to WTP in the out-years, as well as during and beyond decommissioning and demolition (D&D) and closure operations to support groundwater monitoring. The Board decided to keep the priority to upgrade or replace existing inadequate laboratories in the advice.

Gerry agreed that accelerating D&D of PFP should be a priority since it is expensive to maintain the facility. He recommended the title of the advice to say priorities for FY 2010, out-years and economic stimulus budgets. Gerry clarified that the 2022 date refers to achieving processing operations for the second low-activity waste (LAW) facility.

Ken Niles asked if DOE-ORP is still actively looking into early startup of the LAW facility. Steve Pfaff said they are not moving forward with trying to start the LAW facility early. Ken said the advice should be clear and say DOE-ORP should "reinitiate" its pursuit to start the LAW facility early. He also said the advice should be clear about the Board's desire to see transuranic waste shipped off-site, since Hanford is not on the schedule to ship prior to 2014.

Doug Shoop appreciated the Board reconciling its priorities with Ecology's priorities, and thought they aligned well.

Pam thought the advice should be more clearly organized, identify overarching priorities for both DOE-ORP and DOE-RL, and more clearly explain why more funding is needed. She also thought the advice should identify base operations costs.

Rob agreed that the Board should acknowledge that upgrading infrastructure is worthwhile and needed. Keith said infrastructure cuts impact worker health and safety. He said the Board should advise the maintenance of site infrastructure to support worker health and safety.

Rob thought the public should recognize that single-shell tanks are in bad shape. He said many are cracked and corroding, and DOE does not know the condition of rebar and concrete. Rob said many assumptions are made because not much is known about the structure of the tanks. He wanted the advice to include as a priority a single-shell tank structural integrity assurance study.

Susan Kreid, Washington League of Women Voters (Regional Environmental/Citizen), thought the most important part of the advice is where it identifies general principles that should be applied. She thought worker health and safety values should be added to this section.

Pam asked if the Board should make Phase II testing for the Pretreatment Engineering Platform (PEP) a funding priority. Steve Pfaff noted PEP will still have use for a Phase II of testing, but it will probably not be paid for out of WTP funds. Suzanne Dahl, Ecology, said there are draft plans in place for a second phase for PEP. She said did not think all the questions were answered during the first phase, such as the amount of sodium that needs to be treated.

The Board agreed to add continuing PEP Phase II testing to assist the development of a sodium management strategy to the DOE-ORP funding priority list. It also added priority bullets about upgrading the Effluent Treatment Facility to treat secondary waste from WTP, and the design and construction of a high-level glass storage facility. The Board also changed the date for completing cleanup of 618-10 and 11 burial grounds and K Basin sludge to 2015. Specific funding amounts were also removed.

Steve Pfaff asked the Board to revise language regarding the condition of waste transfer systems. He said the transfer lines are sound and compliant. DOE-ORP will need additional transfer lines and upgrades over time, but upgrades are not "desperately needed." Pam agreed and said the bullet was written to help explain why Hanford should get additional funding. Steve said they will need more money for upgrades to feed WTP in time, and Shirley Olinger, DOE-ORP, has made it clear to DOE-Headquarters (DOE-HQ) that WTP will not start on time if they do not get the funding they need.

Keith said he thought additional funding was needed to remove hose-in-hose systems. Steve Pfaff said they have a hose-in-hose transfer management plan showing when they need to be removed. DOE has funded

removal of at least six sections of the hose. Steve said it was not one of the most urgent needs in tank farms.

Bob Parazin, Public-at-Large, asked why the advice does not number the priorities. Susan Leckband said the Board usually does not number advice points unless it wants to list things in order of priority. In this draft advice, the Board specifically states that the items are not listed in priority order.

Gene Schreckhise, Washington State University (University), said tribal nations should be added to the list of groups to which DOE makes commitments.

Larry commented that overhead rates increase with the continuing addition of contractors to the site. He said less cleanup work is performed because more money is going to overhead. He thought BCC could explore the issue.

The advice was adopted.

Public Comment Period Considerations for the TC&WM EIS

Ken Niles introduced the draft advice on the TC&WM EIS comment period. He said the massive EIS will contain key information on which decisions will be made. The advice calls for a recognition that it will take a long time to read and understand the document, and for organizations and individuals to develop their own public information materials. The advice asks for a minimum 120-day public comment period. Ken said the document took years to develop and a comment period short of 120-days would be inadequate.

Ken said the advice also asks for a process for the Board to help with public involvement, and calls for a one-to-two-day workshop shortly after the draft is released. The audience for the workshop would be the HAB and other people well-versed in Hanford issues. The advice also calls for public meetings no earlier than 75-days after the draft is released, and asks DOE to work with the PIC to develop the workshop and public meeting schedule, locations and notices.

Agency perspective

DOE-ORP Mary Beth Burandt, DOE-ORP, said DOE-ORP is conceptually fine with the advice.

Ecology

Suzanne thought the time request was reasonable and an early workshop makes sense. She said Ecology is interested in getting as much input from tribal nations, stakeholder groups and the general public as possible.

Discussion

Rob asked if there was a limit to how many EISs could be released in a certain time period. Mary Beth Burandt said she was not aware of any such limitation.

Ron Skinnarland, Ecology, said the PIC discussed the issue of the TC&WM EIS comment period overlapping with the RCRA site-wide permit. He said Ecology has to complete the permit to continue facility operation. He said Ecology will need to do a good job of explaining the permit's contents due to its large size. He said the permit will not make every decision for the site, but it will be clear about what existing information is available for the permit to make good decisions.

John Stanfill, Nez Perce Tribe (Tribal Government), said the Nez Perce Tribe supports the advice. He said they have watched the development of the TC&WM EIS closely and recognizes its assumptions. John said they need extra time to review the document due to their limited staff.

Susan Kreid thought even 120 days will be difficult for someone to understand the TC&WM EIS. She appreciated the workshop concept and hoped key decision points would be discussed. Susan noted that the

public needs to know what decisions will not be made based on the TC&WM EIS, and the agencies should help readers focus their attention on information that will truly impact future decisions. Ken said that is their hope for the workshop, and many people want to help DOE to shape and describe key decisions. He hoped to have a cooperative effort with DOE and Ecology.

Mary Beth asked if the HAB is the only audience for the workshop. Ken Niles said no; however, the workshop is meant to target an informed audience to avoid spending a lot of time on "Hanford 101."

Emmett Moore, Washington State University (University), asked if DOE will have enough time to advertise a workshop if it is held within two weeks of the release of the draft TC&WM EIS. Ken Niles said DOE can publicize the workshop before the release, and reiterated that the purpose of the workshop is to inform HAB members and people already knowledgeable about Hanford issues so they can help others learn about and comment on the TC&WM EIS.

Steve Hudson said he hoped the public involvement process for the TC&WM EIS will serve as a model for future public involvement efforts.

Todd asked about Ecology's role in the TC&WM EIS. Suzanne said Ecology is a cooperating agency, meaning it has a primary interest in an action the federal government is taking. In this case, it is through the TPA and other activities. Todd thought the advice should ask Ecology to help DOE decide how and when to have public meetings.

Gene Schreckhise asked if the Board is chartered to help the public understand the TC&WM EIS. Susan Leckband said the Board can advise DOE about how it thinks DOE should involve the public. Ken Niles said the HAB's member organizations can develop their own materials, which would be the property of that organization, not the HAB.

Jim Trombold, Physicians for Social Responsibility (Regional Environmental/Citizen), described the Board as "phase one" of the agencies' commitment to work with the public, especially since the Board represents organizations and interests.

Liz Mattson, Hanford Challenge (Hanford Work Force), suggested that the advice encourage DOE to have the ability to extend the public comment period if needed. She thought the public should be able to ask for an extension if necessary. Jeff Luke, Non-Union, Non-Management Employees (Hanford Workforce), wanted the advice to say Ecology will cooperate and participate in any extension request. Jeff thought DOE-ORP may be reluctant to extend the comment period. Jane said Ecology legally has no input into the comment period decision, and did not want to overstate Ecology's ability to influence the decision.

Rob commented that DOE should expect to receive valid comments on the TC&WM EIS that require changes to the document.

Paula Call, DOE-RL, asked if the Board wanted the advice to request public "meetings" or public "hearings." She said they carry different meanings. Emmett said that "hearings" is the term used in DOE's regulations. The Board agreed that the advice should request public hearings.

The advice was adopted.

Systems Criteria for Hanford Tank Waste Risk Reduction

Mike Korenko introduced the draft advice and the accompanying white paper on systems criteria to guide the selection of optimum paths for treating Hanford waste. Mike shared a short background presentation:

- Previous decisions [at Hanford] did not employ systems engineering
 - The TPA was very insightful given the background information that was available at the time
 - A systems engineering approach was not used at the time; problems are now becoming evident
- Secondary waste stream

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- Early LAW Steady State Modeling Run Report (DE-AC27-01RV14136, May 23, 2008) Mike shared some of the technical preliminary results
- DOE is considering alternatives for the secondary waste issue
 - o Led by Ben Harp, DOE-ORP
 - TWC has not yet reviewed the report; early discussions indicate that options considered were bounded

Mike said the Board is not supposed to be involved in selecting technical alternatives, which is why TWC developed the advice to provide guidance on criteria to help guide decisions. Mike described the advice and its top-level criteria, stakeholder and legal criteria, and guiding criteria. He also described the attached white paper, which provides background information for each advice point.

Agency perspective

DOE-ORP

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Steve Pfaff said DOE is putting more emphasis on systems planning. He thought the advice would help keep efforts moving in the right direction.

Ecology

Suzanne said systems engineering is an integration effort, and Ecology often feels like "the integrator" at Hanford. She said a good systems approach for secondary waste streams will evaluate technetium issues, iodine issues and more. She thought the advice is good and would like to see a systems approach employed across the site and for all waste forms. She commented that the risk of inaction is delay, which is a risk in and of itself.

Discussion

Keith commented that workers need to be engaged in identifying risk and DOE should more comprehensively pursue Integrated Safety Managements Systems (ISMS) to improve worker health and safety.

Maynard said the advice, its philosophy and concepts also apply to DOE-RL work, even though it more greatly stresses tank waste and DOE-ORP management.

Todd asked how the white paper relates to the advice. Mike said it is intended to capture the many discussions surrounding criteria development and guidance. Todd asked if the Board was being asked to adopt the white paper. Susan Leckband said yes, it is part of the advice.

Todd asked if the criteria demonstrates Board principles; Mike said yes, the advice incorporates many Board principles. Todd noted that there are a handful of criteria that are different from what the Board has said in the past (e.g. retrieval and treatment versus closure). He said he could work with Mike to ensure the advice is consistent with Board values and past advice.

Dennis said one of the Board's strengths is its consistency. He thought if the advice is not consistent with past advice, the Board should know they are doing that explicitly and know why it is deviating from the past.

Sam Dechter, Public-at-Large, asked Mike to check past Board values for consistency regarding top-level criteria about proven versus unproven technologies and the acceleration of pilot scale demonstrations.

Ken Niles noted that the advice should be clear about eliminating options to placing high-risk material in permanent storage at Hanford. Todd added that the Board should be clear about what it means when it says "high-risk material." He thought the white paper described it well and could be used to help clarify the advice point.

Gene Schreckhise noted that everything is hazardous at some level, and the real issue to evaluate is the potential risk to humans and the environment. Keith added that future knowledge about exposure and risk should be taken into account, too.

Jeff commented on a past Board meeting where the Board agreed that "science should carry the day" regarding how and where to dispose of waste, and that DOE should store waste where it is best suited to be stored. Jeff also said while it is good to for the Board to be consistent with past advice, it does not mean it must always keep the same position on particular issues.

Gerry said he was concerned about some of the advice points, particularly about the use of the term "closure" versus saying "characterize and retrieve." He said closure is a legal term.

Mike Korenko said the committee meant that closure drives DOE to open tanks and retrieve waste. He commented that whether or not "closure" is a legal term, money is saved by not operating the single-shell tank system.

Gerry cautioned against calling a material like sodium "non-hazardous" when in fact certain materials can be hazardous if found in different concentrations or mediums. John Stanfill thought the advice could say "less hazardous." Todd thought the point could be more general and said the Board has always favored to pursue treatment. Mike noted that the advice point was specifically designed to address sodium treatment.

Gerry said the number of vitrified logs does not need to be a criterion. Mike said the committee meant that DOE should evaluate the number of logs versus the life of WTP. Jeff thought the concept is more about the time WTP is operational instead of the number of glass logs produced.

Barry Beyeler, Oregon Hanford Cleanup Board (State of Oregon), asked why the white paper did not include discussions about the last two advice points. Mike Korenko said the committee left them off because there was not a lot of discussion about them.

Dick Smith, City of Kennewick (Local Government), asked if emptying single-shell tanks would substantially reduce costs, or would costs continue without a final legal "closure." Steve Pfaff said the true cost would be reduced if waste were removed from tanks.

Liz asked if the white paper should be incorporated into the advice. Larry said the advice originally contained the background information now found in the white paper, but it was too long. Dick objected to combining the advice and white paper because it would be too hard to read. Liz asked the committees to consider a combination format in the future.

Dennis noted that while models should not be the sole tool, they will always be used to evaluate risk. Liz commented that models are dependent on data quality; problems occur when models with faulty data are used to evaluate risk to worker health and safety. Mike Korenko agreed and said the advice essentially meant to advise taking care to not embrace models as reality.

Doug Shoop said the advice is applicable to the whole Hanford Site. He said it currently seems to be directed toward DOE-ORP and suggested crafting a second piece that is more specific to environmental remediation activities (instead of making the current advice more generic). He thought the Board could consider guiding criteria specific to groundwater cleanup standards. Dennis thought the Board could say that some are applicable to DOE-RL while keeping it primarily directed to DOE-ORP.

Larry thought RAP could work on its own guiding criteria and values if necessary. He said the advice is a product of TWC, which is why it is written more directly to DOE-ORP. Maynard thought the advice should go to both DOE-ORP and DOE-RL and should not go back to committee. He said the top level and stakeholder criteria apply to both offices.

Changes were made to the advice to clarify particular advice points. Mike Korenko also added a recommendation that DOE-ORP and DOE-RL sponsor a joint Capstone Systems Engineering Task Force to brainstorm possible alternatives to rapidly accelerate tank removal and soil remediation under the suspected leaking tanks. Mike said membership should include the most strategic thinkers in the DOE complex. He said "capstone" means a high-level task force.

Susan Leckband noted that the Board's process is to consider new concepts on the first day of the Board meeting, not on the second day. She asked if any Board members object to the new task force concept. Wade Rigsbee, Yakama Nation (Tribal Government), initially said he objected because he wanted a more elaborate discussion on such a task force within TWC. Maynard said he supported the addition and that it does not preclude it from further TWC discussion. He thought it could serve as a starting point for future TWC and Board work and advice. Wade supported the addition if TWC follows up with additional work.

Jim thought "capstone" was not a common enough term to use to describe a high-level issue.

Steve Pfaff said 30 days is not a reasonable timeframe to assemble a task force. He said the idea is fine, but it would take at least six months to convene a task force. The Board removed the timeframe component from the advice point.

Gene Van Liew, Richland Rod and Gun Club (Local Environmental), thought the Board should use a different term than "strategic thinkers" in reference to task force membership. Mike Korenko used the term to describe people who can "think outside the box."

Liz asked if there was a precedent for the Board to be consulted while the task force is assembled. She thought it would be a good way for DOE to make sure the task force is created in the right spirit. Steve Pfaff said there is a good precedence; the single-shell tank integrity panel is a good example. He said it is presumed that the HAB would be involved.

Julie Jones, City of West Richland (Local Government), said she continues to be impressed with the level of technical expertise on the Board.

Availability for a Deep Geologic Repository

Mike Korenko introduced the draft advice on the need for surface storage capacity for vitrified high-level waste to facilitate completion of Hanford cleanup. The advice states the DOE high-level waste disposal strategy assumes that a licensed deep geologic repository will be available for disposal of vitrified waste from Hanford. Mike said the advice asks DOE to use a systems approach for contingency planning if a deep geologic repository does not open on schedule. Mike said DOE should think through the consequences if Hanford does not have anywhere to ship its high-level vitrified waste.

Agency perspective

DOE-ORP

Steve Pfaff said he shared plans with TWC, including a cost/benefit analysis on whether to finish the Canister Storage Building (CSB) or design another facility with the ability to ship and store high-level vitrified waste. Steve said the cost of building a new facility is roughly the same as finishing and adding storage space to the CSB. The location for a new facility would give DOE the ability to expand storage space for up to 12,000 vitrified logs. Steve said WTP cannot run without storage space for vitrified waste, and there is uncertainty surrounding a deep geologic repository. He thought the advice will start the conversation about long-term implications.

Ecology

Suzanne said it is important to put vitrified high-level waste in a deep geologic repository. She said it is illegal for it to end up in near-surface, perpetual storage. She said there is a near-term need to have a RCRA-permitted shipping and storage facility. She did not think Ecology has strong opinions on whether that is achieved with the CSB or a new facility. Suzanne said what is important is having enough storage capacity to run WTP uninterrupted. She said that does not mean Hanford needs 53 million gallons of storage space, but there is the need for some storage space in case Hanford cannot immediately ship its waste offsite. She said looking at the typical funding cycle for design, construction and permitting, the time to make a decision about using the CSB or building a new shipping and storage facility is now.

Suzanne noted that Ecology is not open to "perpetual" storage of high-level vitrified waste at Hanford. Ecology expects that waste to go to a deep geologic repository; if Hanford designs a facility for perpetual storage, it opens itself up to welcoming perpetual storage, which is unacceptable.

Discussion

Keith asked if a poor design of the CSB makes it too expensive to expand; was there a lack of foresight? Steve Pfaff said the design has been used elsewhere. The building itself was designed with relatively limited storage; to add capacity, it would require cutting into the foundation and ordering expensive materials. Steve said there are other designs that use less steel. He said a "green field" construction project near the CSB is better and more cost-effective, and better prepares DOE to keep WTP running. He said they are limited to 4,000 canisters of expanded additional storage at CSB due to nearby underground utilities and structures. He said the CSB was originally meant to be a very short-term storage facility for canisters on their way to permanent storage.

Gary thought the Board should be clear about not wanting long-term storage of high-level waste at Hanford. He said the law is clear about where various waste goes, and high-level vitrified waste is not designed for storage at Hanford. However, Hanford has to do something about interim storage to keep WTP running.

Gerry said the Board should delete the paragraph about DOE's efforts to properly site, evaluate, license and commission a deep geologic repository for final disposition of high-level waste should continue to be a national priority. He said DOE has made no effort to properly site a deep geologic repository. He said Heart of America Northwest believes Yucca Mountain is an unsuitable repository. He agreed that the advice should not ask DOE to perform extensive systems life-cycle analysis for "perpetual storage." Mason Lowe, Hanford Challenge (Hanford Work Force), agreed that the last paragraph should be removed.

Jeff said TWC worked with Steve Pfaff to ensure the advice is timely and to understand the consequences of not issuing advice related to the construction of the green field facility. He said TWC wants DOE to build a facility to store materials to keep WTP going. He thought the last paragraph fits; it is there because TWC wanted to be clear that the Board does not want waste stored forever at Hanford, that DOE should plan for contingencies, and that the Board supports disposal of high-level vitrified waste in a deep geologic repository. He thought the last paragraph could be re-written to alleviate Gerry and Mason's concerns. Gerry said that would work; Mason noted that urging DOE to do what it's already been directed to do can be misconstrued and used politically.

Ken Niles thought the advice could clearly reference DOE's legal obligations and cite the Nuclear Waste Policy Act that requires the disposition of Hanford immobilized high-level waste in a deep geologic repository. The Board agreed to change the last paragraph to reference the act and say that DOE should make it a priority at the national level to properly site, evaluate, license and commission a deep geologic repository for final high-level waste disposal.

Pam said she appreciated Suzanne's comments, and thought she was clear about DOE having legal obligations. With the concern over Yucca Mountain, Pam thought the advice was very timely. Jim was glad that the advice does not explicitly mention Yucca Mountain since it is a political struggle.

The Board discussed how to describe the length of time high-level waste may be stored at Hanford, and whether that time should be described as "long-term" or "interim." Suzanne thought "interim" was best because it has a legal definition and means waste will leave Hanford at some point. Jeff did not think "interim" was sufficient description. Ken Niles suggested using an example of the number of years storage may be needed, such as up to 50 or 75 years. Susan Kreid thought the Board should focus on the end-state and how a facility needs to be built to store waste at Hanford until a deep geologic repository is ready to accept waste. Jeff commented the advice should tell DOE to build a robust storage facility that will last a long time.

Steve Pfaff commented that local DOE offices do not get to decide on a deep geologic repository, and that the main point of the advice is that Hanford needs a robust facility. Gerry thought the advice could say

DOE should build a robust facility and Ecology should permit it for a certain period of time that obligates DOE to search for a deep geologic repository.

Todd suggested adding that the Board does not support extended waste storage at Hanford. The Board added a paragraph that said high-level vitrified waste storage activities should not adversely impact the initiation, operation or completion of tank waste treatment. Therefore, storage capability should be sufficiently robust and flexible to accommodate the storage needs of the potential waste canister quantities throughout the treatment mission.

Wade noted that Russell Jim, Yakama Nation (Tribal Government), co-authored the Nuclear Waste Policy Act and could provide some background on the deep geologic repository issue.

Bob Parks, City of Kennewick (Local Government), asked Gerry about Heart of America Northwest's support for a deep geologic repository but its opposition to Yucca Mountain and money already spent on it. Gerry suggested a half-day workshop to hear from the State of Nevada, tribal governments and stakeholders about Yucca Mountain's pros and cons. He said Heart of America Northwest believes DOE would have to relax groundwater protection standards to use Yucca Mountain. Cathy McCague, EnviroIssues, said TWC is tracking the issue.

Gerry commented that the ability of the HAB to come together on this piece of advice and reach agreement really shows the Board's strength and ability to work together.

The advice was adopted.

Stimulus Funding Update

Doug Shoop updated the Board on the current economic recovery proposal. He said there is a lot uncertainty about the level of funding, but DOE has been working with the new administration to identify opportunities for job creation. He said DOE-EM developed proposals for stimulus funding to be spent between 2009 and 2011 with three priorities in mind:

- Job creation
- Footprint reduction (shrinking the footprint of the active site cleanup)
- Lifecycle cost savings

Doug said currently, there is a big difference between the House and Senate funding proposals. The House passed a \$500 million budget for DOE-EM and the Senate version in process is around \$6.4 billion. Doug said after the House and Senate packages are passed, they will be reconciled through conference committee. Doug noted that Hanford is operating under continuing resolution for FY 2009, and does not know what the FY 2010 or FY 2011 budgets will be. He said it is important to note that if you do not know your budget, you do not know if a stimulus is actually a stimulus, or if it just brings you back to where you were.

Doug and Shirley shared stimulus funding priorities for DOE-RL and DOE-ORP:

DOE-ORP stimulus funding priorities:

Additional funding

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- Scope of work is within contract scope
- Proposed scope for additional funding:
 - Single-shell tank retrieval and closure
 - Infrastructure upgrades to support 2019 operations (e.g. high-level waste canister building, mixer pumps)
 - o Maintenance and upgrades to equipment, 222-S lab, and evaporator facilities
 - Install interim barrier in SX tank farm
 - Design, procure, construct and commission supplemental treatment capability
 - High-level waste tanks interim closure in C, B, T and S tank farms

- PEP Phase II testing and mixing test platform Shirley said the platform has been an excellent tool and DOE-ORP wants to keep the facility viable and work to find other testing opportunities to reduce WTP uncertainties and risk
- Prepare for transuranic waste treatment in B and T tank farms

DOE-RL stimulus funding priorities:

- River Corridor cleanup
 - Facility demolition, waste site remediation, ERDF expansion, burial ground cleanup (consistent with 2015 Vision)
 - Groundwater and vadose zone remediation
 - Continue to remediate 100 Area strontium and chromium plumes, accelerate ZP1 construction and operation
- Accelerated PFP demolition
 - Attempt to accomplish prior to 2016 TPA milestone
- Restoring some transuranic waste retrieval
 - Build a backlog of certifiable waste and start large shipping campaigns
 - Central Plateau waste site remediation
 - o Shrink the Central Plateau, work on 200 N facilities, BC crib area and more

Doug noted that there is funding in the stimulus package for Natural Resource Damage Assessment (NRDA). He said DOE-EM is developing an extensive checklist to ensure it knows where stimulus money will go, how it is spent, and ensuring the right contracts and regulatory framework are in place. He said every DOE-EM site has gone through a readiness review process and Hanford does not appear to have any "show stoppers." Doug wanted to emphasize there are still many unknowns – Hanford does not know its FY 2009, 2010 or 2011 budgets, if or when it will get a budget from the stimulus plan, or what restrictions may be placed on additional funding.

Discussion

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Pam asked if existing DOE-EM contracts are able to receive additional funding. Doug said yes. Gary agreed and said DOE can increase existing contracts by more than 20%.

Pam asked about management administration in DOE-EM. Doug said Inés Triay is working to ensure DOE-EM is efficient with contract changes and aligns budgets with stimulus funding. Pam asked about flexibility for site contractors to contract locally. Doug said the local DOE offices have authority for \$50 million. Pam asked if they want that increased; Doug said yes.

Gary asked if Doug could comment on the Washington's Business and Occupation (B&O) tax. Doug said DOE testified that the tax should not apply to the Hanford Site. Doug said if it does, it could result in higher taxes and perhaps layoffs. Gary asked how much money DOE saves if they are not taxed by the B&O tax. Gerry thought the savings would be about \$1 million per year and said he was skeptical that \$1 million jeopardizes 100 jobs. He said if DOE is not taxed, it jeopardizes the state's ability to get security costs out of cleanup funding. He said the Board has consistently said that security should not be paid for out of the cleanup budget. Doug said he strongly disagreed with Gerry.

Gary thought BCC may want to learn more about the tax; every dollar for cleanup is important.

Larry asked about impacts to DOE, contractors and the Tri-Cities if DOE expects a certain level of funding, hires staff to support the work, and then funding is greatly reduced. Has DOE considered that situation? Doug said they are looking at what is a reasonable amount of stimulus funding that can be maintained over an amount of time (e.g. \$250 million for three years would be reasonable to achieve cleanup goals without wild fluctuations).

Gary said spending obligations are important, such as when and how DOE will be able to spend money and how to spend smoothly to avoid peaks and valleys.

Norma Jean Germond, Public-at-Large, asked how much effort DOE-EM put into sharing the need for Hanford cleanup with the new administration. Doug said Inés Triay has spent a tremendous amount of time

with the new transition team, briefing them on the full scope of DOE-EM cleanup and necessary budgets. He said DOE-HQ is also working with the new administration and is tasking the local offices to develop multiple scenarios.

Ken Niles asked if the regulators support DOE's priorities for additional money. Jane said Ecology supports the priorities and will continue to work with DOE to determine the order of priority. Dennis said EPA also agrees and will work with DOE on how to allocate funds to each project (once the stimulus plan is approved). Doug said if and when DOE gets additional funding, DOE will sit back down with the regulators to discuss how and where to direct money.

Ken Niles asked if there was an emphasis on using additional funding for a remote-handled transuranic waste facility. Doug said yes, they looked at using additional funding for such a facility.

Gerry asked if DOE has IPLs they can share with the Board and regulators. Doug said DOE-RL has one but cannot share it right now; if and when they get money, they will share it with everyone. He said he did not think it would be beneficial to go through the multiple scenarios right now.

Gerry said an IPL would help the Board understand how DOE would spend additional funding. He said he is frustrated that he has not seen an IPL, and commented that it is hard for Congress to hand over money if DOE is not clear about its priorities and management. He hoped the regulators would insist that DOE share its IPLs with them and the Board. Gerry said it was hard to adopt advice about priorities when DOE has a priority list it will not share with the public. He asked DOE to describe how its IPLs differ from Board funding priorities.

Shirley said DOE-ORP just shared its stimulus funding priorities with the Board; there is nothing secret about their priorities. She offered to go over the baseline with the Board again. She said projects that were shorted in 2009 are now high priorities for stimulus funding (e.g. infrastructure upgrades).

Doug said DOE-RL has no "secret list" either; their priorities are those just shared during the stimulus funding priorities presentation.

Gerry said a baseline is not the same as an IPL. Shirley said it is, and the only incorrect part is the WTP startup date. She said they do not need an IPL because they have a baseline and can show how it has changed with the 2019 WTP startup date; the baseline has DOE-ORP priorities built into it.

Keith said it appears DOE-EM's three main priorities (job creation, footprint reduction and lifecycle cost savings) are in line with HAB values. He said job creation can be complicated; for example an operator requires a lot of money for training. How long can people be out of work before needing to go through training again? Doug said the stimulus package will primarily fund work that will be done by subcontractors. Doug said DOE will still have access to existing operators and does not anticipate needing more. He said DOE actually needs more D&D workers than operators.

TPA Tentative Agreement

Doug Shoop said the TPA agencies have reached a tentative agreement on changes to the TPA. Doug said they shared this information with tribal nations and the State of Oregon, and wanted to share it with the Board before going out for public comment.

Matt McCormick, DOE-RL, said the discussions were very collaborative and resulted in a positive outcome for furthering Hanford cleanup. He said the tentative agreement makes several changes to the TPA consistent with shared priorities of cleaning up the River Corridor, DOE-RL's 2015 Vision to reduce the active footprint of cleanup of the Central Plateau, and resolving cleanup schedule delays and available funding with overall priorities.

Matt said the discussions did not include WTP or tank waste retrieval; the agencies are working on reaching agreement on those issues separately. He said they also did not account for any potential increase in funding from the stimulus plan due to the uncertainty of the funding.

The agencies discussed the tentative agreement according to the following outline:

- Draft TPA Change Packages (5)
 - o New and Accelerated Groundwater and Columbia River Protection Milestones
 - o Adjust Existing Milestones to Address 2009 Available Funding and Overall Priorities
 - o Realign and Integrate 100 K Area Cleanup
 - o Retain Laboratory Facilities in the 300 Area
 - Designate Groundwater and River Corridor Soil Operable Units as CERCLA Past Practice Units
- Agreement in Principle
- Public Involvement Schedule

Draft TPA change packages (5)

New and accelerated groundwater and Columbia River protection milestones Draft change package includes new milestones that:

- Establish dates to contain and cleanup River Corridor groundwater
- Require interim actions to expand and enhance groundwater containment and remediation in River Corridor
- Establish milestones for CERCLA cleanup documents for operable units in 100 and 300 Areas to complete by December 31, 2012
- Establish a date to contain existing groundwater plumes to the Central Plateau
- Require interim actions to expand and enhance groundwater treatment system for key contaminants in the Central Plateau

The draft milestones reflect the shared value of preventing contaminants from reaching the Columbia River and containing contaminants on the Central Plateau.

Jane said there are companion draft change packages for each of these that will be available on February 9. She said the groundwater change packages are very similar to information the Board saw in the fall of 2007. She said groundwater has been a priority for Ecology since the beginning. Jane noted that containment will focus on contamination going into the river, starting with chromium. The containment date is set for 2012 followed by groundwater remediation in the D, H and K areas, with complete containment in 2016, and moving to containing uranium in the 300 Area in 2018.

Jane said most of the work on groundwater and Columbia River protection has been under interim actions. She said completing the TPA change process will helps address all contaminants and the coordination of soils and groundwater work in the River Corridor. She said enhancing the interim actions will help prevent River Corridor work from being affected by contamination moving off the Central Plateau and toward the river, recontaminating or compounding an existing problem.

Adjust existing milestones to address 2009 available funding and overall priorities

- Draft change packages concerning legacy waste management (M-91 series) and Central Plateau waste site cleanup decision (M-15 series)
- Delay near-term milestones for transuranic waste retrieval, treatment and certification to reflect available funding and cleanup priorities
 - Reduce levels of waste retrieval and treatment for the next few years
 - Require DOE to submit, by December 31, 2009, a TPA change package to propose milestones to complete M-91 work scope
- Delay near-term Central Plateau cleanup decision-making milestones (M-15 series)
 - Delay nine feasibility study and proposed plans
 - Require DOE to submit, by December 31, 2009, a TPA change package to complete the remaining M-15 work
- Recognize that the M-15 major milestone (due December, 2011) will be delayed

Dennis said in November 2008, DOE notified EPA and Ecology about milestones in jeopardy and requested the suspension of certain work. Dennis said this package helps address those concerns. He noted that EPA and Ecology want this work resumed if funding becomes available through the stimulus plan.

Realign and integrate 100 K Area cleanup Draft change packages:

- Reflect an integrated comprehensive schedule to finish 100 K Area cleanup in three phases • without impacting ongoing work in K West Basin
 - 1. 21 facilities, 59 waste sites
 - 2. 29 facilities, 52 waste sites
 - 3. 29 facilities, 13 waste sites (following sludge removal from K West Basin)
- Change milestone to complete interim safe storage of K East Reactor from September 30, 2011 to July 31, 2014
- Establish six new interim milestones, including two to address 100 Area hexavalent chromium in soil and groundwater
- Modify the M-16 milestones to include the scope from the M-34 milestones to facilitate better integration with 100 K Area work
- Set deadline to revise other milestones for K Area work
 - o Complete K West Basin sludge
 - o Remove K West Basin
 - Initiate soil cleanup under K West Basin
 - Place K West reactor in Interim Safe Storage
 - Complete all cleanup activities set in interim decision documents for 100 K Area

Matt said this change package is part of a tentative agreement that realigns work that had technical issues, such as at K Area. He said this change package is actually three packages. The K Area specific package recognizes the delay in sludge removal and organizes K Area into three phases. He said there will be interim milestones to complete phases, and the change package includes an adjustment to the interim safe storage of the K East reactor.

Retain laboratory facilities in the 300 Area

Draft change packages:

- Address the long-term mission of PNNL by retaining necessary facilities, support structures and utilities in the 300 Area for about 20 years.
 - Postpone cleanup and demolition of 331 Life Science Lab, 325 Radiochemical 0 Processing Lab, 318 Radiological Calibration Lab and 350 Plant Operations and Maintenance facility
 - o Postpone cleanup of waste sites (i.e., primarily active process sewer lines) associated with those buildings and utilities
 - Delay closure of 324 Chemical and Materials Engineering Laboratory by two years 0

Dennis said these changes are adjustments to the 300 Area. He said EPA considers this a somewhat minor change. It recognizes that there is an ongoing mission for PNNL facilities and that some infrastructure needs to stay in place.

Designate groundwater and River Corridor soil operable units as CERCLA past practice units Draft change package:

- Designates subject operable units as CERCLA past practice units
- Does not change lead regulatory agency
- Aligns TPA designation with current interim actions under CERCLA

Agreement in principle

This agreement in principle covers two subjects that require further discussions between the TPA agencies before any changes to the TPA are contemplated:

- 1. Develop Central Plateau cleanup completion strategy that:
 - Covers non-tank farm operable units, excess facilities and groundwater remediation
 - Recognizes tank farm cleanup interfaces
 - Integrates RCRA and CERCLA documentation requirements
 - Integrates canyon D&D actions with remediation of geographically associated waste sites
 - Provides a strategy to address deep vadose zone contamination
- 2. Improve TPA dispute resolution provisions

Matt said they need further discussions before contemplating such decisions because they felt there was not the time or information to make the changes. He said an agreement in principle to discuss the two above areas was signed by DOE, EPA and Ecology.

Public involvement schedule

Dennis said the agencies have briefed tribal nations and the State of Oregon, and are issuing a 30-day prenotice about the public comment period on the draft TPA changes today. The public comment period is March 9 through April 24 (45 days) and the agencies plan to complete the comment response summary by May 29. Dennis said they understand the public interest in the TPA changes, and asked the Board to help the agencies understand where, when and if public meetings are needed. He said they hope to codify TPA changes in early June.

Jane said it is important to understand these draft changes are separate from Washington's litigation regarding WTP, supplemental treatment and tank retrieval. She said this process was collaborative and focused on near-term priorities for groundwater and river protection. Jane said the agencies heard "get on with cleanup" and believes this package does that.

Discussion

Gerry thought the agencies should host public meetings. He thought the public will need an explanation about why transuranic waste retrieval is delayed when the agencies are pursuing stimulus plan money to meet the milestone. He said the public and the Board have said that relaxing milestones leads to less money. Gerry asked 1) if new milestones will be more enforceable than old ones, 2) what weight is given to public comment at State of the Site meetings about keeping an old milestone to show that it was missed rather than just changing that milestone, 3) if the agencies can explain the goal for containing rather than cleaning up groundwater, and 4) is there a deadline for restoring groundwater under the new milestones?

Regarding containment versus cleanup, Jane said there is one milestone for chromium containment and cleanup. The other milestones and schedules will be set in the final Remedial Investigation and Feasibility Study (RI/FS) process by 2012, when schedules will be established for other areas and contaminants. Gerry asked if there should be a firm deadline now for 2024 and make the RI/FS meet that deadline. Jane said they believe technically that it will take longer to totally restore the aquifer to its highest beneficial use.

Dennis said the 2012 containment goal, for example, shows that work must be aggressive to even achieve containment. He said they recognize, especially for the strontium-90 plume at N Area, that unless new technology comes along, they will not be able to completely clean up groundwater by 2024. He said the ROD will set enforceable dates.

Jane said upcoming milestones were the ones that were changed. Jane said Ecology took action under the TPA when M-91 milestones were missed, so there was no "get out of jail free card." She said Ecology is not happy about changing M-91 and M-15 milestones, and will speed up the schedule if more money becomes available.

Dennis said the agencies do think the TPA changes are a big deal and they want to host public meetings. He said change packages are difficult to explain and the agencies will ask for PIC to help with a fact sheet.

Norma Jean said at the State of the Site meetings people were disappointed that TPA negotiations were not finished. She thought they need to hear about the changes. Dennis agreed and said they want to make sure the public will attend and participate in meetings. Norma Jean recommended coordinating a meeting with other big public meetings such as the TC&WM EIS and the RCRA site-wide permit.

Rob agreed that public meetings are needed and suggested having a Committee of the Whole in March to discuss the changes and public outreach. He said the interrelationship between the TPA changes and the TC&WM EIS needs to be openly discussed, and suggested that senior HAB members give a TPA tutorial to describe its original intent and the impact of the changes.

Susan Kreid recommended more public information about the TPA changes and Jane's clarification about the litigation over WTP and tank waste retrieval. She said some people will see the draft changes and think

the litigation has been settled. She also encouraged the agencies to work with PIC and reach a younger audience.

Susan Leckband said the timeline for public outreach is short and that PIC and RAP should help the agencies determine the path forward quickly.

Regarding the agreement in principle, Keith asked if integrating canyon D&D actions with other geographically associated waste sites will include PUREX tunnels. Matt said yes, when a waste site is next to a canyon, the canyon remedial action footprint includes the nearby individual waste site, so it makes sense to remediate the waste site at the same time. He said they will not automatically cap a waste site.

Jim asked about the history of enforcing missed milestone penalties – how many times has it happened, what is the set monetary penalty, and are penalties varied based on the importance of the milestone? Dennis said the TPA uses stipulated penalties, and the regulators have used them several times in the past. EPA, for example, fined DOE \$100,000 over lab capacity in the 1990s. He said the penalties are usually running, meaning they increase the longer the correction takes. Dennis noted that the \$1 million penalty for ERDF was put to good use in the community. Jim hoped penalty money is put to good use, and said accountability seems weak since so many people are responsible for any given delay. Dennis noted that DOE does not like dealing with penalties, making them an effective tool. Matt agreed.

Dick said there are many small waste sites adjacent to U Plant, and all seem more like a hazard than U Plant itself. He asked if DOE has adequately characterized the sites to know if it is safe to cap them. Matt said that is the purpose of the remedial investigation process; DOE has not completed that process for Central Plateau waste sites. After it is done, the feasibility study and proposed plan will determine the best solution. He said they have a lot of information on the Central Plateau and know the areas that could potentially impact groundwater.

Dick asked if there is a ROD for U Plant. Matt said yes, they submitted a work plan to EPA, the lead regulatory agency. He said it has not been approved yet, but they are working with them. Dick commented that U Plant does not seem like an urgent hazard. Matt said the strategy is to start with U Canyon because it is the most simple and can provide useful learning lessons. Craig Cameron said EPA signed the work plan for U Plant. He said there are no milestones because they want the TPA to have a holistic approach for all Central Plateau facilities and canyons. He said they will come out with a tentative agreement for a change package for the public to review.

Agency Updates

DOE-ORP

Steve said the DOE-ORP 2009 vision, mission and priorities statement is about investing in its people, fostering project excellence and managing change. Steve said management has provided thorough background briefings, mentoring programs and has emphasized leadership development training. DOE-HQ has also met with site managers around the complex. Steve said they focused on safety during the fast-paced contract transition to Washington River Protection Solutions (WRPS) and will continue to do so in the future.

DOE-ORP is working closely with DOE-HQ to ensure information about Hanford cleanup needs gets to the new administration. Steve said Inés Triay, acting assistant secretary for DOE-EM, is a champion of work at Hanford.

Steve provided a WTP project update:

- Installed first two pre-treatment facility doors
- Completed first LAW melter assembly
- Completed the third elevation of 56 foot concrete walls (finished height is 120 feet)
- Completed the PEP simulant functional testing in January
- Initiated PEP Phase I integrated testing in January
 - Will continue for several months; Steve hoped that stimulus money will be available to use the platform in the future

- Construction is 40% complete; design is 76% complete
 - LAW facility: Design 95% complete, construction 64% complete (overall 71% complete)
 - Analytical lab: Design 91% complete, construction 54% complete (overall 43% complete)
 - Balance of facilities: Design 75% complete, construction 65% complete (overall 51% complete)
 - High-level waste facility: Design 86% complete, construction 21% complete (overall 43% complete)
 - Pre-treatment facility: Design 68% complete, construction 26% complete (overall 40% complete)
- Steve said they are about two-thirds of the way through concrete work and have laid about 27 miles of piping. Total piping needed is more than 100 miles.

Steve said WTP construction was limited during the final weeks of December 2008 due to inclement weather. He said the workforce was off for multiple days. The WTP site was slippery on the first day back, and one worker fell and broke his hip; approximately 100 workers fell in the parking lot. Steve said they learned that WTP needs to make its own weather and judgment calls, and make them early enough to stop people from showing up for work.

Steve updated the Board on tank farm operations:

- Retrieval resumes on Tank C-110
 - Steve showed photos of the inside of Tank C-110, its retrieval pump, the slurry, and described how the sluicer dissolves and mobilizes sludge to the middle of the tank. Steve said the sludge looked like chocolate mousse. Steve said Tanks C-110, 104 and 111 all use sluicing technology.
- Tank C-104 construction underway
- Tank C-111 next tank in line for retrieval
- Mobile Arm Retrieval System (MARS) Steve said WRPS is making good progress on developing MARS

Steve showed a photo of the tank farms to illustrate the complexity of multiple tank retrieval. He said MARS will hopefully provide the ability to use one multi-functional technology to move bulk waste and hard heel out of tanks.

Steve said WRPS has proposed a series of actions to further protect tank farm workers from chemical vapor exposures. WRPS is also participating in the Hanford Concerns Council. Steve said WRPS is taking a longer range view of completing tank farm cleanup, and wants to know what exactly is in the tanks so they can properly protect workers.

A single-shell tank integrity panel workshop (January 26-28, 2009) found that catastrophic failure is not likely, but Steve said further analysis is needed to understand how the tanks would withstand a seismic event. Steve said opportunities at tank farms include assessing rebar and concrete condition, performing modern structural analysis, examining tank chemistry and corrosion mechanisms, and examining tank liners in retrieved tanks.

EPA

Dennis said EPA had no updates other than the previous stimulus funding and TPA change package updates. He introduced EPA staff, including Helen Brownell, Larry Gadbois, Craig Cameron, Rod Lobos, Rich Campbell, and Emy Laija.

Ecology

Jane said Ecology had no other updates other than the previous stimulus funding and TPA change package updates.

Discussion

Todd said the Hanford Concerns Council Independent Technical Review team information is on the Hanford Concerns Council Web site (<u>www.HanfordConcernsCouncil.org</u>).

Jim asked about long-term plans for a tank after it is emptied. What happens after closure? Jane said they are not declaring individual tanks closed until the TC&WM EIS makes a determination. The seven tanks that have been retrieved are in a holding pattern. She said "Tank Closure 101" handouts describing the process for tank disposition, clean closure and more is available on the back table.

Public Comment

No public comment was given.

Board Business

Vice-chair nominations are open. Susan Hayman asked that nominations be sent to her or Tammie Holm, EnviroIssues. Nominations will be presented in April and vice-chair selection will take place at the June Board meeting.

Topics/activities for the April Board meeting may include:

- Plutonium toxicity tutorial
- Discussion on budget meetings
- Public involvement survey and "landscape" view presentation
- Tank closure tutorial
- Additional issue manager training
- Board self-evaluation results
- Potential advice on TPA change packages
- ERDF expansion and potential advice

Committee conference call draft schedule:

- February 16: TWC (3:00 p.m.)
- February 17: RAP (9:00 a.m.)
- February 19: PIC (11:30 a.m.)
- February 19: EIC (2:30 p.m.)

HSEP will not have a call in February and the TWC conference call needs to be rescheduled from its February 16 placeholder (holiday).

Gerry requested a Committee of the Whole meeting to discuss the TPA change package.

No committee meetings are scheduled for February. EIC will discuss the Leadership Retreat on its conference call.

Susan Leckband thought committee reports went well and thought they should be kept at the beginning of Board meeting agendas from now on. Jim suggested an agenda item to review advice responses. Maynard said committees usually review responses; if the response is not satisfactory, they bring it forward to the Board. Dennis suggested that committee chairs make advice responses part of their committee reports.

Dick said there is a Hanford Challenge flyer about radioactive material found near the Columbia River and asked if the agencies were looking into it. Nolan Curtis, Ecology, said Ecology recently went out to the site with Hanford Challenge and will report back to the committees or the Board when they have more information.

Gene Van Liew asked for an update on the 2000 fire and the success of revegetation efforts. Susan Leckband thought RAP could add the topic to the next committee meeting agenda.

Paula Call, DOE-RL, noted that the Federal Advisory Committee Act requires DOE to update Board member information. She said she may be contacting some Board members to update the information.

Keith said there is an impression that the Hanford pension is too good, and DOE contractors are trying to erode it. He suggested that Board members talk to their organizations and individually lobby their delegates. Jeff said that is true and thought the Board should find a way to stretch its function to become a champion of the Hanford workforce. He said the old administration hurt the workforce. Jeff commented that if the Board wants Hanford cleaned up, it will have a better chance of getting good people to work and stay here if there are good benefits.

Susan Leckband thanked the Board for a good meeting and reminded committees that perfecting advice ahead of time makes for a better meeting.

Attendees

HAB MEMBERS AND ALTERNATES

Barry Beyeler, Member	Bob Parks, Member	Steve Hudson, Alternate
Tom Carpenter, Member	Maynard Plahuta, Member	Tony James, Alternate
Rob Davis, Member	Gerald Pollet, Member	Mike Korenko, Alternate
Greg deBruler, Member	Gene Schreckhise, Member	Larry Lockrem, Alternate
Earl Fordham, Member	Keith Smith, Member	Emmett Moore, Alternate
Norma Jean Germond, Member	Bob Suyama, Member	Laura Mueller, Alternate
Harold Heacock, Member	Margery Swint, Member	Nancy Murray, Alternate
Julie Jones, Member	Jim Trombold, Member	Mark Oberle, Alternate
Mike Keizer, Member	Gene Van Liew, Member	Gary Peterson, Alternate
Susan Kreid, Member		Wade Riggsbee, Alternate
Pam Larsen, Member	Al Boldt, Alternate	Dick Smith, Alternate
Susan Leckband, Member	Karen Bowman, Alternate	John Stanfill, Alternate
Jeff Luke, Member	Meredith Crafton, Alternate	Art Tackett, Alternate
Todd Martin, Member	Sam Dechter, Alternate	Steve White, Alternate
Ken Niles, Member	Ken Gasper, Alternate	
Bob Parazin, Member	Floyd Hodges, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Paula Call, DOE-RL	Sharon Braswell, Ecology	Janice Williams, CHPRC
Matt McCormick, DOE-RL	Madeleine Brown, Ecology	Mike Priddy, WDOH
Doug Shoop, DOE-RL	Annette Carlson, Ecology	Peter Bengtson, WCH
	Nolan Curtis, Ecology	Jack Donnelly, WCH
Lori Gamache, DOE-ORP	Suzanne Dahl, Ecology	Barb Wise, Fluor Hanford
Shirley Olinger, DOE-ORP	Jane Hedges, Ecology	
Steve Pfaff, DOE-ORP	Jeff Lyon, Ecology	Tammie Gilley, EnviroIssues
	Ron Skinnarland, Ecology	Susan Hayman, EnviroIssues
Janis Ward, DOE		Hillary Johnson, EnviroIssues
Sahid C. Smith, DOE	Helen Brownell, EPA	Cathy McCague, EnviroIssues
	Craig Cameron, EPA	
	Rich Campbell, EPA	
	Dennis Faulk, EPA	
	Larry Gadbois, EPA	
	Emy Laija, EPA	
	Rod Lobos, EPA	

MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald	Judith Moses, CTUIR – DOSE	Heinz Hurser
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