

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

June 7 – 8, 2007

Pasco, 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 regarding: 1) Groundwater decision-making values, 2) workers' compensation, 3) target budgets for Fiscal Year (FY) 2008-2009 and out-years, and 4) cost and baseline schedules. The Board also adopted a letter to Department of Energy (DOE) congratulating them on the transfer of waste at K Basins.

Leadership Retreat and 2008 Board Priorities

The Board discussed the outcome of the annual Leadership Retreat and the 2008 Board Priorities.

Fiscal Year 2007, 2008 and 2009 Budget Update

The Board received a presentation from the agencies on the FY 2007, 2008, and 2009 budgets.

Tank Waste Committee and Demonstration Bulk Vitrification System Update

The Board received an update on the status of the Demonstration Bulk Vitrification System (DBVS).

Board Business

The Board discussed topics for the September Board meetings and identified some of the committee needs for meetings and conference calls. It also drafted the Board meeting schedule for 2008. Rick Jansons, Benton-Franklin Regional Council (Local Government), was elected to the position of Board vice chair.

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Susan Leckband, Hanford Work Force (Non-Union, Non-Management Employees), 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. Four seats were not represented: Oregon Hanford Cleanup Board (State of Oregon), University of Washington (University), a vacant University seat, and a public-at-large seat.

Welcome and Introductions

Susan Leckband expressed her and the Board's condolences to the Nez Perce Tribe who recently experienced a tragic loss of a family in a car accident near Burbank. John Stanfill, Nez Perce Tribe (Tribal Government), thanked Susan and the Board for their thoughts and prayers.

Lynn Lefkoff, EnviroIssues, announced the Public Involvement and Communications Committee (PIC) will be held immediately following the Thursday Board meeting.

Jim Trombold, Physicians for Social Responsibility (Local/Regional Public Health), thanked the Department of Energy – Richland Operations Office (DOE-RL) and the Department of Energy – Office of River Protection (DOE-ORP) for the Hazardous Material Management and Emergency Response Training Center (HAMMER) and the demonstration bulk vitrification tour.

Steve Weigman, DOE-ORP, introduced John Fulton, the new executive vice president and chief operating officer at CH2M Hill.

Meeting goals included considering:

- Draft advice from the River and Plateau Committee (RAP) on groundwater decision-making values
- A letter from the Health, Safety and Environmental Protection Committee (HSEP) about the workers' compensation program
- A report from the Board's Leadership Retreat
- Draft advice from the Budgets and Contracts Committee (BCC) on the Fiscal Year (FY) 2007-2009 budgets
- Status of issues being followed by the Tank Waste Committee (TWC)
- Selection of the Board's next vice-chair
- A congratulatory letter on the K-Basin sludge transfer.

The phone and fax summary was corrected. The Board meeting was audio recorded.

Approval of November Meeting Summary

Changes were submitted for the April Board meeting summary. The Board approved the summary.

Groundwater Decision-Making Values Advice

Jerry Peltier, City of West Richland (Local Government) introduced the groundwater decision-making advice. Jerry said the committee looked at the entire process of coordinating and reviewing groundwater activities, reviewing the Comprehensive Environmental Response, Compensation, and Liability Act

(CERCLA), characterization, traceability, and actual remediation. He said the committee followed three guiding questions of closure: Is it a clean closure? Is it a long-term closure? Or is it a waste-in-place closure?

The committee's goal was to create a simple chart leading the reader through a series of decisions that support a group of values. Jerry said values are the most important component of the chart. The chart defines the process to arrive at groundwater decisions that support end-state values.

Shelley Cimon, Public-at-Large, drafted narrative advice to accompany the groundwater flowchart.

Susan Leckband confirmed that the flowchart and narrative components of the advice have committee consensus.

Agency Perspective

Ron Skinnarland, Washington State Department of Ecology (Ecology), was encouraged by the advice and noted that the focus onsite has shifted to groundwater, rather than dealing with it after waste and soil sites are cleaned up. Ron said Ecology and the agencies are moving toward setting goals and cleanup dates for contaminants and plumes. Technically it may be ambitious, but Ron thought it is reasonable to set deadlines. Ron said Ecology is focused on keeping contamination contained on the Central Plateau and out of groundwater.

Dennis Faulk, Environmental Protection Agency (EPA), said the committees worked very hard on the groundwater flowchart and he thought it was a good product. Dennis thought adequate funding for the groundwater program is the most important value. He noted that many systems will need upgrading in 2008 and 2009 and EPA will push hard for funding.

Dave Brockman, DOE-RL, was comfortable with the advice and said it is consistent with CERCLA.

Steve Weigman said DOE-ORP's primary goal is to prevent any further issues with tank waste and the vadose zone. He thought the groundwater advice was primarily relevant to the DOE-RL mission.

Board Discussion

Jim thought describing all the basic physical properties of groundwater in the advice was unnecessary. Rob Davis, City of Pasco (Local Government), said he noticed that people were not always "up close and personal" with groundwater and he thought each plume should be named and registered with information about its specific characteristics and records of change. Rob thought the description of physical properties of water helped paint a picture of groundwater plumes.

Floyd Hodges, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen) thought the advice should emphasize that more characterization of groundwater plumes is needed.

Debra McBaugh, Washington State Department of Health (Ex-Officio), liked the idea of a contaminated plume registry. She thought it should be added to the values section of the groundwater flow chart.

Armand Minthorn, Confederated Tribes of the Umatilla Indian Reservation (CTUIR) (Ex-Officio), requested that in addition to the public, the tribes would be consulted on long-term stewardship issues and remedy selection. Shelley agreed and noted that the tribes were not originally included because the authors of the advice were hesitant to speak on their behalf.

Bob Parks, City of Kennewick (Local Government), thought that instead of calling out specific groups of people, the advice should say "all" people would be consulted. Armand said that because of the Treaty of 1855, the tribes have a different standing and the federal government has a trust responsibility to the tribes. The tribes have higher expectations of cleanup because of their dependence on fisheries and all natural resources.

Bob asked if the groundwater standards for tribes and the public are different. John Stanfill said that cleanup standards will be determined by risk assessments and set according to EPA standards. Risk assessments are done using an EPA standard scenario that does not include a Native American scenario. Because Native Americans use natural resources more intensely than the average American, the Native America usage needs to be addressed.

Bob agreed but would like to see the actual cleanup value and know what a tribal expectation of clean is. He was concerned that DOE would clean up the site and the tribes would disagree and say it is not clean.

Shelley suggested saying groundwater would be cleaned up to highest beneficial use, which encompasses the needs of Native Americans and the general public. Greg DeBruler, Columbia Riverkeeper (Regional Environmental/Citizen), agreed that there was a specific trust responsibility for Native Americans and thought it should be specifically addressed.

Greg said the tribes are developing standards with the agencies, and agreed with Bob that cleanup standards need to be clearly defined to prevent having to repeat cleanup work in the future.

Susan Kreid, Washington League of Women Voters (Regional Environmental/Citizen), noted that ecologically, human drinking water standards are often not the most protective. She thought that ecological water standards need to be retained in addition to drinking water standards.

Rob said the committee did not consider highest beneficial use for groundwater as only applicable to human drinking water standards; he thought it covered ecological standards as well. Greg said that highest beneficial use should be defined to include “bugs and bunnies” as well.

Dennis noted that cleanup along the river would not be happening if only human drinking water standards were used. He thought the Board could advise groundwater cleanup should meet the highest standard protective of human health and the environment. Greg suggested using the term “ecosystem” instead of “environment.”

Ken Niles, Oregon Department of Energy/Oregon Department of Water Resources (State of Oregon), thought the Basin Plan should be explained and described better. Shelley said the state has the authority to manage watershed planning, and Basin Plans cover every basin in the state.

Floyd suggested calling contamination plumes “groundwater and vadose zone contamination plumes.”

Jeff Luke, Non-Union, Non-Management Employees (Hanford Work Force), said the narrative groundwater advice should be consistent with the flowchart, and suggested language to ensure that risk to human health and the ecosystem from groundwater and contamination is minimized to the greatest extent practicable, or as low as reasonably achievable.

Susan Kreid thought that the flowchart values should be prioritized. The Board agreed to order the values on the flowchart starting with the value of restoring groundwater to the highest beneficial use, restoration in a reasonable timeframe, and ensuring adequate funding.

The Board discussed graphical changes and flow modifications of the flowchart.

Pam Larsen, City of Richland (Local Government), thought the flowchart should be shared with other Site-Specific Advisory Boards (SSABs), along with the Central Plateau decision chart. Shelley will take them to the fall SSAB Chairs meeting.

Susan Leckband congratulated the committee on the flowchart, which was created in response to agency requests to overlay Board values on technical decisions.

The Board adopted the advice.

Worker Compensation Program Advice

Keith Smith, Public-at-Large, introduced the workers' compensation program letter, which HSEP began discussing last year. He said the committee prepared advice in December 2006, but in the meantime DOE made changes reflective of the values in the advice. Therefore, the committee decided to change it to a letter. The letter has committee consensus.

Agency Responses

Dave said there have already been improvements to the workers compensation program, with more to come.

Juli Yamauchi, the new full time DOE-RL employee dedicated towards workers compensation issues, thought there have been many improvements already and she has had good feedback from employees. She said communication is key for the system to work and it has already improved.

Board Discussion

Maynard Plahuta, Benton County (Local Government), agreed that the letter should be complimentary, suggested changing the letter to advice.

The Board agreed to change the letter to a piece of advice.

Pam asked if the process for filing a claim, processing doctor's bills, and company responsibilities are transparent. Keith said it is important to make it someone's job to monitor those matters and assist workers, which is what Julie Yamauchi now does. Keith said the training session with the stewards, whose responsibility it is to represent their constituents, will be very helpful. Keith thought the whole system will work much better now.

Pam asked if it is the stewards' responsibility to inform workers of the claims process. Keith said yes, and he anticipated more training sessions with the general worker population once union negotiations are settled.

Jim thought the advice should acknowledge the work that has already been done to improve the system.

Pam thought the advice was great and appreciated Julie coming to the Board meeting. She hoped that the process is streamlined and safe for workers, and asked that the advice be provided to the Government Accountability Project (GAP) and Heart of America Northwest and any other organization that works with injured workers to make sure they know the Board is paying attention to the issue.

Gerry Pollet, Heart of America Northwest (Regional Environmental/Citizen), also thought the advice was good. He was concerned that beryllium exposure continues to be treated differently from other worker injuries. Gerry thought it was important to note that having an ombudsman like Julie Yamauchi resulted from the State taking action.

Tony James, Benton-Franklin Public Health (Local/Regional Public Health), noted that Washington State Labor and Industries does not recognize beryllium as disabling.

The Board adopted the advice.

Leadership Retreat

Susan Leckband reported on the Board's Leadership Retreat that took place in May. The Board chair and committee chairs and vice chairs attended the retreat. Susan said it was a successful exercise where the leadership discussed how the Board could improve and determined what the Board's priorities will be for Fiscal Year (FY) 2008. The Board needs to approve the 2008 priorities at their September Board meeting.

Susan described some of the issues discussed at the Leadership Retreat:

- A board process manual detailing how the Board works
- Committee work: What went well, what needs to improve, how committees and issue managers follow up on advice and advice responses
- The role of PIC and how other committees can utilize PIC
- The potential for committee realignment when site contracts are changed and awarded
- The opportunity for new members to attend every committee meeting for at least a month to get a well-rounded view of Board work
- Committee chairs and vice chairs should act as unofficial mentors to new members
- Committee chairs and vice chairs should be out in the community sharing what the Board does
- Filling vacant seats and getting higher education institutions involved and interested

Susan also introduced draft 2008 Board priorities identified at the Leadership Retreat. The priorities will serve as a guide for Board work in 2008. Identified priority subject areas include:

- Groundwater integration
- Tank waste management
- Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS)
- Public education and public involvement
- Waste disposition
- Institutional controls

Board Discussion

Maynard said the aging Hanford workforce is a major issue given the shortage of new college graduates in the nuclear field. He asked how the Board could help with the situation.

Susan Leckband hoped that the university seats would help the Board engage universities to discuss the issue of Hanford obtaining and retaining recent graduates.

Dennis said EPA solicits universities and colleges throughout the northwest. He requested that Board members pass along contact information if they know anyone at universities. Universities are more likely to respond if a letter is sent to a specific person.

Larry Lockrem, Non-Union, Non-Management Employees (Hanford Work Force), noted that the agencies used to be involved with universities and other educational institutions and thought they may increase their involvement again. He thought that communication may break down between the site and university systems; DOE and contractors should clearly communicate what training programs are needed.

Rob thought the Board needs appropriate representation from the colleges and universities, and that Hanford needs a steady influx of recent graduates to work on site. He thought DOE-Headquarters (DOE-HQ) may be more involved with promoting science and engineering than the local field offices. Dave said they have reintroduced the intern program and DOE-RL is hiring six interns. He also noted that contractors need new workers and they have a much larger workforce than the local DOE offices.

Dave said that Fluor is working on an education committee and producing a report on the how the state of Washington is producing fewer engineers.

Margery Swint, Benton-Franklin Public Health (Local/Regional Public Health), said that Hanford has to start at the high school level and get kids interested early in Hanford. She said that high schools used to have a half-day work program for seniors to attend class in the mornings and work onsite in the afternoons.

Keith commented on the need not only for engineers onsite, but for skilled craftsman, too. There currently is no active apprenticeship program on site, which he thought is very short-sighted.

Bob said Columbia Basin Community College (CBC) used to have a program that funneled graduates directly into work. He thought it was important to talk to high schools about education other than college, such as vocational programs and direct education-to-work programs.

Susan Leckband suggested addressing the education and workforce crisis in budgets and contracts advice.

Maynard asked if the Board would work with the agencies to develop metrics for assessing cleanup progress. Susan said they hope for a collaborative effort but the concept has not fully matured yet. Maynard suggested assigning an issue manager.

Ken Niles said that the number one Board priority should be groundwater cleanup and integration.

Armand asked Susan Leckband to meet with the Confederated Tribes of the Umatilla Nation Board of Trustees so the tribe can get to know her and the HAB. Susan agreed. Armand also requested that considerations for long-term stewardship be added to the priorities; the Board agreed.

Dave asked what the Board meant by programmatic risk assessment. Dennis thought it meant analyzing, for example, whether or not the river corridor cleanup can be cleaned up in the timeframe established.

Susan Kreid commended the Board on its efforts for integrating new members. She thought Board advice should be available in one place and searchable by key word. Lynn noted that EnviroIssues keeps an advice database and makes it available on CD at each Board meeting. She thought the Board should consider making the database or a searchable advice page available on the website.

Steve Hudson, Hanford Watch (Regional Environmental/Citizen), asked for more explanation of the bullets under "Other Issues." Susan Leckband said those issues will be expanded upon within the committees.

Steve Weigman noted that interim actions are not constrained by the TC&WM EIS; interim actions are used when work needs to be done immediately. He noted that the EIS is a National Environmental Policy Act (NEPA) document, not CERCLA.

Jeff requested that full funding be one of the Board's priorities; the Board agreed to add it as the Board's number one priority.

Agency Perspective

Ron Skinnarland thought it was good to keep the focus on groundwater integration and cleanup; there is a chance to get additional funding. He said tank waste treatment and retrieval programs are up in the air because of the Waste Treatment Plant (WTP) and the Tri-Party agencies need to figure it out. He said Ecology is still struggling on how to make the TC&WM EIS process open. He wants people to know what to expect before the EIS is actually released and thought that direct communication with Ecology or Mary Beth Burandt, DOE-ORP, would be helpful. The EIS will be a tool to use on a technical basis on how groundwater modeling and risk assessments are done. Ron said the Board could help Ecology decide what happens after the EIS is finished. He thought the Board helped with waste disposition by saying "get on with cleanup." Ron thought the agencies were doing this in the Central Plateau but are a few years away.

Dennis thought adding full funding as a priority will strengthen the priority list. He also thought it would be good to add that the Board will continue to monitor cleanup, even though it is usually assumed the Board will do so.

Dave said his list of priorities for the Board matched up well with what the Board presented.

Steve Weigman thought the priorities captured the breadth of the issues to be dealt with in FY 2008. He said DOE-ORP has established the beginnings of a good dialogue with issue managers in response to Advice #192 and he intends to retain that focus on the path forward for the tank program and the impact on it by the WTP schedule.

Ken Gasper, Benton County (Local Government), reiterated that because of the WTP delay, there are major impacts to the tank farm system, and Advice #192 addressed those impacts. Ken said that there is another aspect to the budget cuts: Why is Hanford's budget being cut? He thought it was because DOE-RL, DOE-ORP and the contractors have a bad record of living by their estimates, of which Congress is well aware. Congress sees the budget overruns and WTP delays, and while the recent success of K Basin sludge transfer is wonderful, it was also delayed and the original budget was far less. Congress sees all of these delays and cost overruns and expresses its dissatisfaction by not approving the requested budget. However, Congress continues to fund Hanford. Ken thought that Hanford has to establish realistic budgets and schedules so tax payers and advocates have something credible to deliver to the American public and deliver what Hanford says it will. "Low-ball" bids should not be encouraged. Ken pleaded for a priority from the Board, agencies, and contractors to establish in the new contract system, K Basin plans, and groundwater plans, to establish realistic expectations by demanding realistic budgets and schedules so Hanford can deliver to the nation what it promised.

Susan Leckband thanked Ken and asked him to see if that could also be captured in budget advice.

Shelley agreed and thought the Board should ratchet up its contracting discussions with DOE-HQ to make sure work is monitored from start to finish.

Pam thought communication with DOE-HQ about site work is extremely important. Regarding realistic schedules and budgets, she was hopeful that DOE will look at realistic proposals from contractors on the Requests for Proposals (RFPs). She thought "low-ball" bids will be problematic.

Dennis said DOE-RL is putting together an integrated baseline that will be helpful. He said Nick Ceto, EPA, has pushed for a full cycle baseline that will help increase credibility.

Rob wanted to know how this could be implemented on a committee level. He said sometimes the committees see areas of cost savings and need to know how to communicate that to the agencies or contractors.

Shelley would like the Board to consider sending Board members to other boards around the country and national meetings, if the budget is healthy enough.

Lynn noted that the Board Priorities is not an official Board product and only needs consensus, not wordsmithing.

Rick Jansons, Benton-Franklin Regional Council (Local Government), said a top priority at the Leadership Retreat was to ensure that WTP is fully funded, and thought the priorities should specifically reflect that.

Al Boldt, Government Accountability Project (Hanford Work Force), thought the Board should get involved somehow in the TPA negotiations. Susan Leckband noted that the priorities say the Board will pay attention to the TPA negotiations, and there is a structure within the TPA for public comment. The Board will be involved during that time. Dave Brockman noted that Board advice is being considered while the agencies are making revisions and confirmed that there will be a public comment period.

The Board discussed valid and conservative schedule commitments and estimates, versus "marketing" to minimize cost growth and schedule extension. The Board said that ensuring full funding should be a priority.

K Basins Congratulatory Letter

Susan Leckband presented the K Basins sludge transfer congratulatory letter for the Board to approve.

Dave described the success of moving sludge from K East Basin to K West Basin. He said a tremendous amount of credit goes to the workforce. A few months ago, DOE thought they would miss the milestone, but the workforce was innovative and worked around the clock to get it done. Next steps include hydrolasing the walls of K East, removing debris, and draining and treating water. The basin will then be torn down and taken to the Environmental Restoration Disposal Facility (ERDF) for disposal. Dave said they removed more sludge than they originally thought they would, so they can tear it out rather than grouting the basins and taking out monolith chunks. They will still spray fixative to contain any remaining contamination, but Dave said it was fairly routine decontamination and decommissioning (D&D).

Rob thought the congratulatory letter should be more descriptive; the Board has done more than just “follow” the work at K Basins. Rob also thought that the letter should go to newspapers as an editorial – the whole community should be aware of the success and it will help the HAB gain additional exposure.

Armand asked if K Basins pose any long-term remaining contamination issues. Dave said removing the sludge was just a step to get to the contamination under the basin. K West basin has never leaked and a treatment system is being designed to treat the sludge in K West, after which K West will be taken down. Armand said contaminated soils need further consideration for long-term stewardship and risks posed to groundwater. Dave said there are milestones in place; the Board agreed to state that it will continue to monitor K Basins until all contamination is gone.

Dick Smith, City of Kennewick (Local Government), thought that shutting down PUREX was the beginning of the problems at K Basins.

The Board adopted the letter.

Hanford Fiscal Year (FY) 2007, 2008, 2009 Budgets

DOE-RL

Jeff Frey, DOE-RL, quickly discussed the FY 2007, 2008, and 2009 budgets and made sure the Board was aware of all activities that are planned as over-target activities.

In formulating the FY 2009 budget and cleanup priorities, DOE-RL is focused on commitments and accomplishing cleanup. The budget request achieves significant cleanup along the Columbia River in compliance with CERCLA/Resource Conservation and Recovery Act (RCRA) cleanup requirements and within the framework of the Tri-Party Agreement (TPA). The FY 2009 budget increased confidence through supportive risk-based baselines that were externally and independently reviewed. Jeff presented a cleanup plan graph illustrating total cleanup requirement costs and planned work scope over time.

Jeff noted that the Board is especially valuable if additional target money is not received and DOE-RL has to make trade-off decisions. DOE-RL’s investment strategy is consistent with previous years and planned accomplishments include: Cleanup, control and mitigation of contamination in proximity to the Columbia River; plutonium consolidation; and cleanup, control and mitigation of contamination in the Central Plateau. Central Plateau work is currently an over-target activity.

Jeff said that the Board’s input makes a difference: There has been success at setting a target and getting priorities and some additional funding over the years, especially with groundwater work.

Jeff discussed River Corridor activities including:

- FY 2007-2008 spent nuclear fuel stabilization and disposition. Planned accomplishments include continued D&D of K East Basin. The milestone for the complete removal of the K East Basin structure will be missed in FY 2007 due to technical issues.
- FY 2009 spent nuclear fuel stabilization and disposition. Key planned accomplishments include initiating sludge treatment facility modifications and complete D&D of K East Basin. Jeff noted that a lot of planning is still needed and the Board will be able to provide priority input. The TPA milestones for initiating sludge treatment and the complete removal of the K Basins and their contents are forecasted to be missed.
- FY 2007-2008 nuclear facility D&D in the River Corridor Closure Project. Jeff noted that unless additional funding is received, the following TPA milestones will be missed in FY 2008: Initiate response actions for remaining waste sites for the 100 N Area; complete the interim remedial actions for the 100-IU-2 and 100-IU-6; and initiate substantial and continuous soil remediation at the 618-10 burial ground.
- FY 2009 key planned accomplishments were also briefly discussed for nuclear facility D&D in the River Corridor Closure Project. Jeff said everyone understands the need to support the 300 Area and the labs. Dialogue is needed and should not be driven by the budget.
- FY 2007-2008 planned accomplishments include nuclear facility D&D for the Fast Flux Test Facility (FFTF). Jeff noted that in FY 2009 the facility will be shut down and put into planned storage.

Jeff also quickly discussed Central Plateau planned accomplishments:

- FY 2007-2008 and FY 2009 key planned accomplishments include nuclear material (NM) stabilization and disposition at the Plutonium Finishing Plant (PFP). Jeff noted that the D&D of additional PFP facilities in FY 2009 to mitigate ramp-up of D&D from FY 2010 to FY 2011 is a planned over-target activity. Jeff said DOE-RL is concerned that if D&D is not started early enough the project may not be achievable. A stable and continuous workforce has to be ensured.
- FY 2007-2008 and FY 2009 solid waste stabilization and disposition. Jeff noted that the milestone for certification of transuranic waste to the Waste Isolation Pilot Plant (WIPP) would likely be missed due to technical issues. Jeff also noted additional over-target accomplishments for FY 2009, including continued suspect transuranic waste retrieval.
- Groundwater protection in FY 2007-2008 and FY 2009
- Nuclear facility D&D in FY 2007-2008 and FY 2009

Other planned accomplishments include safeguards and security in FY 2007-2008 and FY 2009 and funding for the Natural Resource Trustee Council (NRTC) operations in FY 2009. Jeff noted that additional NRTC responsibilities as defined by Natural Resource Damage Assessment policy are part of over-target funding.

DOE-ORP

Steve Weigman highlighted a few key points from the FY 2007-2009 budget-briefing handout. He said the history and mission are described in the handout, as well as how the process and capability were developed leading to repository in Yucca Mountain. Steve highlighted DOE-ORP's Five Year Plan and Baseline Funding Profiles and how the disconnect really begins in 2009 between the target and baseline. He said cleanup is paced by the construction of WTP, which is delayed and influences DOE-ORP's ability to clean up tank farms. Steve also said it influences perceptions of work at Hanford.

Steve noted that one tank retrieval is planned per year at a cost of \$18.8 million. He said DOE-ORP wants to proceed with supplemental treatment so waste can be treated sooner. Planned WTP accomplishments in 2009 include:

- Pretreatment facility
 - Engineering over 80% complete
 - Construction over 40%
- High level waste facility
 - Engineering 90% complete
 - Construction 30% complete

- Low activity waste facility
 - Engineering complete
 - Construction 72% complete
- Laboratory
 - Engineering complete
 - Construction 75% complete
- Balance of facilities
 - Significant large components complete (cooling water, electricity, etc.)

Currently construction on the pretreatment facility is on hold pending seismic evaluation. Steve noted that these planned accomplishments are based on \$690 million per year for WTP.

There is no over-target request for WTP in 2009; DOE-ORP is planning for \$690 million per year. Steve said they believe \$690 is the correct level of funding and that the challenge is keeping the WTP schedule steady. Over-target requests for tank farms include:

- Initiating demonstration bulk vitrification system construction
- Initiating construction to deliver tank S-109 waste to the demonstration bulk vitrification system
- Completing double-shell tank upgrades to provide space for single-shell tank waste retrieval
- Initiating conceptual design of supplemental pretreatment capability
- Developing tank closure technology

Steve said worker and public safety is DOE-ORP's number one priority, the reason why a good portion of resources go to minimum safe operations.

EPA

Dennis asked the Board to look at the graph on the back of the DOE-RL handout illustrating costs in millions versus the fiscal year. He said it clearly speaks of the dire straits Hanford will be in unless it becomes extremely more efficient or gets more funding. There is a huge gap between how much work costs and how much money the site is getting. He said unless more funding is obtained, there pretty much will not be any work happening on the Central Plateau. He said groundwater is slated for a big upgrade, but without money it will not happen. Dennis said it is up to the agencies to secure funding and make sure it is used efficiently. He thought PFP is a major issue that keeps getting pushed out, and that even though plutonium is in safe configuration, PFP is still an environmental risk.

Ecology

Nolan Curtis, Ecology, encouraged Board members in the Hood River and Portland areas to attend the upcoming budget meetings.

Nolan said there are serious challenges to cleanup milestones and schedules in the TPA. The FY 2009 funding continues the trend downward as Ecology noted in the FY 2007 and FY 2008 budget reviews. Nolan said budget constraints and technical and management problems have limited cleanup efforts at Hanford. Nolan said Ecology was pleased that funding was restored for WTP until the news this morning that it was cut by \$100 million. He said that DOE-ORP's proposal to delay completion of WTP by eight years is unacceptable to the State, as well as the reduction in tank waste retrieval efforts. Nolan said the TPA still requires WTP start up in 2011. Nolan also noted that the DOE-RL target of \$935 million for FY 2009 is woefully short of the \$1.5 billion needed to comply with the TPA.

The bottom line for Ecology, Nolan said, is that DOE has missed critical milestones in the TPA and is in jeopardy of missing more. Ecology is concerned with the federal government's commitment to cleanup up Hanford. Nolan agreed that the work is difficult and challenging, and will require extraordinary effort and commitment from everyone. He said the agencies need to work together to secure the appropriate amount of funding for cleanup.

Nolan showed a pie chart illustrating that one third of the DOE-Environmental Management (DOE-EM) budget will go to Hanford in FY 2009. He said that is a large slice but Hanford still needs more – does the whole pie need to grow?

Nolan said that flat or level funding results in increased costs and decreased buying power. The longer cleanup takes the slower the schedule and the less work that can be done for the same amount of money. He said everyone has to work together and encourage DOE to find the efficiencies.

Board Discussion

Pam asked how the agencies reacted to comments heard in the first three budget meetings and how they may ultimately affect the budget request. She asked if Ecology could provide their thoughts on how people are feeling about Hanford, and why was more money allotted for Purex and not for WTP.

Steve Weigman said it is challenging to present the story of the huge cleanup effort at Hanford in a concise manner so people can react to substance; he thought the agencies are getting better at it. He did not think the public was opposed to the agencies' priority selections. He said he saw issues with how DOE implements its priorities and the funding allocated to each.

Jeff Frey thought it is difficult to present Hanford issues to the public because of the varied levels of education and knowledge about Hanford. He said it is hard for people to understand how Hanford arrived at where it is today, and hard to explain how changes to the initial TPA projects ramp up the cost and complexity of projects. He also thought that in the past, project cost and schedules were underestimated.

In Richland, Dennis heard the concern that more money should be spent on groundwater protection. In Seattle, he heard more about tanks and the potential need to build additional double-shell tanks.

At the meetings, Nolan said there was a big picture discussion of government funding choices, such as funding the war in Iraq or funding Hanford cleanup. People commented on the dismantling of FFTF and the demonstration bulk vitrification project. Generally, he heard a lot of frustration directed toward things such as the high cost of minimum safe efforts and how it reduces retrieval capabilities.

Mike Wilson, Ecology, commented on the media coverage of the House Energy and Water Appropriations Committee decision to cut the WTP budget by \$100 million. He had not yet seen the actual language yet, but was not very concerned because it is early in the process. He noted that DOE had not requested enough money for compliance and TPA milestones and so was given a "plus-up" of \$73 million. Mike thought it was a good sign, from a regulatory standpoint, that Congress analyzes if funding levels are capable of meeting obligations.

Mike Wilson said that if WTP funding is reduced by \$100 million, there is still enough money banked to handle ongoing construction through 2008. However, Congress would have to increase funding in 2009 and 2010. Mike thought it would be good to step up funding slowly, but it does not appear Congress is thinking that way.

Mike Wilson said the other piece is about supplemental treatment technologies. He said the Energy and Water Appropriations Committee had been pushing Ecology to push DOE to put more money into bulk vitrification, so he was surprised that they pulled away from it. He thought it was a confusing move because they want DOE to have a low level waste plan, but how should DOE decide without knowing if bulk vitrification is a workable technology?

Ken Niles did not like the implication from Ecology's pie chart that Hanford gets a third of the DOE-EM budget and therefore should not complain. He knows that is not what Ecology meant, but it comes across like that. He thanked the agencies for the plethora of information and thought it was a vast improvement from years past.

Ken Niles asked Steve Weigman if the over-target work for tank farms was a comprehensive list; Steve said yes. Ken thought there was a gap of about \$119 million; Steve said that was about right. Ken asked if WTP is only allotted \$590 million in 2008, is start up still possible in 2018?

Steve Weigman said \$690 million per year is the average expenditure for WTP, and that commitments are higher in some years and lower in other years. A project of WTP's magnitude needs a predictable funding base so the project can be kept on a predictable schedule. Zack Smith, DOE-RL acting assistant manager, said the immediate impact is insignificant, but he is concerned about long-term implications. He said funding in less expensive years helps build up a "war chest" for years that require higher funding, or more than \$690 million.

Zack also noted the impact WTP funding reductions have on the workforce. Engineers thinking about taking a job at Hanford may have second thoughts when they see budget cuts. He said the cost of workforce uncertainty is hard to measure, but it is a major concern.

Mike Keizer, Central Washington Building Trades (Hanford Work Force), said skilled craftsman and construction workers are also affected by budget uncertainty; Hanford may have a hard time attracting and keeping them if work appears unstable.

Keith Smith said maintaining a good workforce and engaging them in cleanup decision-making results in a more successful cleanup. He said it is necessary to give the workforce the tools and equipment they need to do the work well and safely.

Maynard asked if DOE initiates bulk vitrification construction but decides to halt work, would its funding be available for other uses? Steve said any construction that is planned is tied to the demonstration bulk vitrification going forward. Maynard asked if bulk vitrification did not happen and DOE wanted to deliver to S-109, could they? Delmar Noyes, DOE-ORP, said the retrieval system for S-109 is standard and right now it is just designed to deliver to bulk vitrification. It could be changed if a different choice was made.

Rob asked for a table comparing budget units RL-41 and RL-42 in FY 2006-2009. Jeff will provide it.

Rob thought it would be helpful for budget outreach to include a big picture look at what portion of the budget goes to salaries and how it is apportioned.

Susan Kreid thought it would be helpful to have updates throughout the year to see what planned activities have been accomplished. Steve Weigman said Shirley Olinger, DOE-ORP, had made a similar comment.

Jim said the Board's expectations for public meetings need to be more realistic. It is hard for people to provide input on priorities when they do not have a lot of exposure to Hanford and its issues. Jim also thought the Board needs to maximize the public comment opportunities at Board meetings. He said the Board should try to get more people to attend HAB meetings.

Budget Advice Regarding Cost and Baseline Schedules and the 2008-2009 and Out-Years Budgets

Gerry Pollet introduced the two pieces of advice from BCC, one about FY 2008-2009 and out-years target budgets and other about cost and baseline schedules.

Gerry described the "Costs and Baseline Schedules" advice, which states that a new baseline plan should not be adopted without regulator, Board and public review. When the advice was first presented to the Board, it did not have a background section; that section was developed in between the Thursday and Friday sessions.

The Costs and Baseline Schedules advice also requested that DOE should not approve DOE-ORP's new proposed baseline because it unilaterally extends schedules and fails to include required work. The advice said that DOE-ORP needs to disclose the costs of compliance work. Gerry said that the Board and public

were not told that DOE-ORP had sent a new baseline to DOE-HQ. Gerry also said the State discovered the new baseline by reviewing the congressional budget request in February. The new baseline extends tank farm cleanup through 2042, long after the current TPA. Gerry said the advice discusses the budget nondisclosure and the adoption of a baseline that does not legally adhere to the TPA. BCC encourages DOE-HQ to not adopt the baseline.

The other piece of advice, "FY 2008-2009 and Out-Years Budget," describes the Board's dissatisfaction that DOE-ORP did not provide the same level of detail as was provided by DOE-RL, and asked that DOE-ORP disclose the cost of potential compliance efforts which are not currently proposed for funding within DOE-ORP's target budgets and baseline. The advice also addresses root causes of the compliance gap, such as DOE's failure to abide by prior commitments to use the funds saved from early cleanup and closure of small DOE sites for the remaining large sites like Hanford. Gerry thought it was important to show the graph it entitled "DOE-RL Planned Work Scope Compared to Provided Targets" to show the comparison of the work scope under the DOE-RL baseline and the TPA and target. The work scope exceeds the target by \$5 billion over ten years. Gerry said that for FY 2009, the DOE-RL work scope is about \$500 million short under the funding of the target budget.

Board Discussion

Rob thought that the definition of "baseline" is unclear and inconsistent in its use. Gerry Pollet said the target is the expected planning budget and the baseline is the long-term schedule for doing all the work the project expects to do and the costs associated with it. Rob asked if the Board had ever issued separate advice on targets and baselines. Gerry said that it has, but it gets lost if it is part of general budget advice. Gerry wants baseline nondisclosure advice to go to DOE-HQ as well.

Al Boldt asked if the Board can advise DOE-HQ; Susan said yes.

Dick Smith thought it was hard to complain about something that cannot be done, like if retrievals are done quickly, where would DOE put the waste? Steve Weigman said they do not have the resources to develop additional storage capacity. Resources could be diverted, but he maintains that their intent is to treat waste when DOE is able to retrieve it. DOE wants to time retrievals so double-shell tank space is used up at about the same time treatment begins. When treatment time slips, it is hard to predict a retrieval pace and whether or not to build more space to store it, which is expensive.

Maynard thought there were more root causes than just the "compliance gap" of promised funds once smaller sites were cleaned up. He also wondered if that promise had simply fallen through the cracks. Gerry said it was a formal written commitment in the budget requests, and Congress formalized the commitment by creating the 2006 Closure Account. Maynard thought that authority should be identified in the advice.

Maynard asked why safeguards and security costs will not decrease when all the plutonium is shipped from Hanford. Dave said security costs have gone up overall; getting rid of plutonium will reduce costs but not by much.

Ken Gasper noted that there will be an increase in safeguards and security costs if plutonium does not leave Hanford soon.

Maynard did not think that target funding of \$690 million a year is artificial just because it is the average level of funding needed to maintain work during expensive years. He suggested saying it is the funding level that will meet the estimated cost at completion.

Dennis suggested putting a positive spin on the advice. Making it more of a complex-wide issue would help make it more valid.

Pam agreed that the Board should be complimentary of the budget process because it is vastly improved. She thought describing the closure accounts factually would be sufficient. Pam said other sites see Hanford

getting additional money for groundwater, for example, and become frustrated. She thought the advice needs to recognize the national context while stressing Hanford's individual needs.

Susan Kreid did not think the Cost and Baseline Schedule advice should be issued at this time; she thought some points could be incorporated into the 2008-2009 & Out-Years Budgets advice. She thought the timing was premature and the advice did not seem ready. If the Board still wants a separate piece of advice, she thought it should be issued at the next Board meeting.

Ken Niles thought the 2008-2009 & Out-Years Budgets advice would have to be significantly changed to incorporate the Cost and Baseline Schedules advice. He did not think they should be combined. Gerry thought the Costs and Baseline Schedules advice was timely now. By the time the Board meets again, Congress will have thought that the baseline is approved and DOE-HQ will approve it.

Susan agreed that the background section could be developed Thursday night and she would review it.

Rob said he was told that tank retrievals would not be inhibited by a 2018 WTP start up. Steve Weigman said that they would do the retrievals if they had more resources. DOE, EPA, and Ecology are discussing how many retrievals can be done between now and when WTP starts up. Steve did not mean that only one retrieval was possible a year unless there was treatment capacity; he said there would be a significant decrease in retrievals over the years because of the fixed amount of space.

Rob commented that the maturity of the technology of bulk vitrification will determine whether or not it will be used. Harold said bulk vitrification has not been proven and hopefully the next test will determine its viability. After its viability is proven, DOE-ORP needs to provide a realistic cost estimate.

2008-2009 & Out-Years Budget Advice

Ken Niles suggested that DOE-ORP continue to examine the early start up of the low-activity waste facility (LAW) and conduct studies for additional storage capacity to continue tank retrieval. Ken Gasper did not support advising DOE to investigate additional waste storage. The language was not added.

Jeff thought it was an assumption that some projects would have been underway if not for continuing problems at the K Basins. He thought it seemed like a reprimand to DOE for mismanaging K Basins. Ken Niles said they were trying to say that K Basins is a high priority project and costs more than anyone imagined, and there were costs to other projects because of it. Jeff suggested framing the statement positively.

Debra suggested saying that some projects would have been underway if available funding had not been diverted to higher priority projects like K Basins.

Ken Gasper thanked the authors of the advice for reflecting TWC input.

Maynard thought the advice should request additional funds to replace the money being transferred to safeguards and securities.

Gerry Pollet thought they were gaining traction with the idea that funding needs to come from an appropriate source for safeguards and securities. Gerry said safeguards and securities money should not come out of the cleanup budget. He anticipated more DOE-HQ support in the next few years.

Larry Lockrem asked that the Board consider secondary waste streams and the cost of necessary supporting technology. Rick Jansons said TWC is addressing the issue.

Dave Brockman noted that the graph on the front of the advice, "DOE-RL Planned Work Scope Compared to Provided Targets," includes funding for things other than compliance work.

Dave also asked that the advice be straightforward and ask DOE to be completely open with the public about projected funding shortfalls, rather than beat around the bush by asking DOE to be completely open with its regulators. Gerry said they attempted to make the advice positive and will continue to do so, but he wanted to make sure the message was clear.

Ken Niles asked if DOE could open WTP if Congress provided unlimited funds. Steve said the project could not move forward as a whole that much. A consistent level of funding is needed, and \$690 million per year for WTP allows DOE to better manage the work. Steve said that \$690 million is the minimum level DOE needs to maintain momentum and it is a level of funding that DOE thought Congress would be able to consistently fund.

The Board adopted the advice.

Cost and Baseline Schedules Advice

Steve Weigman explained that DOE-ORP submitted a new baseline to reground WTP in a validated schedule that they thought they could produce to, and to reground the tank farms in a work scope to support WTP at the anticipated level of funding. Steve described it as a catch 22, in that they could not get a baseline to support the TPA schedule, which is currently being negotiated, but they needed a new baseline to keep work moving. Steve said he would have preferred to have finished TPA negotiations before creating a new baseline. Steve said DOE-ORP probably should have involved everyone in the process, but they would still be without a compliant baseline because of the TPA negotiations. He said they will go back and reassess the baseline upon completion of TPA negotiations and will open the process to the public and stakeholders.

Maynard suggested the Board accept the DOE-ORP baseline as an interim baseline, but not accept a final baseline until it goes through the appropriate public review process.

Gerry Pollet said the DOE-ORP baseline should not have been revised without public and stakeholder input. He said it is not a regulatory compliant baseline and DOE-HQ should not approve it.

Dave described the baseline process: The regulators are notified if there is a problem with the baseline meeting approved milestones and DOE creates a new baseline and new milestones are negotiated. To do that, DOE needs an internally approved baseline. Dave said DOE's first responsibility is to discuss the baseline and milestones with the regulators, then the TPA requires releasing the regulator and DOE approved new baseline and milestones for public and stakeholder comment.

Gerry thought the process seemed backward; a formal baseline should not be changed before it is discussed with regulators. Dave provided the example of K Basins – the project is ready to buy equipment but they know the system will not operate as designed because of what was learned about the sludge, so design and procurements are stopped which changes the baseline. Dave explained at that point, they are not on schedule and take corrective action and create a completion baseline which is submitted to the regulators along with an application for milestone changes. Gerry thought that was a description of work schedule instead of baseline.

Steve Weigman noted that for years the DOE field offices agreed to milestones without knowing how it would meet them, until Jim Rispoli told them to stop operating that way. So DOE-ORP and DOE-RL roughed out baselines. Steve said from a practical perspective, planning will not be successful until the TPA and baselines are dependent on each other. Steve said the TPA cannot successfully lead the baseline; when a milestone is written, there has to be the expectation that you are able to meet it.

Dennis noted that once the change package is signed and the TPA and baseline are aligned, there is formal agreement and Congress sees that Hanford is in agreement and able to move forward. Nolan Curtis agreed that the appearance that all entities on site are in agreement is very important.

Maynard asked what will happen if DOE-HQ does not approve the baseline. Steve did not know the exact answer, but he said it was important for DOE-ORP to get it done so DOE-HQ trusts that they are doing the job right.

Nolan noted that retrieving one tank per year is included in the current DOE-ORP baseline, and Ecology agreed to that rate of retrieval. However, it is a rate that could be improved with more funding.

Dennis said DOE will continue to work by the new baseline. That baseline will be updated later to reflect the outcome of negotiations.

Tony James said DOE and the Board should be more precise about what a baseline is; the term is used for multiple reasons and creates confusion. Steve Weigman agreed and thought there was a disconnect since the beginning of the TPA.

Susan Leckband asked BCC to discuss baselines, their definitions and their relationship to the TPA.

Jeff, on behalf of Susan Kreid, questioned the timeliness of the Cost and Baseline Schedules advice. He thought it was timely and necessary to correct erroneous impressions, but it was not clear to her. He asked the Board to consider Susan Kreid's opinion.

Dave thought the current baseline situation is timely. He thought the Board could issue solid, comprehensive advice on how baselines are issued later on.

Gerry thought it was important for the Board to again say, as it has in past advice, that baselines should be adopted with regulator, Board, and public input.

The Board adopted the advice.

Tank Waste Committee Updates

Ken Gasper introduced TWC's work on tank waste systems integration. He described HAB Advice #192 which called for a clear, credible integrated path forward for tank farms in light of WTP delays. The path forward is necessary to address the interconnectedness of the system and to ensure funding. Ken said DOE-ORP was responsive to the advice, and the afternoon's presentations serve as an update.

Steve Weigman noted that the fundamental logic behind the tank farm decision-making stayed the same, but the alignment and schedule shifted in some parts. DOE-ORP has to look at tank farms and WTP as a system and they applied programmatic risk management as a tool. Steve said estimate credibility is tied to risk, and today's presentations give a quick snapshot of programmatic risk. A draft December Project Overview was provided to the Board and the draft ORP Planning Baseline Summary Schedule, River Protection Project showed the impact of WTP startup slipping.

Greg deWeese, Bechtel National, Inc. (BNI), said Ken asked how risk management is folded into the baseline. He said it was a good question because it leads to how much funding the project gets and when it gets it, how much confidence DOE has in the baseline, and the ability to meet the TPA. Greg noted that when he talks about risk, he means project and programmatic risk, not risks to human health.

Greg deWeese said WTP's lifecycle was analyzed from now until the 2042 end date, a broad and complicated scope. He said they devised a way to systematically identify risks and the actions needed to manage risk, and how to incorporate them into the baseline. Monitoring is also incorporated into risk and the baseline. Greg said they ended up with three risk assessment processes: 1) Design and build the five WTP facilities, 2) tank farms, and 3) risks that are outside the contract scopes, like the potential unavailability of Yucca Mountain. Greg noted that BNI has policies and procedures, as do CH2MHill and DOE-ORP. Every year a risk management plan is prepared that shows new confidence in the project lifecycle.

Greg provided a “what if” example: What happens if the mission is extended and the tanks are used longer? He said they ensure that the tanks and associated equipment will last as long as possible through a specific maintenance and assessment programs, making sure the double-shell tanks do not fail, with dollar amounts associated with specific actions.

Ken Niles asked if there are contingency plans for risks DOE and its contractors cannot control, like Yucca Mountain availability. Greg said yes, there are decision and timing points, the primary decision being when to build storage. He noted there are a number of shared risks between BNI and DOE-ORP for Yucca Mountain that could impact the mission.

Pam thanked DOE-ORP and its contractors for their help in providing information and working with TWC; she thought the effort was a prime example of how the Board can make a difference.

Steve Weigman said their goal is to make sure the WTP schedule is aligned with the tank farm schedule.

Ken Gasper said the agencies response to HAB Advice #192 is to have an updated integrated plan, which will be ready in the fall. Ken expected to see a briefing from DOE-ORP.

Ken Niles asked if the completion dates on the ORP Planning Baseline will shift; Steve said most will slide to a later date. He anticipated a total realignment of the project and noted that high confidence estimates are important.

Gerry Pollet commented on the projected 2032 date for single-shell tank retrievals, which will be realigned. He was concerned about the risk from leaving waste in tanks and asked if DOE will conduct a review of the risks and their potential impacts from the delay in retrievals. Steve said DOE-ORP looked at the contents of the single-shell tanks, how much of the contents are solid, how much are liquid, and if it could leak. He intends to bring that to the Board, but it does not yet include a specific risk analysis. He said it is laid out so you can see where the issues will be. The single-shell tank performance assessment does not look at extended storage, but it could if they have the resources.

Gerry said retrieval delays mean delays in cleaning up contamination under the tanks. Gerry thought that was a clear EIS issue and the analysis needs to include a full range of risks.

Gerry asked how closure will begin if C Farm is not retrieved until 2016. Steve Weigman said they intend to do a technology development project to close small tanks, which could then be applied to larger tanks. Steve said DOE needs to know how to close a system at the time they can actually close it. Steve said they tried to put all the “what if’s” into a logic framework to see one issue’s implication on another.

Ken Gasper asked if the system plan will provide those types of alternatives analysis. Steve said no. Delmar Noyes is looking at the pros and cons of some key decisions through a supplemental alternatives study and early LAW report. DOE will move forward with the systems plan this summer and will identify the costs, schedule, and associated technologies, but it will not look at the alternatives.

Rob Davis wanted to make sure a second LAW facility was on the logic chart. He thought DOE needs to know if they need a second LAW facility before releasing people from the design of the first LAW facility.

Ken Gasper said Delmar’s alternatives analysis report would be available to the public at the end of June. The bulk of the system plan writing will be done after the report is released. Regarding the decision point for implementing supplemental treatment, Ken said TWC was told that even though demonstration bulk vitrification is shown as the supplemental technology, the actual decision will include the options of bulk vitrification, steam reforming, and a second LAW facility. Dick asked that an early LAW start up be included as well.

Demonstration bulk vitrification system (DBVS) update

Dick Smith discussed the DBVS status. He described a study comparing the pros and cons of using a large bulk vitrification system instead of supplemental treatment using LAW, which the Board had been pressing for. TWC is concerned about a review of the comparison. Dick said it was very brief and back up information was unavailable; the committee prepared comments which were dealt with in the report. Dick said some cost estimates were unclear and he did not know why an eight line bulk vitrification facility was proposed against a second LAW. It was not the concept in the proposed baseline.

Ben Harp, DOE-ORP, gave a DBVS status update. Bulk vitrification research and development was selected by DOE in 2003 and now the project baseline design and cost estimate are complete. Earlier test issues were resolved, such as the redesign of the starter path and heat up rate and a redesign of the refractory. Ben said they are currently in the research and development phase analyzing the use of supplemental low activity waste treatment.

Ben described the Large Scale 38D Integrated Dryer/Melt Test, which started on May 22. It will demonstrate integrated system operations, validate prototypic systems operations, validate molten ionic salt mitigation, and demonstrate glass product viability. Ben noted that the dryer and feed system will be tested and reviewed by an expert review panel in the beginning of July. The first prototypic part being validated is a dryer.

Ben provided the DBVS project execution schedule:

FY 2007

- Integrated Dryer Melt Design/Test
- Expert Review Panel Issue Resolution

FY 2007 and FY 2008

- Critical Decision 2 & 3 Submittal

FY 2009

- Procurement and Construction

FY 2010

- Construction and Startup

FY 2011

- Operations

FY 2012

- Complete (fifty boxes)

Ben noted that construction across the street from S-109 is targeted to begin in FY 2009.

Regulator Response

Robbie Beyoni, Ecology, reiterated that the baseline is for a second LAW facility. The decision for DBVS was supposed to have been made a year ago and the decision may be delayed for a number of years, which Robbie said is a problem because it takes away from the design and study of a second LAW facility. He said operations need to commence before 2011. He said that there were clear benefits presented for bulk vitrification in the past four or five years. However, he believed it is time to reevaluate whether technology and cost benefits still exist given all the technical challenges in the past few years, such as the molten ionic salt problem. Robbie said Ecology is also concerned about deposits at the foot of each box that is not part of the glass; everything in a LAW container is glass. Robbie also noted that using soil from the site was supposed to be a cost savings, but it is not any longer because glass forming minerals are needed to bind the molten ionic salt. He thought it seems like the cost is approaching that of a second LAW facility.

Robbie thought a lot of decisions are resting on the large scale integrated dryer/melt test. Ben agreed that Ecology's issues are major objectives for the upcoming test. He thought the system is improved and the test will address all those questions.

Susan asked if DOE responded to Ecology's questions. Robbie said they have not received answers yet.

Shelley asked how much effluent waste is a product of the filter system and what type of testing is being done. Ben said the filters are pulsed and the effluent is reprocessed back at the dryer. The technetium issue is being validated and the high-efficiency particulate air (HEPA) filters will be tested downstream. In-line testing off that filter will help identify where the constituents go.

Larry asked how much technetium was released in the gas. Ben said they are testing the filters and will find out what the percentage is in the package and what is in the ventilation system.

Dick asked if they will be able to provide a mass balance closure on technetium and iodine. Ben said they will see what the technetium retention is in the glass, but he did not know about iodine.

National Liaison

Shelley gave a Board National Liaison update. She said there is substantial interest in *The Politics of Cleanup*, a report prepared by the Energy Communities Alliance (ECA). ECA is an organization of local governments that are adjacent to or impacted by Department of Energy (DOE) sites. Shelley said the document contains cleanup site case studies, including Rocky Flats, Mound, and Oak Ridge, and analyzes the technical challenges of cleaning up sites and how politics affect cleanup decisions. She asked PIC to review the report because it is important to Jim Rispoli. ECA executive director Seth Kirshenbergl will attend the fall SSAB Chairs meeting.

Shelley also asked PIC to compile examples of how the Board involves the public. Shelley and Susan plan on presenting Hanford public involvement examples at the fall SSAB Chairs meeting. Reading *The Politics of Cleanup* will help generate ideas of what public involvement means, how the Board involves the public, and how individuals in Board seats involve their constituents.

Shelley noted that she is still collecting comments on the Engineering and Technology Roadmap and will submit them as unofficial comments from members of the Board; there is not time for the Board to put together official consensus comments. Shelley also noted that a report from the National Academy of Sciences Research Council will help refine the roadmap. Public participation will be addressed soon and Shelley thought PIC could get involved.

DOE Environmental Management Advisory Board (EMAB), which provides Jim Rispoli with information, advice, and recommendations concerning issues affecting the EM program, recently produced eleven recommendations. Shelley thought recommendation number ten, which asks that DOE assure timely and adequate information and responses, is of some importance to the Board. Shelley also thought the Board should engage more with EMAB. Shelley briefly described EMAB's 2007 focus and offered more information on EMAB and its website.

Shelley discussed presentations at the SSAB Chairs meeting on transuranic waste (TRU) and shipments to the Waste Isolation Pilot Plant (WIPP). She said WIPP is filling up faster than was anticipated and RAP should see where Hanford is in line for shipments.

Shelley said she was waiting on an update on plutonium disposition. The next SSAB Chairs call is in July. The fall meeting focus will be on the public involvement workshop, FY 2009 budget, waste disposition, and pre-1970s TRU.

Board Discussion

Ken Niles said that Hanford will have to work with stakeholders because of the reduction in TRU storage capacity. He said it is incumbent on the Board to make sure Hanford's TRU is shipped and stored at WIPP. He said a report will be out in June regarding the DOE-EM's work to deal with mixed low level and low level waste and the disposition efforts across the complex.

Ken Niles said the current lifecycle waste forecast is lower than he thought it would be, and described how operations are no longer paying for themselves because numbers are down; HQ is having to fund disposition rather than individual sites. He suspected that operations will change over time.

Norma Jean, Public-at-Large, confirmed that PIC will pull together examples of public involvement successes at Hanford that Shelley and Susan will use at the fall SSAB Chairs meeting. She asked Board members to read *The Politics of Cleanup* and brainstorm public involvement success stories.

Pam said filming and showing of the State of the Site meetings on cable television is a good public involvement example. She also noted that there is both a volume and timeline boundary for material headed to the Nevada test site. Shelley will find out more.

Board Meeting Schedule 2007

The proposed Board meeting schedule for 2008 is:

February 7-8	Tri-Cities
April 3-4	Oregon (Portland or Jantzen Beach)
June 5-6	Tri-Cities
September 4-5	Olympia
November 6-7	Tri-Cities
To-be-determined	Tri-Cities

Shelley noted that there may not be public transportation to Jantzen Beach.

Armand asked if Salem, Oregon could be considered for a meeting; Armand thought it would be good to meet where the Oregon legislature is. Maynard thought it would be more expensive to go to Salem.

Jeff thought there should be more meetings outside the Tri-Cities, which would help attract more and a greater variety of people. Lynn said the decision to have an additional meeting will be made at a later date. It is harder to set up a meeting outside the Tri-Cities on short notice.

Pam thought it was a good idea, but besides Hood River, there is usually poor media and public attendance outside of the Tri-Cities. She suspected that an additional meeting will be more technical and it is difficult to line up a meeting with agency and contractor schedules so they can attend.

Lynn will send the schedule out to the Board.

Update on Board Charter Changes

Dave had nothing new to report on the status of the Board charter changes. DOE-RL and DOE-ORP provided the charter to DOE-HQ and described the effort and consensus that went into the initial changes. Erik Olds, DOE-ORP, noted that DOE-HQ is looking at other boards' charters as well.

Agency Updates

DOE-ORP

Shirley Olinger, DOE-ORP, said the agencies have entered into formal TPA negotiations; the first meeting was last week and four more meetings will follow. She said there was much discussion about the DOE-ORP baseline. She explained that the intent, since they did not have a revised TPA agreement, was that after the agreement was renegotiated the baseline would be revised again with time to work with stakeholders.

DOE-ORP has been co-hosting regional budget meetings. There are two more left, in Hood River and Portland. Shirley said the TC&WM EIS is going well. The last Technical Review Group (TRG) meeting is coming up and there has been good involvement from various stakeholders. A report will be written reflecting TRG input and DOE will revise the vadose zone modeling. Shirley said DOE is still planning on issuing the draft EIS in May 2008.

Shirley described how DOE-ORP has initiated staffing succession planning by attracting younger professionals. She thought working onsite is still a great opportunity for young people and asked that the Board send along resumes from any interested people.

Shirley said tank retrievals are currently going slow, and there is an S102 pump that needs replacing. They hit hardheel at C108 and are using innovative techniques for C109 and C110. She said CH2MHill is working on being able to move quickly from one tank to another to make sure retrievals do not stop.

She noted positive progress during the past three months with DBVS. The project has DOE-HQ support. She said they have to finalize the full scale integrated test, and if all turns out well at the 38D Full Scale Test Melt, they will be able to go to DOE-HQ and finalize the design package. Shirley thought everyone is encouraged with the progress.

Shirley said they are making good progress on the analytical laboratory facility at WTP. The exterior steel framework is almost complete and it is 37% complete overall. DOE-ORP is continuing to work on the earned value management system and hopefully the Office of Engineering and Construction Management (OECM) will get the approval soon. She said they hope to have a decision by the fall on the high level waste and pre-treatment facilities and hope to start construction on the high level waste facility by the start of the fiscal year and work on the pre-treatment facility by January. There is a test platform that will be operational in January.

DOE-RL

Mike Weis, the acting manager for DOE-RL, announced that Dave Brockman is the acting deputy manager for DOE-RL. He also noted that Washington Closure Hanford (WCH) has some new team members, including Kurt Heeler, Wayne Johnson, and Dave Bignell. Con Murphy is the new Fluor Hanford president.

Mike said DOE-RL was awarded another Voluntary Protection Program (VPP) flag for the groundwater project and now has thirteen of the 27 flags on the site. It is an incredible accomplishment for the workforce.

He noted that the six public tours next week filled up almost instantly. DOE-RL is working on making more tours available.

Mike described the recent success at K Basins in moving containerized sludge from K East to robust containers at K West. The next step is to remove water from K East and proceed with D&D. Mike said they finished demolition at PFP and put a temporary cap in 241-Z facility, with tanks with interim transfer points. All are cleaned out and temporarily capped until the long-term CERCLA process is done.

Mike described the wide variety of activities in the groundwater program and the support from various places around the country. Among the supporting parties are DOE-EM and the Harry Reed School in Nevada. DOE-RL is ready to use another round of apatite to capture strontium to prevent migration toward the river – an injection will be done in June. They are also using a coagulation process to change chromium into a safer form. Another treatment being worked on injects polyphosphate into wells to capture uranium. It has a side benefit of chemically processing with calcium to form apatite that captures other radionuclides.

Mike said they did a borehole in a chromium problem area in the 100 D Area. Finding the source has been difficult, but through their investigations Mike thought they were getting close. DOE-RL has been removing soil in the 300 Area and remediating the area from the road to the river.

Unrelated to cleanup activities, Mike said that while WCH was characterizing some orphan sites in the 100 Area, they found a baseball home plate from an old baseball field.

Board Discussion

Norma Jean asked about the chromium source in the 100 D Area. Mike thought the source of the contamination was probably from operations activities around rail cars. He expects to find the source around the rail road lines, which they will begin removing soon.

Ecology

Nolan Curtis, Ecology, announced that Laura Cusack received the 2007 Governors Award for leadership and management. He noted that applications for the public-at-large seat on the Board are available on the Ecology website. He said Ecology is fully engaged with the TPA negotiations, a useful and continuing process that will hopefully find resolution by the end of the summer. Nolan noted the following from the Ecology Nuclear Waste Program Update handout:

- Comment period for the Air Operating Permit: June 11 – July 13
 - Public hearing: July 12
- Comment period for the Air Pollutant Ventilation System: June 25 – July 25
 - The permits are available online for review at www.ecy.wa.gov/programs/nwp/commentperiods.htm
- Comment period for replacing emergency diesels: May 14 – June 12
- Comment period for putting the Integrated Disposal Facility into standby mode ended June 8
 - Ecology received a few comments and will prepare a Responsiveness Summary
- T-Farm Surface Barrier Demonstration Project
 - Construction of the barrier will begin in late June and its effectiveness will be evaluated for at least two years
- Hanford 200 Area Effluent Treatment Facility
 - DOE-RL wants to modify water treatment operations by adding equipment which will provide a cement solidification of some of the secondary waste brines. A comment period is not required but will be held if there is significant public interest.

In March, Ecology submitted Global Nuclear Energy Partnership Programmatic EIS scoping comments and questions to DOE–Nuclear Energy (DOE-NE).

Board Discussion

Susan Leckband looked forward to baseline discussions.

Keith Smith asked if the cement solidification will prevent leaching; he thought some waste was prone to leaching out. Nolan did not know. Dennis said solidification is not used for all contaminants; there are different standards for different chemicals. Mike Weis said they are looking at doing solidification on location, too.

Pam was concerned about technetium, and noted that in a number of instances the Board has been concerned that technetium will be captured in an evaporator, grouted and put into ERDF. She said technetium leaches out of grout.

Bob Parks asked where pump and treat technetium is stored. Dennis said final disposition is yet to be determined.

Bob asked about the compaction testing situation at ERDF. Dennis said the expert review panel is recommending a new electronic system to ensure adequate compaction is reached. Bob questioned the original design and operations system. Dennis said the tests they ran were considered appropriate, but the manner in which the instrumentation was used was not done in accordance with manufacturer requirements.

Mike Weis said DOE could not verify if the correct process was followed because data had been falsified. The independent experts evaluated what the contractor had done and made recommendations to improve efficiency and reliance on the crew making the measurements. A small scale test showed that compaction was actually done correctly, but they will run a broader test to make sure there is no subsidence.

Chuck Spencer, WCH, believed that the final test, a large load test, would be fine. The independent review did not doubt the adequacy of the compaction but recommended additional compaction tests for verification.

Chuck said that in the future, they will use a larger device (rather than multiple bulldozers) to increase the compaction area and use a GPS system to show exactly where the compaction passes have been, and will measure vertically and horizontally. The GPS will feed information back for verification.

Jerry Peltier asked if the contract awarding process is on schedule. Mike Weis said bids are due in six weeks for the Mission Support Contract, and DOE is proceeding with other contracts as well. He hoped the transition for the Mission Support Contract will be in 2008. DOE has requested budget for the transition.

Pam asked if the contract had been awarded for the replacement of B Reactor. Chuck said the RFP is currently being prepared.

EPA

Dennis Faulk, EPA, recognized Larry Gadbois for winning the Region 10 Project Manager of the Year. He noted that EPA concurred on the DOE Five Year Review, which they will discuss at the RAP meeting.

EPA received a letter from the Parks Service asking if B Reactor would be safe to use in the long term. Dennis said EPA responded that it will be safe as long as surveillance and maintenance continues.

Dennis described the 118B-1 burial ground tritium plume. He said the Explanation of Significant Difference (ESD) suspected that it will decay rapidly and naturally. He said they are looking at the C9 Crib on the Central Plateau, which is very contaminated. They are looking at the structural integrity of the concrete roof. He said with the technetium-99 pump and treat, they are going to hook up wells around the T tank farm and will pump out technetium-99 contaminated water.

Dennis said DOE's national expert review team issued some recommendations for system changes to better verify adequate compaction at ERDF. Over the summer, a large test facility will be built to ensure there is good compaction. Dennis said that EPA thinks that the compaction overall has been adequate and there should not be any long term capping problems.

Committee Reports

Tank Waste Committee (TWC)

Rick thanked DOE-ORP for the WTP tour. He said that TWC continues to follow groundwater monitoring with RAP, and analyze the potential for leaks or source terms at the tank farms. Issue managers will discuss any changes in funding. TWC continues to monitor the TC&WM EIS and will update the committee and board as it progresses.

The committee will look at any change in funding for WTP. Rick had not heard the recent announcement about potential funding reduction. He expects WTP to receive full funding; any shortfalls will lengthen the

schedule and affect milestones. Rick also noted that a report on early LAW start up and bulk vitrification secondary waste streams will be released to the public this summer.

Steve Weigman was unsure about the report on the bulk vitrification secondary waste streams; there is significant work going on this summer, though.

River and Plateau Committee (RAP)

Jerry Peltier said RAP will review institutional controls and hoped that DOE continues to review past institutional control advice (Advice #63) as it moves toward Records of Decisions that include institutional controls. RAP is concerned about the lack of funding and the path forward for groundwater remediation and will continue to keep it a top priority.

Health, Safety and Environmental Protection Committee (HSEP)

Keith Smith thanked the Board for approving the Workers' Compensation advice, on which the committee had worked hard on. He thanked DOE and Fluor for the HAMMER tour and thought it was a good educational experience for people who had never been there. He anticipated that HSEP will work with BCC on a HAMMER funding strategy and will evaluate how to best utilize the HAMMER training.

Budgets and Contracts Committee (BCC)

Gerry Pollet thanked DOE-RL and DOE-ORP for the budget workshop in Richland. He thought it was well attended and a good model for future workshops. He noted that Seattle had more members of the public attend, even though the DOE notice was late. There were fewer people in Spokane, but the discussion was still good. Gerry anticipated good turnout at the upcoming Hood River and Portland budget meetings. The Hanford website (www.hanford.gov) has synopsis of the meetings and public responses.

Gerry said BCC is waiting to review the RFPs for the major contracts, which will be a large piece of BCC's work plan. BCC will work with other committees to review new baselines and DOE-RL cost validation.

Public Involvement Committee (PIC)

Norma Jean reported that PIC agreed on the public involvement priorities identified at the Leadership Retreat. PIC discussed how it could develop effective public involvement tools for a number of things, such as budget and State of the Site outreach. PIC discussed the Hanford Update, its role and how it can be more effective. The committee has not developed issue managers yet, and the work plan and other ideas will need further discussion.

Norma Jean also noted that the committee discussed distinguishing the difference between outreach and public involvement, as well as the national liaison's request for public involvement success stories and tools.

Public Comment

No public comment was offered.

Board Business

Rick Jansons was nominated and approved as the new Board vice chair.

Identified committee meeting dates and notes:

- RAP: Wednesday, June 20
- HSEP will not need a conference call or meeting until the fall

September Board meeting agenda topics may include:

- Groundwater funding advice
- Tank waste, early LAW startup
- Bulk vitrification

Attendees

HAB MEMBERS AND ALTERNATES

Jim Curdy, Member	Gerald Pollet, Member	Gary Petersen, Alternate
Rob Davis, Member	Keith Smith, Member	Wade Riggsbee, Alternate
Greg deBruler, Member	Margery Swint, Member	Dick Smith, Alternate
Norma Jean Germond, Member	Jim Trombold, Member	John Stanfill, Alternate
Harold Heacock, Member	Gene Van Liew, Member	Art Tackett, Alternate
Becky Holland, Member		Charlie Weems, Alternate
Rick Jansons, Member		Helen Wheatley, Alternate
Mike Keizer, Member		
Susan Kreid, Member	Al Boldt, Alternate	
Pam Larsen, Member	Shelley Cimon, Alternate	Earl Fordham, Ex-Officio
Susan Leckband, Member	Ken Gasper, Alternate	Debra McBaugh, Ex-Officio
Jeff Luke, Member	Floyd Hodges, Alternate	Armand Minthorn, Ex-Officio
Ken Niles, Member	Steve Hudson, Alternate	
Bob Parazin, Member	Tony James, Alternate	
Bob Parks, Member	Larry Lockrem, Alternate	
Jerry Peltier, Member	Laura Mueller, Alternate	
Maynard Plahuta, Member	Nancy Murray, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Keith Benguiat, DOE-RL	Robbie Beyoni, Ecology	Tammie Holm, EnviroIssues
Dave Brockman, DOE-RL	Sharon Braswell, Ecology	Hillary Johnson, EnviroIssues
Lisa Copeland, DOE-RL	Madeleine Brown, Ecology	Lynn Lefkoff, EnviroIssues
Jeff Frey, DOE-RL	Joe Caggiano, Ecology	Cathy McCague, EnviroIssues
Greg Jones, DOE-RL	Nolan Curtis, Ecology	
Karen Lutz, DOE-RL	Ron Skinnarland, Ecology	Karen Caddey, CH2M Hill
John Morse, DOE-RL	Cheryl Whalen, Ecology	
Mike Weis, DOE-RL	Mike Wilson, Ecology	Rob Piippo, Fluor Hanford
		Janice Williams, Fluor Hanford
Ben Harp, DOE-ORP	Dennis Faulk, EPA	Barb Wise, Fluor Hanford
Erik Olds, DOE-ORP		
Delmar Noyes, DOE-ORP	Mike Priddy, WDOH	Don Moak, Energy Solutions
Steve Weigman, DOE-ORP	John Martell, WDOH	
		Edgardo Berrios, WA Group
	Terri Traub, PNNL/DOE Reading Room	Lynnette Bennett, WCH
	Janice Parthrel, PNNL	Kurt Kehler, WCH
		Noel Kerr, WCH
		Greg deWeese, Bechtel National

MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald		
Barbara Harper, CTUIR		

