

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

September 9 - 10, 2010

Seattle, 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 two pieces of advice concerning:

1. Openness of the U.S. Department of Energy’s Environmental Management Advisory Board Subcommittee Meetings
2. Integrated 100 Area Remedial Investigation/Feasibility Study Work Plan, Draft B

Board business

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

- 2010 Board accomplishments
- Chair selection
- Adoption of 2011 Board priorities and calendar

Presentations and updates

The Board heard and discussed presentations on the following topics:

- Tri-Party Agreement Agencies – Annual Updates
- Tutorial on Hanford Advisory Board website

Public comment

There was one public comment provided.

HANFORD ADVISORY BOARD
September 9-10, 2010 Seattle, WA

Susan Leckband, League of Women Voters and Board chair, called the meeting of the Hanford Advisory Board (HAB or Board) to order. The meeting was open to the public and offered 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.

Eight seats were not represented: City of West Pasco (Local Government), City of West Richland (Local Government), Franklin and Grant Counties (Local Government), Benton-Franklin Regional Council (Local Government), Hanford Atomic Metal Trades Council (Hanford Work Force), Central Washington Building Trades (Hanford Work Force), Richland Rod and Gun Club (Local Environmental), and the Confederated Tribes of the Umatilla Indian Reservation (Ex-Officio).

The Board meeting was audio-recorded.

Welcome, introductions and announcements

Susan Leckband welcomed the Board to Seattle.

Susan said this is the annual meeting held to discuss what has been done over the past year and what will be done over the next year.

Susan Hayman, EnviroIssues, reviewed the agenda and the ground rules.

Susan L. introduced new Board members attending the meeting, including Lyle Smith, Hanford Cleanup Board, and Dan Serres (member) and Steve White (renewed alternate) from Columbia River Keepers.

Susan H. said EnviroIssues developed design concepts for a HAB logo, per request from Susan Leckband, for the Board to consider. Susan L. said that many of the U.S. Department of Energy Environmental Management Site Specific Advisory Board (DOE EM-SSAB) have a logo that identifies them with their site; Susan would like to see the same at Hanford. Susan H. encouraged Board members to provide their feedback on the draft logo concepts during the course of the meeting. EnviroIssues will take the feedback and refine the concepts.

Confirm June meeting summary adoption

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

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

Tri-Party Agreement Agencies – Annual Updates

DOE-ORP

Dave Brockman, DOE-Office of River Protection (DOE-ORP), said there have been a lot of changes at DOE recently. Dave said he has transitioned into the manager position at DOE-ORP and will remain there until he retires in January. Jonathan (JD) Dowell, DOE-ORP, will take over his position at the beginning of the year. Dave also announced that Dale Knutson has been assigned Federal Manager of the Waste Treatment Plant (WTP) construction, and Matt McCormick has been promoted to Manager of DOE-Richland Operations (RL) at Hanford.

JD provided an update for DOE-ORP. He thanked the Board for hosting the meeting, and said he was looking forward to meeting all Board members he has not yet met.

JD said they are rapidly preparing initiatives that are progressing forward for where DOE-ORP hopes to go in 2011. He said there are a lot of exciting things happening with the tank farms and that DOE's strong management team will assist them in continuing success at Hanford.

JD reviewed DOE-ORP's 2010 accomplishments:

- Tank Farms Project
 - Tank Retrievals – DOE plans to continue an aggressive retrieval schedule in 2011
 - Mobile Arm Retrieval System (MARS) Phase II testing
 - Infrastructure and facility upgrades – American Recovery and Reinvestment Act (ARRA) work
 - Enhanced tank waste strategy
 - Single Shell Tank (SST) Integrity Expert Panel Working Group
- Completed proposed settlement agreement public review and comment period
 - Issued draft Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) and completed public review and comment period
 - Collected over 5,000 comments; DOE is currently addressing those comments.
- Waste Treatment Plant (WTP) Project
 - Resolved External Flow sheet Review Team technical issues
 - Pivot point to construct, commission and operate
 - Project Alignment
 - WTP construction site Voluntary Protection Program Star status

JD reviewed DOE-ORP's responses to HAB advice submitted in 2010. Currently there are eight open issues and they have responded to five of them. JD said DOE-ORP and the Board are compatible in several areas of the advice pieces. JD said it is very important to get the Board's input on the cleanup process because it serves as a check and balance system. JD said DOE-ORP is taking the advice seriously and that the process should be as collaborative as possible.

JD reviewed the progress of tank farm retrievals:

- C-104 Retrieved 75% of tank waste
- C-111 Retrieval starts next week
- C-112 Design and construct system
- C-108 Construct hard heel retrieval system
- C-110 Select hard heel technology
- C-107 Install new sluicing system (first MARS deployment)

JD explained the retrieval tools being used in the tank farms. He said many of these tools sound familiar but have been enhanced or improved recently and are more robust than they were before. Single shell tanks have a tendency to leak and new technologies are being used to make waste retrieval more efficient and safer for workers.

- Mobile Arm Retrieval System (MARS)
- Enhanced Reach Sluicing System (ERSS)
- Mobile Retrieval Tool (FoldTrack – Revision 1)

JD reviewed the infrastructure improvements at Hanford:

- C-Farm Projects/Enhancement
 - Stack upgrades – add a 23' extension to two ventilation systems in C-Farm to reduce vapor exposures to As Low as Reasonably Achievable (ALARA)
- Installed TY Farm Interim Surface Barrier
 - Barrier Area ~ 80,500 square feet (1.8 acres)
 - Evapotranspiration Basin ~ 71,300 square feet (1.6 acres)
 - These improvements will help with weather durability and keep contamination buried in the ground from getting buried deeper
- Started Evaporator Campaigns

- Expected to create at least 240,000 gallons of double shell tank space for continued retrievals from single shell tanks.
- Performed Waste Transfers
- Completed Wiped Film Evaporator small-scale design and simulant testing
- Focused on mitigating high-level waste in order to feed the WTP more efficiently
- Waste Feed Transfer Lines Upgrade
 - Completed 100% design of new lines and refurbishment of old lines in March
 - Construction began in June
 - Contractor performance and infrastructure challenges are both issues with feed transfer lines

JD discussed the challenges DOE-ORP currently faces concerning tank farms, and provided examples of how they are actively working to mitigate those challenges:

Challenge: Reduce lifecycle cost and savings

Solutions:

- Enhanced tank waste strategies
- Technology development and deployment

Challenge: Aging infrastructure

Solutions:

- ARRA funding – DOE-ORP is working to be successful guardians of this funding and see that it improves work at Hanford

Challenge: Increase Tank Farm Operational Readiness

Solutions:

- Improve Conduct of Operations
- Retrieval transition

JD said approximately \$140 million of the ARRA funding has been spent so far. DOE-EM has done a good job of improving infrastructure to complete cleanup goals and ensure reliable waste feed for WTP operations in the future. JD said the agencies are very focused on establishing a good transition path for workers once ARRA funding runs out.

Dale Knutson, DOE-ORP, said when he began in his position in June, a group of independent experts came to Hanford and informed DOE that cleanup could be finished by 2019 but it would take a significant amount of funding. Dale explained that it is important to create a culture that accepts tax payer funds are going towards cleanup and to develop a “pivot message,” which is a concept that will help move the Hanford cleanup project from design and construction to construction and commission. Dale said it is his job to make create the pivot message and ensure that this transition occurs.

Dale explained the integrated management underway at Hanford and used a flow chart to relate this to WTP. He said the contractors for tank farms and the WTP are integrating and working together to provide a robust operation at the WTP.

Dale said July marked the 50% mark of construction of the WTP. He said it is important for people to understand what their tax payers dollars are being used for and how they are helping accomplish cleanup at Hanford. In 2016, 100% of the physical construction will be complete and 80% will be transitioned to an operational state, three years earlier than people anticipated.

Dale said crews are currently learning how to use new technologies that deal with low activity waste streams. This will help prepare workers for dealing with two other more difficult waste streams in the future.

Dale explained the “13-16-19” WTP management schedule:

- By 2013 all engineering will be complete on the project.
- By 2016 construction will be complete and 80% of the plant will be to operational state.

- By 2019 commissioning of the WTP will be complete.

Dale said these milestones could happen sooner depending on the level of funding available. DOE-ORP has sent in a Fiscal Year (FY) 2012 Congressional Budget Request, and if they receive all of the funding requested, they are confident that they will have a budget and strategy that will enable them to meet the 13-16-19 milestones.

JD said sustained excitement and energy is needed for integration of tank farms and the WTP because it is going to be a challenging engineering feat to complete the WTP by 2016.

JD stated that in terms of budget, DOE-ORP got what they expected to get in 2011 and the finding will allow them to continue increased operations on-site. He said there is a need to mature supplementary treatments so they can contribute to other projects in the future and try to meet the needs of FY 2012.

In looking forward, DOE-ORP will be focusing on the following:

- Tank Farms
 - Finish strong on ARRA
 - Continue to improve retrieval
 - Technologies
 - Contractor performance
 - Mature the tank waste strategy
 - Focus on technology development
 - Improve performance
 - Deliver long-term efficiencies
- WTP
 - Focus on construct/commission
 - Complete design
 - Integrate Tank Farms and WTP to prepare for operations
 - Accelerate funding profile to reduce risk and ensure operations success
- Proposed Consent Decree and Tri-Party Agreement Modifications
- Draft Tank Closure and Waste Management Environmental Impact Statement

JD said DOE will also be focused on taking care of trained people because that is a very important resource needed for cleanup.

JD thanked the Board for their time and for the advice and recommendations they submit. He said DOE-ORP will continue to listen to their recommendations and try to make the best decisions they can.

DOE-RL

Matt McCormick, DOE-RL, provided an update to the Board. He said it is a privilege and an honor to be in front of the Board as the DOE-RL manager. He said Dave paved the way for the 2015 Vision and Matt noted that he has no intention to change what Dave has already started. Matt said Rich Holten, DOE-RL, will serve as the Central Plateau Assistant Manager and they will work together to continue improving the quality of cleanup at Hanford.

The following are excerpts from Matt's presentation. Matt credited ARRA funding for completion of much of the work on the site.

21 Years of Cleanup Progress – Continuing momentum to reduce or eliminate environmental risks

- Moved 2,300 tons of corroding spent nuclear fuel away from Columbia River to safe, dry storage in Central Plateau, removed one basin
- Treated 4.4 billion gallons of contaminated groundwater, treatment in place along Columbia River and on Central Plateau; new treatment systems being deployed
- Cleaned up more than half of the total waste sites (475 of 800) and demolished nearly half (208 of 463) of the facilities near Columbia river
- Retrieved 50,437 of 70,000 drums of plutonium-contaminated buried waste, sent 451 shipments of waste to national repository in New Mexico

- Placed 5 of 8 reactors in interim safe storage, 1 underway
- Cleaned up 35 of 850 waste sites and one-quarter (271 of 970) of the facilities on the Central Plateau
- Disposed more than 10 million tons of waste in Environmental Restoration Disposal Facility (ERDF)

2010 HAB Advice Overview

- Received 12 letters of advice, 9 pertaining to DOE-RL
- Three pieces of advice particularly valuable
 - *Beryllium – recommending independent review of CBDPP*
 - *Central Plateau Strategy*
 - *Proposed Changes to the Tri-Party Agreement for Central Plateau Cleanup Work, and for Mixed Low-Level Waste and Transuranic Mixed Waste*

July 2010 Hanford Site Cleanup Completion Framework

- Comprehensive Information Resource on Hanford Site Cleanup
 - Provides overview of Hanford cleanup strategy
 - Strives to make complexities of cleanup more understandable
 - Gives context for how individual activities support cleanup completion
 - Living document, will be updated yearly
- Content
 - Overarching goals for cleanup
 - Relationships between three main components of cleanup: River Corridor, Central Plateau and tank waste
 - Stages of cleanup completion building upon 2015 Vision, Central Plateau Strategy, new tank waste completion milestones
 - Cleanup challenges from DOE-ORP point of view

Key Cleanup Challenges

- River Corridor
 - K Basin Sludge
 - Final Disposition of Surplus Production Reactors
 - Hexavalent Chromium at 100-D, 100-H and 100-K Areas
 - Strontium-90 Plume at 100-N Area
 - Uranium Plume at 300 Area
- Central Plateau
 - Number, variety, complexity of cleanup actions
 - Deep vadose zone contamination
 - Long-term effectiveness of engineered surface barriers
 - Legacy Solid Waste Burial Grounds
 - Tank waste retrieval and treatment
 - Tank area closure

Stages of Hanford Cleanup

- Shrink to the extent practical from 586 square miles to about 10 square miles

FY 10 Progress - Hanford Reach National Monument

- Fitzner-Eberhardt Arid Lands Ecology Reserve (ALE) Unit
 - Combined Community Communication Facility operational
 - More than 31,000 square feet of facilities demolished
 - Completed demolition of 15 facilities on lower ALE
 - 95% of debris sites removed
- Wahluke and Saddle Mountain Units (North Slope)
 - Planning for debris cleanup

2015 Vision FY10 Progress

- River Corridor

- All 300 Area groundwater remedies implemented
 - Natural attenuation and monitoring determined not adequate
 - Remedial and sequester technology tests underway
 - Uranium geochemistry and transport research underway funded by DOE Office of Science
- 69 of 240 facilities demolished
- 22 of 107 waste sites remediated
- 442,000 tons of soil removed
- Non-intrusive sampling underway at 618-10 Burial Ground, plans underway for 618-11
- River Corridor IU2 & IU6 Area
 - 7 waste sites remediated
 - 251,000 tons of soil and debris removed
 - Workers continue to sift through debris at old Hanford Town Site dump
- River Corridor D & H Area
 - D Area pump & treat system construction/startup 97% complete
 - Acceptance testing in progress
 - 45 road crossings constructed
 - 45 miles of high-density polyethylene piping in place
 - 55 wells installed (41 extraction and 14 injection)
 - H Area pump & treat system
 - Acceptance testing in progress
 - Initial operations anticipated in December 2010
 - 10 facilities demolished
 - 78 waste sites remediated
 - 1,719,000 tons of soil removed
- River Corridor N Area
 - All N Area groundwater remedies implemented by December 2015; Tri-Party Agreement (TPA) target date 12/2016)
 - Proposed expanded apatite (mineral) barrier
 - Initial 300 foot test indicates at least 95% reduction of strontium-90
 - 59 of 115 facilities demolished
 - 1 of 78 waste sites remediated
 - 16,000 of 157,000 tons of soil removed
- River Corridor B & C Area
 - B Reactor Designated as a Museum or Interim Safe Storage
 - B Reactor preserved for public access, tours provided March – September each year; about 6,000 visitors during 2010 tour season
 - National Park Service considering including B Reactor in Manhattan Project National Historical Park, DOE strongly supports
 - Remediating the 13-square-mile BC Control Area
 - 48 acres excavated and surveyed
 - 288,000 tons of soil removed
 - 33 waste sites remediated
 - Groundwater remediation
 - River sampling results indicate chromium upwelling
 - Currently assessing options to address
- River Corridor K Area
 - 4 waste sites remediated
 - 29 facilities demolished
 - Initiated remediation beneath former K East basin

- Retrieved highly radioactive settler tube sludge in K West basin
 - Over 610 items of debris removed from K West basin
 - Demolished 6 reactor support facilities
 - Demolition of K West sedimentation basin 85% complete
 - Completed 4 characterization core borings at KE reactor
 - Removed 368,000 tons of soil/debris
 - Brought down 175-foot exhaust stack
- 400 Area
 - Continued surveillance and maintenance of Fast Flux Test Facility (FFTF)
 - Completed full-scale replica of the K West basin (including constructing an 85,000-gallon basin) at the Maintenance and Storage Facility (MASF) to simulate sludge retrieval
- River Corridor
 - Cleanup ‘In-between’ Reactor Areas
 - Reviewing operational history for implications of past waste sites
 - Light Detection and Ranging (LiDAR) (remote sensing) technology coupled with Orthophotography (geometrically corrected aerial photography) produces highly accurate digital imagery
 - ‘Virtual fly-overs’ looking for signs of past disturbance
 - Follow-up with ground surveys
 - Detected more than 20 waste sites and dozens of uncontaminated debris sites so far
- Central Plateau Outer Area – 200 North Area
 - Evaluating disposal alternatives for 14 contaminated railcars and two contaminated locomotives
 - Removed 8,100 tons contaminated soil from 216-N-6 waste site
 - Finished demolition of 212-N, 212-P, and 212-R buildings (formerly stored freshly irradiated fuel rods)
 - Removed 29,000 square feet of contaminated building space
 - Completed confirmatory radiological surveys and soil samples as final stage of this demolition project
- Central Plateau Inner Area – 200 West Area
 - U Plant demolition and disposal (D&D) preparation
 - Cleared canyon deck
 - 125 pieces of equipment relocated to cells
 - Five U Plant ancillary facilities at ground-level or removed
 - 29,760 square feet of fixative applied in preparation for demolition
 - Waste Treatment and Disposal
 - Resumed shipments of transuranic (TRU) waste to Waste Isolation Pilot Plant (WIPP); low-level waste to ERDF
 - Completed construction and turnover of ERDF container maintenance facility
 - Completed Alpha Caisson Retrieval Project to 30% design
 - 994 cubic meters of mixed/low-level waste shipped to treatment facility
 - 521 cubic meters of suspect TRU waste retrieved from trenches
- Central Plateau Inner Area – Plutonium Finishing Plant (PFP); preparing for 2013 demolition--three years ahead of TPA milestone
 - Completed removal of special nuclear material
 - Initiated historical security downgrade
 - 91 glove boxes removed
 - 84 shipped for treatment/disposal
 - 5 staged for size reduction
 - 18 ancillary structures relocated or demolished
 - D&D teams working in 234-5Z, 2367-Z/ZB and 242-Z buildings
 - 15 fuel storage vaults removed two years ahead of schedule

- 1,896 cubic meters of waste shipped:
 - 1,703 mixed low-level waste
 - 171 TRU waste
 - 22 non-radiological waste
- 10,884 linear feet asbestos removed
- Successfully completed entries into 242-Z Americium Recovery Facility
 - Completed removal of tank room combustibles
- Central Plateau Inner Area – ERDF
 - Cleanup activities generating more waste for disposal at ERDF than ever before
 - Increased average disposal rate from 200 cans/day in 2009 to 400 cans/day in 2010
 - On May 10, set new individual daily record of 602 cans
 - On June 24, 2010 set annual disposition record by surpassing former mark of 1,067,271 tons set in 2005
 - Super cell 9 & 10 expansion will increase capacity by 50 percent
- Central Plateau Inner Area – Deep Vadose Zone
 - New Deep Vadose Zone Operable Unit proposed in Central Plateau TPA Change Package
 - Focal point for development, testing and application of solutions
 - Treatability testing underway
 - Pilot-scale desiccation test initiated at BC Cribs
 - Uranium sequestration test planned for FY-2011 at U-8 crib
 - High-air-flow Tc-99 extraction test planned for FY-2011 at BC Cribs
 - Interim barriers installed at two tank farms include vadose zone monitoring
 - Investments in long-range solutions
 - Deep Vadose Zone Technical Forum (held July, 2010)
 - Draft Long-Range Plan available for regulator and stakeholder review October, 2010
 - Securing EM-30 funding and aligning investment priorities with deep vadose zone needs
 - Establishing collaborative research efforts with the Office of Science
 - Planned “launch ” of a Deep Vadose Zone Applied Field Research Center this fall (includes EM-30 solicitation for proposals for the Hanford Center and two other Centers to address research needs)
- Central Plateau Groundwater
 - Design complete, construction contract awarded for 200 West (ZP-1) pump & treat system
 - Concrete foundations being formed
 - Steel construction to begin September 2010
 - 13 wells installed
 - Pursuing LEED (“green building”) certification
 - Decommissioned 175 wells no longer of service

Hanford Site Chronic Beryllium Disease Prevention Program

- March-April, 2010, DOE Office of Independent Oversight [within the Office of Health, Safety and Security (HSS)] inspection on Hanford Site implementation of its sitewide Chronic Beryllium Disease Prevention Program
- HSS Report, issued on June 2, 2010, yielded four findings, 12 opportunities for improvement
- Frequent working group meetings with agencies, contractors and key stakeholder groups
- Contractors have submitted corrective action plans which have been integrated into one draft plan which was submitted to DOE-Environmental Management (EM) on August 30, 2010 - EM reviewing draft plan and coordinating with HSS
- Draft Corrective Action Plan includes 255 items that address each finding and opportunity for improvement identified in the HSS Report
- Interim actions underway on items identified as priority by working group

Energy Park Initiative

- February 2010 lease request from Energy Northwest; supported by Mid-Columbia Energy Initiative.
- April & August 2010 – Hanford Site Manager met with Tribal Nations to discuss Energy Park Initiative
- In considering this initiative, DOE to ensure:
 - Geographic boundaries consistent with Comprehensive Land Use Plan
 - Leases compliant with applicable laws, regulations, and obligations
 - Continued open dialogue with parties interested in leasing land for energy use
- October 28, 2010 – DOE will hold community forum to discuss/obtain input
- Following community forum, DOE-RL will determine path forward regarding Energy Northwest lease request

Cleanup After Recovery Act – Preparing for 2012 and Beyond

- Cleanup funding anticipated to decrease in 2012 compared to 2011
- DOE-RL submitted 2012 funding request of 1.6 billion
- Committed to focus on cleanup priorities and minimize workforce impacts

Matt thanked the Board for their time and added that he looks forward to continued interaction with members.

Ecology

Jane Hedges provided an update to the Board on behalf of the Washington State Department of Ecology (Ecology). Jane said Polly Zehm, Director of Ecology, regrets that she could not make it to the meeting. Jane thanked the Board for all of their support last year.

Jane said it has been a busy year for Ecology. She thanked the Board for their timely and thoughtful advice. There were nine pieces of advice submitted to Ecology and they have been making it a priority to provide timely responses.

Regarding the State of the Site advice and recommendations, Jane said the TPA Agencies intended to hold meetings this fall but, due to the work associated with the TC&WM EIS, the meetings will be held in the spring of 2011.

Jane said Ecology appreciates the budget advice concerning the impending end of the ARRA funding. Ecology understands that they will be pressed for funding in the near future and the agencies are working together to prioritize needs in order to meet the TPA milestones and obligations.

Jane said the work Ecology is doing and the progress being made on-site is increased by the ARRA funding. Shrinking the footprint of Hanford and focusing on ground water protection are major priorities for both Ecology and the U.S. Environmental Protection Agency (EPA).

Jane said work is nearing completion on the draft Hanford Facility Dangerous Waste Permit (also known as the RCRA site-wide permit), which covers 40 facilities; dangerous waste, mixed waste, and closed facilities. Ecology is working hard to release the draft permit for HAB and public review during the first of the year. The HAB Public Involvement and Communication Committee is working on recommendations to facilitate an opportunity for people to learn about the permit, because it is such a large and important permit in Washington State.

Jane said the decision to close Yucca Mountain as a nuclear waste repository has been an emotional roller coaster over the last year. In April, the State of Washington filed suit in the Washington DC Court of Appeals to prevent DOE from withdrawing their permit. In June, Andy Fitz, Office of the Attorney General, State of Washington, presented an oral argument on behalf of the state in front of the Nuclear Regulatory Commission (NRC) in Las Vegas, Nevada. Washington State was in charge of coordinating speakers who were opposed to the withdrawal. At the end of June, DOE's decision to revoke the permit was denied, but later approved by the NRC. Jane said Ecology speaks monthly with the judge in the DC case and they are trying to move the appeal forward.

Jane said the Blue Ribbon Commission was appointed to look for other long term solutions, since Yucca Mountain might not be an option. Speakers in front of the Atomic Safety Commission argued that Yucca Mountain should not

be taken off the table until other options have been identified. Jane said Governor Gregoire has been a long-time advocate for cleanup at Hanford and she is well informed with what has been going on with the Hanford Site. .

Jane said Ecology is working with the agencies to finalize the TPA Change Package in the next few weeks. Jane thanked the Board for their comments. Jane informed the group that the WIPP dates included in the change package were changed to match those of the permits, per their request.

The C-Farm Tanks Performance Assessment workshop and the programmatic agreement workshops are currently underway. Jane gave kudos to DOE-ORP and the contractors for agreeing to hold these workshops and for the wide variety of participants that attended the events.

Jane said Ecology is looking forward to the completion of the TC&WM EIS. She said the EIS will help inform the agencies' tank closure decisions.

Jane said the State's budget is currently in a bad place and State employees are required to take furlough days. This leads to less time in the office and therefore less time to respond to Board advice and recommendations. Jane thanked the Board for their patience and ensured members that Ecology is working to prioritize their work load make sure that they are getting things done in a timely manner in order to keep progress moving forward at Hanford.

Jane announced that Ecology has hired 13 new enthusiastic staff members that they are happy to have on board. There are still a number of vacant positions that Ecology is working to fill.

Jane thanked the Board for the time and effort they put into advice and recommendations. The agencies value the Board's expertise and level of institutional knowledge because it helps the agencies make better decisions.

EPA

Dennis Faulk, EPA, said this year has gone very fast and a lot has happened. To help portray all of the work in a clear and concise way, Dennis created the acronym NEAT:

Negotiations
Excellence
ARRA
Teamwork

Dennis said EPA spent a lot time this year in negotiations and they landed in a great spot in terms of the Central Plateau Cleanup Strategy and M-91 milestones. EPA heard loud and clear from the Board and the public that there were issues with who writes the Record of Decision (ROD) documents. As a result, Dennis said EPA will continue to take the lead in writing future RODs. EPA received a lot of comments on the TPA Change Package and they expect it to be signed at the end of September or early October.

Dennis added that the Board's advice throughout the year was great and the work on the beryllium issue was exceptional.

Dennis said 2010 was an excellent year at Hanford in terms of progress. He said this amount of activity breeds excitement and there has not been excitement at Hanford in a very long time. Dennis said he hopes the momentum continues through 2011 and 2012. Dennis said the ARRA funding gave Hanford a big boost of energy; the volume and speed at which buildings are being demolished and material is being taken to ERDF is exciting to see. Dennis noted that it is important for the Board to push for the \$1.6 billion DOE requested in order to keep the momentum going at Hanford.

EPA does not actually do the work on-site but they do try to enable the contractors to do the work, and do it well. Dennis said there is a lot teamwork going on at Hanford and the Board does a good job of holding the agencies accountable.

Dennis showed a photograph of the EPA team. Members include Dennis, Larry Gadbois, Craig Cameron, Helen Brownell, Laura Buelow, Chris Guzzetti, Rod Lobos, Emerald Laija and Dave Einan. He said there is a mix of

experienced and non-experienced people working together. Dennis said EPA has won two national awards for the quality of RODs they have developed at Hanford.

Discussion

Pam Larsen, City of Richland (Local Government), said she is excited about what has been accomplished with the ARRA funding thus far. She added that DOE has applied for leftover funds from 2010 to use in 2011. Pam asked which projects have been chosen for this additional funding. Matt said there is approximately \$1.5 million in buy-back funds to use in 2011. Specific projects have not been identified but the money will likely be used toward four or five infrastructure improvement projects.

Pam asked if pending the EMAB committee meeting this month and their findings concerning the WTP, would construction on the WTP would get delayed or halted. Dale K. said there will be a debrief next week on a draft report of their findings but DOE would not know until next week what their final conclusion is. What they will be deciding upon is whether or not ERDF is effective and safe. There are opportunities for improvement when you plan for a 40 year lifecycle in terms of near term and long term advantages they can take.

Ken Niles, Oregon Department of Energy (State of Oregon), asked where DOE-ORP stood in terms of supplemental treatments. JD said there are technical dollars available focused on complex wide solutions and secondary waste stream management, and currently DOE-ORP is looking at three of these technologies. However before these technologies can be used their effectiveness needs to be proven. From a DOE-Headquarter (DOE-HQ) standpoint there are other elements to the Enhanced Waste Strategy, such as steam reforming, that are in the top three technologies being studied. Dave added that this is currently a large focus for Dr. Triay, Assistant Secretary for DOE-EM. Shirley Olinger, DOE-ORP, is leading the effort on this issue. Ken asked why DOE is looking into steam reforming when the TC&WM EIS showed that steam reforming was not a good option at Hanford. JD said there is a commitment to make sure that there is thorough analysis done on all options.

Dick Smith, City of Kennewick (Local Government), encouraged the agencies to treat the tanks farms and WTP as a system and not two different pieces.

Dick asked if DOE still plans to use garnet to cut holes in the top of the tanks to use the MARS device. JD said that garnet is the approved path for DOE and added that the corrosiveness in the WTP facility and tank farms piping has been studied and has shown garnet to be a suitable cutting material for the 54-inch risers. JD noted that there are still technical difficulties the HAB has with whether or not garnet is the right material but DOE is standing by their studies and feel that it is an acceptable option.

Keith Smith, Public-at-Large, thanked Jane and Dennis for their updates. He said he was pleased to see that the tank farms and WTP were being integrated. Keith requested that the agencies obtain formal worker input on this topic because it is important to plan from those working on the ground.

The group asked how long DOE would take on testing supplemental treatments before a decision is made. JD said this is a good question and it depends on a number of variables. JD said DOE is weary of investing too much money into a technology method and then not using it. DOE is being careful not to get to a point of no return in terms of choosing the appropriate treatment. JD said the current System Plan supports that a fixed plan is needed by 2011.

Larry Lockrem, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen), asked JD and Dale where DOE plans to find over 150 chemical technicians to support the transition from construction into commissioning of the WTP. In addition, Larry wanted to know how DOE planned to integrate and fund new individuals at other areas on-site. JD said this is the complexity of transitions in the nuclear industry. Currently there are certain things that do not exist now that will in the future that will assist in meeting cleanup goals. The technologies and work force needed to run the WTP facility are two of those things that do not exist at this time. JD said the current tank operation contractor, WRPS, has started resource planning in terms of staff needed, however; that is the extent of staff planning completed to date.

Doug Mercer, University of Washington (University), thanked the agencies for their energy and good work being done at the site; he said he can feel the positivity all the way in Seattle.

Doug struggled with whether or not the agencies should choose technologies that have been proven to work that the agencies are familiar and comfortable with (i.e. glass), or if they should choose riskier alternatives that have potentially higher payoffs (i.e. cheaper, more efficient). JD said this is a complex question. DOE is still examining which technologies to include in the System Plan to ensure that they are safe and compliant. JD said the HAB has challenged DOE throughout the design process and he feels that the Board's oversight, via advice and recommendations, needs to continue to be robust.

Dave said advice on the WTP should focus on getting the WTP built and moving. The research needs to be conducted; it must mature and then be integrated into the System Plan. Dave said DOE continues to make better waste forms and will change them as needed.

Maynard Plahuta, Benton County (Local Government), asked where DOE is in terms of deep vadose zone remediation and the cost it will take to move forward with this. Matt said he is working with DOE-HQ to identify \$5 million to kick off a deep vadose zone research center. However, the \$5 million does not include the cost to deploy a remedy.

Maynard asked if historical sites at Hanford will be left as is or preserved. Matt said they will likely leave them as they are but noted that they are working with archaeologists to learn how to preserve them better. Maynard said this is encouraging to hear.

Pam said it appears that there is a fast track for demolishing the K East Facility, which will cost a lot of money. In light of the 2012 budget, Pam asked how DOE plans to approach this issue. Matt answered that DOE is requesting funds to continue work with the K East Reactor by either putting it into interim storage or demolishing it. The cost will be the same regardless of the route DOE decides to take. Matt said this will happen in 2013 so a decision will need to be made soon.

Pam asked if there is still a commitment to preserve B Reactor. Matt said they are trying.

Larry asked who the contractor is for the uranium geochemistry and transport research that is funded by the DOE Office of Science. Matt said Bechtel is the contractor.

Gerry Pollet, Heart of America Northwest (Regional Environmental/Citizen), said it is encouraging to hear that public comments on the TPA Change Package made an impact. Gerry said that because of the decision to ensure removal of TRU waste from Hanford before WIPP closes, the public will feel their input matters and will be encouraged to continue coming to meetings and submitting comments.

Gerry said the Open Government Plan has specific requirements on transparency and the HAB is a model for that type of collaboration. Gerry noted the DOE did not solicit input on their Open Government Plan that was submitted for the President's Initiative. Gerry also proposed DOE incorporate a flagship initiative into their revised Open Government Plan in terms of public involvement.

Matt said DOE is aware that they put out a plan for the President's Initiative without advertising for comments. Matt agreed that their Open Government Plan needs work, especially recognizing the cleanup process, and DOE-EM is aware that they are deficient in this area. Matt noted that the regional DOE offices are working with DOE-HQ to address and improve this issue to ensure that the cleanup process is recognized. Gerry asked if DOE would engage the public in this effort, possibly with public meetings. Matt said DOE would make it available to the public and would accept comments. Dave added that this might be an advice topic the Board would like to take on.

JD agreed with Dave and Matt, stating that this would be a great piece of advice and would force DOE to look into possibly holding public meetings. JD said this will be an important topic at the SSAB meeting to evaluate what the transparency model is across the sites because it should be a national policy. Dennis said this dialogue would be welcome at the State of the Site meetings and he encouraged the Board to culminate advice with this input in mind, because there are more players involved in this issue than are present at the meeting.

Jane said Ecology is not affected by the Open Government Plan, as it is not a federal agency. However, Washington State has a history of openness in government and agreed that the State of the Site meetings would be a great forum

for this discussion. Jane said many people involved with Hanford are on national boards, including herself, and that they would be willing to raise this question.

Gerry was concerned about how leasing decisions concerning the energy park might impact the National Monument. Matt encouraged Gerry to come to the October 28 forum and voice his concerns. Matt added that DOE must comply with NEPA and any other conservation requirements at Hanford. Gerry asked how he can provide his input if he is not able to make the October meeting. Matt said they would look into how to accommodate people who cannot attend the meeting.

Emmett Moore, Washington State University (University), said the October 28 meeting has the potential to impact the future of Hanford and he encouraged members of the Board to prepare for this meeting and mobilize appropriately.

Laura Hanses, Non-Union, Non-Management Employees (Hanford Work Force), thanked DOE-RL for their efforts to address risks associated with West Nile Virus because it is important to protect the community.

Laura encouraged the agencies to consider long-term transportation for the work force. In a month there will be elk on the road and the driving conditions will be much more dangerous. Jeff Luke, Non-Union, Non-Management Employees (Hanford Work Force), also asked if there are any plans for mass transit busing. He said this is great time for DOE to reinstitute a mass transit system because Hanford is better configured for it, i.e. single buses to the labs, the WTP, etc. In addition, Hanford is an environmental cleanup site and it seems counterintuitive to have thousands of personal vehicles driving out to the site each day. JD said they are looking into busing the workforce or possibly bringing gasoline on-site, both of which will enhance safety and efficiency of the workforce.

Laura asked how DOE plans to transition the workforce after ARRA funding runs out. Matt said they are working to make the ARRA workforce transition go as smoothly as possible and plan to follow all required rules for worker restructuring. JD agreed with Matt, adding that DOE believes they will be able to seamlessly transition all current ARRA funded workers into existing jobs at Hanford. HAMTC will also be involved in deciding how workers are restructured.

Laura asked how DOE plans to deal with the aging workforce. Matt said one of the options being discussed is identifying ways to reduce the physical impacts on workers in 2011.

Liz Mattson, Hanford Challenge (Hanford Work Force), asked how waste being dumped at the Environmental Restoration Disposal Facility (ERDF) is being tracked. Matt said samples of low-level waste curies and high level waste curies in the soil are taken to identify how much activity there is. This information is tracked and mapped; Matt added that curie content data is available as part of the operating ground rules at ERDF.

Keith asked about the status of the Fast Flux Test Facility (FFTF), and if continued surveillance and maintenance is still needed. Matt said all of the sodium has been removed from the facility, excluding some residual in the process piping. Matt said surveillance and maintenance of the facility is minimal, costing approximately \$2 million per year.

Keith asked if DOE plans to do any road infrastructure improvements to haul dirt and other materials into and out of U Plant. Matt said they anticipate they will get fill from Area-C. There is currently a road going to the Plutonium Finishing Plant (PFP), but a new road will likely be built into U Canyon. DOE will reuse asphalt from K-Basins but they are still determining ways to get the fill to U Canyon safely. SR 240 is a busy highway so building an overpass or underpass will be the best option.

Keith said he appreciates the upgrades and maintenance of beryllium control on-site. Matt said they looked through a long-term lens in terms of operation, and proper support of the facility is essential.

Emmett complimented the agencies on designing the WTP to handle pumping effluent from the Central Plateau.

Doug asked if the Natural Resource Damage Assessment (NRDA) and cleanup activities for the 100-N reactor coolant intake are connected. Matt said they will coordinate that cleanup activity with the Hanford Natural Resource Trustee Council. He said it is a question of what to do with the water intake and noted that restoration may or may

not be needed. DOE will first make cleanup decisions and then consider the natural resources in terms of minimizing environmental damage.

Matt said there are 8 discharge pipes that tunnel under the river. Determining what to do with these pipes is another decision that will need to be made. Matt said N-Reactor does not have these discharge pipes. Dennis said this is an intake facility so there are no CERCLA requirements. He said the decision comes down to aesthetics in terms of how the landscape should be left. Dennis added that it does not fit into the NRDA because there are not hazardous substances and is therefore not under superfund rulings.

Mecal Samkow, Oregon Hanford Cleanup Board (State of Oregon), asked if a decision has been made about DOE leasing or selling land at Hanford for an energy park. Matt said DOE received a lease request from Energy Northwest for a land proposal but what they will put there, whether it is biofuel, wind or solar power, is unknown. Matt said DOE would like to lease the land for an energy park but they will likely release the raw land and the purchasers' land use plan will need to follow the normal National Environmental Policy Act (NEPA) process.

Mecal asked if the land is leased, would the Board have a say in what goes there. Dave said a community forum, focused on future use of the site and the concept of making land available for energy park activities, will be held on October 28 to discuss and obtain input. Following the forum, DOE-RL will determine a path forward regarding Energy Northwest's lease request. Energy Northwest has not yet disclosed what they would like to put on the land but ensured the Board that all leases will be compliant with applicable laws, regulations and obligations.

Susan L. suggested Mecal ask the facilitators for information about the energy parks. Bob Suyama, Public-at-Large, said that the Tri-City Industrial Development Council (TRIDEC) provided an informative presentation at the River and Plateau Committee (RAP) meeting concerning green energy parks possibly powering plants on-site. Bob said the presentation led to a great discussion and he encouraged showing it at a future HAB meeting to get members up to speed on the status of the energy park and green energy on-site.

Matt said there is an Executive Order from the President to reduce Hanford's carbon footprint so DOE is on the hook to reduce carbon emissions on-site. DOE is looking at accomplishing this by constructing a natural gas line from Pasco to the Central Plateau to power diesel lines, vehicles and possibly mass transit with natural gas versus diesel.

Mecal asked how terms are established and agreed upon by the Board and the agencies. Dennis said the agencies typically develop and begin the use of certain terms but there is not a formal process for developing terms or acronyms.

2010 Board Accomplishments

Susan H. reviewed the 2010 HAB/Agency Priorities Tracking Table spreadsheet. She said this is a tool for tracking mid and final year priorities from the TPA and Board-defined priorities. Agency priorities are noted in red and all others priorities listed were identified by the Board. The columns include – *Topic; Committee(s); Committee/Agency Dialogue; Active Issue Management; Advice; Agency Response; and Notes.*

Susan H. said this is a living document and EnviroIssues will continue to maintain and update this tracking system. This document will not only help track committee activity but will also serve as a report card to the agencies.

Susan H. said the *Notes* section helps determine next steps and prepare for next year's priorities.

Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), noted that there is a lot of cross work between committees, which is a strength with the Board. Those cross cutting topics were determined two years ago and the Board has been setting Committee of the Whole (COTW) meetings during off-Board months.

Agency Perspective

The agencies agreed that this spreadsheet is helpful to see what responses are pending. They also agreed that providing responses in a timely manner is an issue and a priority.

Discussion

Keith said this tracking spreadsheet will show where the record is incomplete. Keith said in years past, the agencies felt that responding to advice in a committee meeting was sufficient but it is important to have an on-the-record response that can be found online and closes the issue in the public's mind.

Dick suggested including the issue manager's name in the spreadsheet to make it more useful to members. Susan H. agreed to make that change.

Doug said he liked the spreadsheet because it shows the range of topics the Board has been focusing on and it can also be used as a reference tool. Doug suggested noting which issues do not have active management. Susan H. said they would rework the *Notes* section or add in an additional column that details what the status is.

Susan suggested adding details of why the priorities are the way they are would in the *Notes* section.

Doug suggested posting the spreadsheet online.

The group agreed that they would like to see a clearer legend or key.

Doug asked if the EIC developed the topics. Susan H. said the topics included came from the priority list provided by the agencies that the Board reviewed and adopted last September, in addition to those developed by the EIC at the spring leadership retreat. Susan said the 2011 priorities would be added to the spreadsheet once they are adopted but noted that some issues recur from year to year.

Doug asked how the spreadsheet is updated or changed. Susan H. said EnviroIssues will update the spreadsheet as the committees focus on certain issues and advice is developed and responded to. The yellow highlight notes when a new topic has emerged.

Susan H. said this is the first time this type of tool has been used. Susan encouraged Board members or agency representatives to provide suggestions on how to improve the tool and make it more user-friendly.

Committee reports

National Liaison

Susan L. said the SSAB has not met since June. There is an SSAB meeting next week and that the members of EMAB will be attending a meeting at the same hotel. Susan suggested that if the Open EMAB Meeting Advice is passed by the Board, she would be happy to take it to the meeting to discuss as a possible product for the SSAB because the issue affects sites all over the country.

Health, Safety and Environmental Protection Committee (HSEP)

Keith said over the past year they have seen a lot of productivity. Keith said the draft beryllium advice that the Board passed and the DOE Corrective Action Plan that is now in the hands of DOE-HQ are both steps in the right direction to get an improved working beryllium plan that tracks the issue. Keith said some people are not thrilled with the Plan but they were persuaded to sign on and he is looking forward to getting it back from DOE-HQ. A lot of what is included in the Plan is currently being done and the workforce is fully confident in it, which is important.

Keith said HSEP will meet in September to discuss tank farms because the issue continues to crop up. HSEP is looking to hear from DOE concerning the lack of radiation control on site.

Keith noted that they will also be discussing the Tank Vapors Program and how they are being reduced on-site. HSEP will also receive an update from DOE on the beryllium program and the status of the Corrective Action Plan.

HSEP will likely discuss 2011 priorities in November. In addition, issues with the Integrated Safety Management System (ISMS) will also be a topic of discussion. HSEP is interested in understanding how the ISMS training is going and how contractors are involved in its implementation. Mike Korenko will talk about training examples and safety incentives through the contracting process. Mike applied the ISMS program at the Rocky Flats Plant in Denver, Colorado and is an expert on the program.

Keith said unfortunately a discussion about DOE's traffic study might not make it onto the September agenda because there is not enough time to understand how it works.

Budget and Contracts Committee (BCC)

Gerry said BCC has not met since they adopted the 2011 priorities last spring. They are waiting to hear back on a couple of issues, particularly the FY 2012 budget, so BCC has not been as active as other committees.

Gerry said one of BCC's priorities for 2011 will be to review site contract performance measures and assessment for safety and health. BCC plans to accomplish this by assessing contracts and ensuring that performance incentives and penalties are clearly defined.

Harold Heacock, TRIDEC (Local Business), said BCC plans to develop advice concerning out-year budget projections and priorities based on the lifecycle cost and schedule report. In the past, BCC has developed budget priorities and objectives, but the lifecycle cost and schedule report continues to be in limbo. Harold said there is more work committed than there is money to pay for, in addition to a number of budget conflicting priorities, so this is an on-going discussion.

Gerry said BCC's priorities are closely tied together and are also tied with the lifecycle cost report, which is important for the Board to receive. BCC recommended to DOE that there should be a five-year priority list and a final year of the ARRA funding tool to get an idea about where the dollars are going. Gerry said DOE's draft response to this recommendation was no; however; Gerry said it is unclear how the BCC or the agencies can consider budgeting issues without a five year Integrated Priority List (IPL).

River and Plateau Committee (RAP)

Pam complimented Susan for a very successful, yet busy, year. Pam also thanked the committee, particularly Maynard and Dale Engstrom, Oregon Department of Energy (State of Oregon), for their work and for volunteering to serve in leadership roles for RAP.

Pam said RAP submitted advice on long term stewardship and institutional controls. In addition, RAP had a great presentation on the Resource Conservation and Recovery Act (RCRA) versus the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). She thanked John Price, Ecology, and Craig Cameron, EPA, for leading the presentation.

Pam said RAP provided input on the TC&WM EIS. Pam felt that the advice the HAB did on the EIS was impressive and she hopes the agencies will incorporate the advice into the final draft. RAP also sponsored advice on the 100-N Area Remedial Investigation/Feasibility Study (RI/FS) Work Plan.

Pam said RAP was encouraged by the response provided on the TPA Change Package advice the Board submitted, particularly concerning TRU waste.

RAP has been tracking science and technology issues pertaining to cleanup of the River Corridor and Central Plateau. Deep vadose zone is another issue RAP is worried about and is pushing DOE for an update soon. Pam noted that RAP had several members participate in the deep vadose zone workshops that occurred this past summer.

Currently and into next year, RAP will focus on U Canyon destruction and demolition (D&D), CERCLA 5-year review, retrieval and packaging of pre- and post- 70 TRU, K-reactor and basin, effectiveness and capability of ET barriers, characterization and remediation of PW-1, 3, 6 and CW-5 waste sites, SW-2 and supplying input on the RI/FS work plan, and submitting comments on pump and treat systems for groundwater remediation.

Pam said although smaller and differently constructed, Brookhaven National Laboratory is still serving as a lessons learned for reactor removal at Hanford.

Pam also mentioned that a waterline leak on site caused movement in contamination plumes and RAP is concerned about other areas on site where this might be happening.

Tank Waste Committee (TWC)

Larry said there were three topics discussed in June; regulatory review of Ecology's comment on the TC&WM EIS, waste source contamination, and issues with Hanford tank waste to be forwarded to the EMAB subcommittee on tank waste.

Larry said there was a joint meeting with RAP that focused on; regulatory review of EPA comments on the TC&WM EIS, System Plan to begin moving forward (Ken Gasper provided support on this topic), creating a technology development road map for tank waste retrieval and closure, and Blue Ribbon commission to share their thoughts and observation on Yucca Mountain.

The September 16 TWC meeting will focus on; the pulse jet mixer facility with a video presentation, WTP and understanding a path forward, 242-A Evaporator upgrades, System Plan Rev 5, and observations from members who attended the single-shell tank analysis of record.

In 2011, the TWC will focus on; big picture issues with tank waste, how to achieve outcomes for systems and strategic planning, waste retrieval and processing, need for characterization and deep vadose zone treatment, ongoing work on regulatory processes, and secondary waste.

Dirk Dunning, Oregon Department of Energy (State of Oregon), said the TWC has a discussion with DOE-ORP and Ecology. Ecology would like the committee to hold a public meeting after the TWC meeting on tank closures, secondary waste issues and different waste forms, and regulatory issues in terms of leaving waste inside the tanks, and whether Waste Incidental to Reprocessing (WIR) is under DOE order.

Public Involvement and Communication Committee (PIC)

Steve said it was a busy summer for the PIC. A number of meetings and calls were held and Steve thanked the committee for their support. Steve encouraged members to read the meeting summaries to get a better understanding of the work the PIC has been doing. The August summary gives a feel for the complexity and density of the RCRA Site-wide Permit.

PIC will be discussing public workshops on the RCRA Site-wide Permit, and is looking to broaden their audience. Suggestions as to where to host these meetings are welcome.

PIC priorities in 2011 include; creating initial strategic planning documents, review and critique the draft Community Relations Plan, refine the State of the Site meeting advice, develop and promote HAB specific educational outreach opportunities, integrate time for debriefing into all meeting agendas, advise on the DOE-EM Open Government Plan (and make Hanford a model for this), and review agency outreach materials.

An additional PIC priority concerning engagement techniques was added to respond to a direct request from EPA. EPA would like the committee's help to develop techniques for post-decision interactions with the public, i.e. after a ROD is issued.

Steve encouraged members who have attended workshops or meetings to provide PIC with feedback on what worked well and what did not, what presentations were successful and what materials are useful.

Steve said the PIC will be working on the issue of knowledge transfer from the aging Board to younger members. The PIC is hoping to accomplish this by soliciting participation from college classes.

The State of the Site meetings were pushed to the spring so the PIC is thinking through format and facilitation.

Nick Ceto, DOE-RL, informed the Board that the lifecycle cost and schedule report is still in limbo and is not actively being worked on. Nick did not have a date for when the report would be ready because it depends on the consent decree that calls for new court-enforced deadlines for emptying Hanford tanks of radioactive waste and treating the waste. However, Nick noted that DOE is working on a video and visualization tool or slide show to illustrate the progress being made on-site. Nick thought this tool might be useful to the PIC committee. Maynard agreed that having both of these tools available would be great.

Ken asked Nick if the video script had been finalized for the video. Nick said he and Paula Call, DOE-RL, are still working on it.

Pam noted a recent Hanford community event where DOE-ORP and Ecology were invited to speak to audience of approximately 200. The event was televised locally and regionally.

Steve said the issue of getting high-level information to the public was discussed at yesterday's PIC meeting. Todd Martin, Board member and facilitator at the TPA Change Package meetings, provided a very informative *Hanford 101* presentation. Steve felt that getting this to audiences who are not as informed would also be useful.

Executive Issues Committee (EIC)

Susan L. said the EIC is made up of the Chairs and Vice Chairs from each committee. The EIC meets regularly before each Board meeting and allows the committee to connect and learn about what each of the other committees are focused on. Susan said EIC meetings are very beneficial and help the Board meetings go more smoothly. Interconnecting the committees together more successfully is an effort to make the cleanup at Hanford more successful.

Susan announced that the site tour will be held on October 6, following the October 5 COTW meeting. Tammie will send out information about the tour and Susan encouraged all members to take advantage of this opportunity, because ARRA funding has caused a lot of visible work to be completed.

Advice on openness of the U.S. Department of Energy's Environmental Management Advisory Board

Ken Niles said the Open Meeting Advice is fairly straight forward. He reviewed the genesis of this advice: There was a meeting in Richland regarding the Waste Treatment and Immobilization Plant (WTP). The majority of the meeting was closed to the public. He sent his concerns about this practice to DOE, who responded to his concerns by saying that, under provisions of the Federal Advisory Committee Act (FACA), sub-committee meetings do not have to be open. While DOE has the legal right to close this meeting, Ken said it is bad policy and conflicts with open government. Ken added that in mid-September the sub-committee is presenting their findings to the full Environmental Management Advisory Board in Santa Fe, New Mexico. Initially, we were invited to call in to hear their presentation, then we were informed that there would not be a telephone line available to do this. After pushing back on DOE's decision, we were given permission to call in but were told it was a "listen only" line. Ken said this difficult process with DOE-HQ is what prompted the advice.

Ken said this advice is written directly to Dr. Inés Triay, DOE-EM. Susan said if the Board approves the advice, she will hand deliver it to Dr. Triay at the upcoming EM SSAB meeting in Santa Fe, New Mexico the following week.

Susan H. noted that the advice received consensus from PIC to move forward.

Agency perspective

JD said by bringing this to DOE-HQ the Board is trying to resolve the situation. JD said it is clearly an issue the Board feels strongly about and it is apparent what the Board is asking for.

Discussion

The group agreed the advice is well written and they agreed with it conceptually.

Pam said she was unaware of the secretiveness of the meeting. Pam, Susan and Dirk attended a brief portion of the meeting, listened to the discussion and saw their presentation. She said the demeanor of the committee was very gracious and interested in the work of the HAB and they were interested in their opinions. Pam asked if this positive experience could be acknowledged in the advice. The group agreed to add that the HAB was invited to attend for only 20 minutes and then asked to leave.

Susan L. said this is not the first time a process has gotten in the way of success. Dirk said the committee was very open and hospitable, but the difficulty came from DOE-HQ. Dirk said he was in the room listening in the back but was asked to leave by a DOE-HQ representative.

Doug said this incident is what triggered the advice but because this is a structural issue, it is likely to lead to an additional incidence in the future. Susan said it is in the FACA law that subcommittee meetings do not have to be open. Doug asked what the procedure is for deciding if the meeting is closed or not. Susan said there is not a formal procedure and the meetings are closed simply because they can be. Their attorneys said the meeting did not have to be open to the public so they were not.

Susan H. asked if it is important to the Board to know why DOE chose to make the meetings closed. Ken said the advice is simply to share an example with DOE-HQ of an incident they did not like and ask that similar meetings are not closed in the future.

Todd Martin, Citizens for a Clean Eastern Washington (Regional/Environmental Citizen), suggested that a letter from all of the SSABs on this topic could be sent to DOE-HQ. Susan said she already took this issue to the SSAB meeting and suggested they all write a letter.

Mecal asked if the discussion that took place justified the meeting being closed. Pam said she was present at the meeting for longer than was allowed and there was not any discussion she observed that indicated why the meeting should have been closed.

Dale suggested adding in language that states if a meeting is closed, a justified and reasonable explanation must be provided.

Emmett asked Ken to eliminate the bullet encouraging DOE to direct its advisory bodies to work together to leverage the vast technical resource they share. Emmett said this bullet introduces a new topic and takes away from the idea of open or closed meetings. Ken agreed with Emmett's suggestion.

Susan L. suggested taking that bullet back to PIC to incorporate it into other future advice. The group agreed that too many concepts dilute the advice and this bullet should be brought back to the PIC.

The group agreed to make it clearer that the advice is focusing on EMAB's tank waste cleanup subcommittee.

Doug asked if this advice precludes addressing this issue in the future. Ken said it does not.

The advice was adopted and Susan L. agreed to hand deliver the advice to EMAB and Dr. Triay at the next SSAB meeting. The advice will also be sent to Ecology and EPA.

Advice on 100-N Remedial Investigation/Feasibility Study Work Plan, Draft B

Dale introduced the advice and noted that it has been a lengthy process. He said the advice comes from the integrated work plan. The advice has been in and out of the RAP three or four times and has received a lot of comments and review from HAB members and agency representatives, who wanted the advice to be more concise. Susan H. noted that the advice received consensus from RAP to move forward.

Agency Perspective

John Price, Ecology, said it is good advice. DOE and Ecology are finalizing comments on the RI/FS so when the advice is sent it will be very timely.

Nick said they will be ready to respond when the advice is sent.

Dennis encouraged Dale to clearly link the advice to the structural issues the Board has with the Work Plan.

Discussion

Jeff said if Dennis' comments are incorporated into the next draft of the advice, he would fully support it.

Jeff was not comfortable with the absence of references in the advice. Mecal agreed, stating that including references will allow someone to pick up the advice in 50 years and be able to piece things together because citations provide a frame of reference. Dale agreed to add in footnotes where appropriate.

Jeff asked if advice-writing guidelines, including rules for citations, could be developed so the Board does not have to spend valuable time on formatting. Susan H. said she and Doug have an interest in developing guidelines and will work toward this in the near future.

John said a proposal to expand the barrier is part of the interim action but investigation is still needed to identify other techniques before a decision on expansion is made.

Harold said he does not have any problems with the advice, but it does jump to conclusions about groundwater movement because this did not show up in the initial analysis. Harold said chromium is probably coming from the K-reactor but the Work Plan assumes it is coming from the 100-N area. Dale said the information came from the Work Plan and from his understanding there is chromium in the 100-N area but there is little attempt to find where it came from. However, the assumption is that it is coming from the 100-N area. Dale said chromium is not necessarily tested for because it has never been seen as a chemical of concern. Dale said the agencies have not paid as much attention to chromium as they should have, which is what the advice aims to convey.

Nick said DOE has not completely ignored chromium and he encouraged the advice writer's to note this. Nick did agree that testing for chromium was not adequate but it was still done. Dale agreed to incorporate Nick's suggestions.

Dirk asked where the chromium came from. John said a lot it came from the K-Area.

The group felt it was very important to clearly state in this advice that the Work Plan must include a verification process and/or post remedial testing to ensure the effectiveness of final remedial actions.

John said the advice should specify which locations will need to have post remedial studying. Dale said the advice aims to be more general; wherever cleanup is done, post remedial testing needs to be done to verify that the cleanup was successful.

John said this information is not included in the Work Plan because it will be included in the Remedial Action Work Plan, which is where specific post remedial requirements are listed. Betty Tabbutt, League of Women's Voters (Regional Environmental/Citizen), said having two separate studies is confusing. Dennis said this has been an issue before. Remedial studying is done but EPA and the other agencies do not do a good job in letting people know this. Dennis said this advice is good in terms of reminding the agencies to clearly articulate what they do on-site. Nick added that the agencies have not done a great job in explaining all of the work they have been doing on-site in the Work Plan, which has led to a lot of confusion.

John suggested adding in a confirmatory sampling requirement to future RODs.

Todd acknowledged that there will be data gaps when the final 100-Area RI/FS is released and he encouraged Dale to acknowledge this in the advice.

The group agreed to include the notion that verification will be needed after both the interim remedial actions and the final remedial actions.

Doug asked if there are uncertainties in the Work Plan. Dale said yes. He said they went through the Work Plan and identified data gaps that will need to be filled in. Instead of requesting that the agencies do more work, the advice is suggesting that data gaps need to be adequately filled in.

Doug asked if the Board was comfortable with the phrase "additional sampling" as opposed to providing a specific numbers. John said he did not think the Board needed to the set or quantify the level of testing needed because it is the job of the regulators to decide how much is needed and set appropriate standards. Nick said the issue of determining how much sampling is enough is a recurring concern for the Board. Because of this, Nick suggested

discussing it at a COTW meeting or hosting a tutorial with those who are doing hazardous waste management and have them share their thoughts about how much data is needed to make informed decisions. Nick felt it would be good to hear a range of views. The sufficiency line is very subjective but the Board could benefit from hearing the point of view of someone doing active cleanup all over the county. Susan said this would be a good tutorial to have in the future and suggested the topic be brought to an EIC meeting first to determine next steps.

Doug noted that Dr. Howard Frumkin, Dean of the School of Public Health at the University of Washington, could assist in recommending someone to provide a tutorial concerning best feasible target levels for toxics clean ups.

Emmett asked Dale to add in language that makes it clear the Board is familiar with the difference between CERCLA work plans and RI/FS work plans. Dale added in language to distinguish the two.

Nick noted that the RI/FS Work Plan identifies activities that will be put into the RI/FS Report. The Work Plan is the plan to develop the final report.

Dale said the overall impression of the Work Plan is that the principle contaminate of concern is strontium but there are other contaminants that have not been approached, such as nitrate, that affect drinking water. Currently there is no plan to remediate nitrate, chromium, or other metals that reach levels higher than drinking water standards. Dale said if those elements are found in the water, something must be done because it is the law. The Work Plan needs to also include how the agencies plan to deal with contaminants other than strontium.

The advice was adopted and will be sent to the standard TPA agencies and usual CCs.

Tutorial on Use of the Hanford Advisory Board Web site

Cathy McCague and Tammie Gilley, EnviroIssues, provided a tutorial to the Board about the current HAB website and proposed changes that will likely be made in the future. Tammie said the goal of these future changes is to make the site more user-friendly and easier to find documents of interest.

Susan L. encouraged Board members to forward any suggestions about how to improve the HAB website to Susan H. or Paula Call.

Tammy explained where Board members can find HAB meeting packets that include the agenda, advice to be discussed and any other important documents needed for the meeting. Tammie said she receives documents from the committees and the agencies and then she forwards them to the webmaster to post.

Tammie informed the Board that if they would like to request any documents or correspondence, members will need to fill out a document request form and send it to her directly. She added that members are also welcome to visit her at the EnviroIssues office in Richland.

Tammie showed the Board where past and current pieces of advice are kept and how they are tracked. Susan H. added that the webmaster will be added a function to the site that will allow visitors to sort through the advice.

Dick suggested inserting the year the advice was written

Doug said he would like to see a general topic description across the top of the advice in order to cross reference.

Tammy reviewed updates that were made to the Board member lists.

Doug said it would be very helpful to have an online subscribable calendar.

Bob asked if there is a place on the website for presentations that were made at Board and Committee meetings. Cathy said that, ideally, as soon as EnviroIssues receives presentation, they would be sent to the webmaster and posted online under the full board meeting information page. EnviroIssues is also working with DOE to get presentations online more seamlessly since GoToMeeting has been such a useful tool. Cathy added that the

webmaster will soon archive and collapse information from past years to clean up the pages but still keep past documents and presentations easy to access.

Susan H. said EnviroIssues is working closely with DOE to implement these proposed changes. Tammie must work through the webmaster which is why updating the site is a slightly lengthy process.

Cathy showed members where the ground rules, Memorandum of understanding (MOU), Committee lists, all calendars (HAB yearly overview calendar, Committee meetings and calls calendar, etc.), agency correspondence, points of contact and past annual reports can be found.

The Board suggested updating all calendars to include furlough days.

Dennis asked if Emy's contact information could be available online instead of his own.

Mecal asked if EnviroIssues' contact information could be included on the site in addition to a phone and email list for the chairs and vice chairs. The group agreed to continue using Tammie as the clearinghouse for all HAB inquiries. Anyone who has questions, concerns or interest in the HAB should contact Tammie directly. Tammie said an updated phone, fax and email list will be sent to all Board members for internal use only.

Doug suggested indicating which calendar the public should use if they would like to participate in HAB activities.

Cathy said the facilitation team is suggesting adding in more special reports and publications that impact work plans. This could include flow charts or documents generated for or by the Board that are not letters or advice. Keith said including a link to the Single Shell Tank Integrity Workshop Report would be useful to the TWC. Steve added that the public involvement white paper should be in the special reports section as well.

Betty asked if a date could be added to all special documents posted on the site and have them listed chronologically with the latest documents at the top. Cathy agreed to do so.

Cathy noted that an EIC list will be added under the Committee Lists section since the EIC has been meeting more regularly.

The Board agreed that they would like to see a related links section. The group suggested linking to the EM SSAB website, to the Hanford events calendar.

Doug suggested making it clear where visitors can find a high level overview of HAB versus very detailed information.

Bob suggested creating a page that lists all of the conference call and GoToMeeting information for HAB members and members of the public to easily locate.

Vince Panesko, City of Richland (Local Government), asked if it could be made clearer where visitors can find workshop schedules pertinent to the HAB. Cathy said most of that information is listed on the Hanford events calendar.

Cathy noted that the HAB photo and logo, once finalized, will be added to the homepage to show the breadth and character of the HAB. Liz suggested incorporating a photos page that would give a face to the Board and visually display all of the hard work the Board does. This would also make the HAB website more engaging.

Cathy thanked the group for their suggestions and encouraged them to submit any other changes they would like to see. Cathy said these changes would need to be approved first but EnviroIssues and DOE are currently in the process of making them happen.

Public Comment

Michelle Gerber, Washington River Protection Solutions (WRPS), said she was sent to the Board meeting by her company but noted that her public comment was not on behalf of WRPS. Michelle said one of the benefits of getting to travel is that you are able to dialogue with others. Michelle noted that while in Seattle, she attended a meeting the National Parks Service (NPS). She explained that last fall, NPS issued a resource study concerning a National Historical Park at Los Alamos National Laboratories to represent the 1940s Manhattan Project. WRPS pushed back, advocating for Hanford to be included in the Manhattan Project Sites Special Resource Study.

Michelle said she was happy to report that the NPS revised their study to include Hanford B Reactor and Oak Ridge Reservation. Currently the study is making its way through regional and national directors for their signatures, and then it will be sent to the Secretary of the U.S. Department of the Interior (DOI), Ken Salazar, who will likely sign and approve the study.

Board Business

Bob welcomed the group and thanked members for their comments on the draft HAB logo.

Bob announced that EPA has public comment period starting very soon concerning the approval of the Central Characterization Project's (CCP) TRU Waste Characterization Program. Information about the program and comment period can be found under the EPA Federal Register.

Chair Selection

Bob announced that there were three nominations for the HAB Chair position, however, two nominees declined. Susan Leckband, the existing Chair, accepted the nomination. Bob solicited final nominations from the Board. Members selected Susan by consensus to another 2-year term as HAB Chair.

Adoption of 2011 priorities

Susan L. said the 2011 priorities were developed at the leadership retreat in May, and presented to the Board at the June meeting. The agencies previewed the priorities at the May retreat and saw them again at the June Board meeting. In addition, the list of priorities was vetted through each of the committees. Susan hopes that this daunting list of work will encourage members to continue participating via conference calls, committee meetings, webinar and GoToMeeting opportunities.

The 2011 Board priorities were adopted.

Adoption of the 2011 Board calendar

Susan L. discussed the 2011 Board calendar and explained the new graphic features that have been added to help distinguish important dates.

Due to the Spring Break schedules for Richland and Oregon, the April Board meeting was moved to March 31 and April 1, 2011.

Vince asked which meetings were outside of Richland. Susan answered that the September and April Board meetings are outside of the Tri-Cities.

The 2011 HAB Calendar was adopted.

Potential November Board Meeting Topics

- Chronic beryllium disease – update on program implementation and draft corrective actions plan
- Consent decree updates
- Open government plan

- Energy park
- CERCLA 5-year review
- Advice writing guidelines
- Potential advice:
- Public involvement advice
- System plan rev-5
- Burial grounds

Other announcements

Keith announced that Lyle Smith, a health care professional, is now volunteering for HSEP.

Debra McBaugh, Washington State Department of Health (Ex-Officio), announced to the Board that this would be her last meeting. She said she has been involved in the HAB since 1995. Debra said she would be moving on to another sector of work that is not related to Hanford. Earl Fordham and Mike Priddy will serve on the HAB. Mike will take over tasks Debra used to do. He has been attending committee meetings and is excited to serve in his new role.

Debra told the Board that in her early years she believed science was the answer to cleaning up Hanford; however, she has learned from working with HAB members that science is only 10% of the answer and there are many other factors that need to be considered when making decisions. Debra thanked the Board for this lesson. Susan L. thanked Debra for her work on the HAB and wished her the best in her future endeavor.

Mecal announced that Maxine Hines, Hanford Cleanup Board (State of Oregon), was not able to make the meeting because she recently had surgery. Susan H. encouraged members to sign the card for her and Tammie will send it out.

Closing Remarks

Feedback on Board Meetings and Facilitation Team

Susan H. invited Board members to provide the facilitation team with suggestions on how to improve HAB meetings in the future, i.e. meeting agenda, format and meeting location. Susan H. asked if the Board would mind if the facilitation team build in time at the end of each Board meeting to evaluate the meeting in order to capture comments and suggestions to implement at subsequent meetings. The Board approved Susan's suggestion.

Ken said he enjoys hearing from the agency leadership every year. They provided great updates and enough time was built into this agenda so that they did not have to rush their presentations.

Ken said committee reports are all very different and it would be useful if committee representatives could focus their updates around three or four points to streamline this portion of the meeting. The group agreed that committee reports are longer than necessary and would appreciate more direction from the facilitation team.

Maynard said he appreciates hearing agency updates, particularly challenges DOE is dealing with. Maynard said the Board enjoys hearing the accomplishments but it is also important for the Board to hear DOE thinking forwardly about what the issues are making cleanup difficult.

Bob said he was impressed with the sense of enthusiasm expressed by the agencies. He said it was excellent hearing about all of the progress happening on site.

Dick asked about the benefit is of hosting HAB meetings in Portland and Seattle. He said it is a major expense for many of the Board members and agency representatives. The group agreed that hosting meetings outside of Richland allows for a number of positives opportunities including; meetings are more easily accessible for students at major universities which assists in drawing in younger members, it helps bring Hanford's presence to the Westside of the state, it allows for members to get to know one another better and ultimately makes for more successful working relationships and it allows stakeholders who do not live in the Tri-Cities to participate in the

cleanup process. Ken added that the Board serves the entire Oregon-Washington region, not just the Tri-Cities, and therefore the meetings need to travel.

John said social media and social networking is starting to be developed and it is important to understand that because the Board is aging, the audience and how you reach them will likely need to change. John added that Ken has been doing a lot to talk to college students in an effort to draw younger members. John applauded Liz's ice cream social for its success. John also noted that the agencies have working to be more proactive and meeting on issues that are five years out and incorporating the public's thoughts on how to do things. The agencies have moved away from 'decide now, defend later,' which is encouraging and creates a challenge for the PIC to determine where public involvement is going. John encouraged members to participate in Oregon's Hanford Cleanup Board because it is a lot of fun and is a different format than the HAB.

Paula announced that DOE is working towards using social networking as a way to connect with people. She added that this might be another way to broadcast Board opportunities.

Doug said the issues the Board faces with lack of participation can be addressed with innovation. The Board has a tendency to be conservative and it feels risky to try new techniques. However it is essential that the Board steps outside their comfort zone and commits resources to new public involvement strategies. The PIC is very interested in this issue, but energy is needed from the whole Board to see real success.

The group agreed that because Board meetings are held during the day from 8 AM to 4 PM it is very difficult to get participation from the working public. They also felt that looking at other ways people can participate other than meetings is something that should seriously be looked at. Dick agreed that the Board should spend funds exploring alternatives because it is unclear if existing meetings are cost effective.

Steve thanked everyone for their comments because bringing in new participation is a topic PIC is particularly concerned with.

Discussion on Dr. Walter Tamosaitis' Presentation

On September 8 in the Red Lion Bainbridge room, Dr. Walter Tamosaitis, former Research and Technology Manager of Hanford's WTP, hosted a lecture discussing his views and concerns about the safety of Hanford and WTP. A number of HAB members attended the seminar. Ken said the TWC would be tracking this issue at future meetings.

Committee Schedule

Susan H. announced upcoming committee meetings and calls. Susan L. encouraged members to join committees because that is where a lot of the work happens.

RAP: Meeting September 15 (joint topic with PIC), call on September 21
TWC: Meeting September 16
BCC: Call on September 21
HSEP: Meeting September 23
PIC: Call on September 16, meeting on September 22
EIC: Call on September 23

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

Attendees

HAB MEMBERS AND ALTERNATES

Tom Carpenter, Member	Gerald Pollet, Member	Larry Lockrem, Alternate
Harold Heacock, Member	Howard Putter, Member	Liz Mattson, Alternate
Steve Hudson, Member	Dan Serres, Member	Debra McBaugh, Alternate
Pam Larsen, Member	Keith Smith, Member	Emmett Moore, Alternate
Susan Leckband, Member	Lyle Smith, Member	Mark Oberle, Alternate
Jeff Luke, Member	Bob Suyama, Member	Wade Riggsbee, Alternate
Doug Mercer, Member		Dick Smith, Alternate
Todd Martin, Member	Karen Bowman, Alternate	Mecal Samkow, Alternate
Ken Niles, Member	Gerry Dagle, Alternate	John Stanfill, Alternate
Bob Parazin, Member	Sam Dechter, Alternate	Betty Tabbutt, Alternate
Bob Parks, Member	Dale Engstrom, Alternate (phone)	Vince Panesko, Member
Maynard Plahuta, Member	Laura Hanses, Alternate	Steve White, Alternate
	Floyd Hodges, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Paula Call, DOE-RL	Dieter Bohrmann, Ecology	Janice Williams, CHPRC
Nick Ceto, DOE-RL	Jane Hedges, Ecology	Sharon Braswell, MSA
Matt McCormick, DOE-RL	John Price, Ecology	Dru Butler, MSA
	Ron Skinnerland, Ecology (phone)	
Dave Brockman, DOE-ORP		Chelsey Funis, EnviroIssues
Stacy Charboneau, DOE-ORP (phone)	Dennis Faulk, EPA	Susan Hayman, EnviroIssues
J.D. Dowell, DOE-ORP	Emy Laija, EPA	Tammie Gilley, EnviroIssues
Dale Knutson, DOE-ORP		Cathy McCague, EnviroIssues
Pamela Mccann, DOE-ORP (phone)		
Carrie Meyer, DOE-ORP (phone)		
Erik Olds, DOE-ORP		

MEMBERS OF THE PUBLIC

Amanda Banik, Heart of America Northwest	Michele Gerber, WRPS	Mikkie Nakamnra, University of Washington – Bothell
Annette Cary, Tri-City Herald (phone)	R. J. Lee	Howard Putter, Washington Physicians for Social Responsibility
Cherie Eichholz, Washington Physicians for Social Responsibility	Maxim Lundquist, Washington Physicians for Social Responsibility	Mark Saporito, Heart of America Northwest
	Dotty Johnson	