

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

September 8-9, 2005

Portland, OR

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

Executive Summary

Board Action

The Hanford Advisory Board (HAB or the Board) adopted one piece of advice regarding the Waste Treatment Plant (WTP).

Look Back/Look Forward: Perspectives from the Board and Senior Tri-Party Agreement (TPA) Managers

Todd Martin presented the Board’s perspective on its work from the past year. Roy Schepens, US Department of Energy – Richland Operations Office (DOE-RL); Keith Klein US Department of Energy – Office of River Protection (DOE-ORP); Jay Manning, Washington State Department of Ecology (Ecology); and Dan Opalski, US Environmental Protection Agency (EPA) each presented their agencies’ perspectives on the Board’s work from the past year and offered suggestions for possible issues where the Board could have input in the coming year.

Waste Treatment Plant (WTP)

The Board issued advice regarding WTP cost overruns and schedule delays.

Bulk Vitrification

The Board discussed advice regarding the feasibility of continuing the bulk vitrification demonstration project. The advice was returned to committee for further review and refinement.

Board Priorities for 2006

Board members reviewed and updated the priorities for 2006. The agencies commented on the priorities and generally agreed and commended the Board on their priority selection.

Board 2006 Meeting Schedule

The Board approved the meeting schedule for 2006.

Site Specific Advisory Board (SSAB) Update

Todd Martin, Shelley Cimon, and Susan Leckband will be attending the upcoming SSAB Chairs meeting in Idaho Falls. They will receive an update on the national forum as well as present the Board's top concerns for this quarter.

Board Business

Todd had a meeting with the new Assistant Secretary, Office of Environmental Management (EM-1), Jim Rispoli. The meeting went well with Todd sharing many of the Board's perspectives and concerns. There will be a new member orientation during the November Board meeting.

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Todd Martin, Citizens for a Clean Eastern Washington (Regional Environmental/Citizen Organizations) Chair, called the meeting of the Hanford Advisory Board (HAB or Board) to order. The meeting was open to the public and offered ongoing opportunities for public comment.

Board members in attendance are listed at the end of this summary, as are members of the public. Three seats were not represented: Yakama Nation (Tribal Government) and two Public-at-Large seats.

Welcome and Introductions

Jerri Main will be the new alternate for Bob Parazin, Public-at-Large.

Gerry Dagle will be the new alternate for Margery Swint, Benton-Franklin Public Health.

Tanya Williams, Environmental Outreach Specialist for the Washington State Department of Ecology.

Penny Mabie introduced Cathy McCague, a new facilitator for EnviroIssues.

Approval of June Meeting Summary

The Board approved the June meeting summary with changes submitted by Paige Knight, Hanford Watch (Regional Environmental/Citizen Organizations).

Look Back/Look Forward: Perspectives from the Board and Senior Tri-Party Managers

Todd presented his perspective on the Board's accomplishments in 2005. He thinks the Board did well in 2005 and is much happier with the Board's effects on policy in 2005 than he was at the end of 2004. He focused his comments on myths pertaining to the Board and its members.

- Myth #1 – The Board doesn't work on the agencies' priorities. The Board's priorities from last year included values, principles and strategies for remedy selection and waste management in the Central Plateau; the 300 Area uranium plume and reindustrialization; 100 Area final Records of Decision (ROD); and groundwater. Eight of thirteen advices produced by the Board in the last year pertained in some way to the Central Plateau. When gauging impact, almost all priorities have been met, and in some instances surpassed, with the exception of groundwater. The agencies were not ready to tackle groundwater as outlined in the Board priorities, so this has been postponed. One somewhat disturbing trend is toward a lack of substantive responses from the agencies.
- Myth #2 – The Board is negative and mean. In the past year, the Board has issued letters of commendation to the agencies regarding tank retrieval progress and Environmental Restoration Disposal Facility (ERDF). The Board has also reduced the usage of the word "must" in Board products.
- Myth #3 – The Board is ineffective and inefficient. This one is hard to refute as there is not always a product, but the Board does inform media decision. The *Weapons Complex Monitor* has picked up much of what the Board is doing. Department of Energy – Headquarters (DOE-HQ) is preparing a national waste disposition strategy, in part due to a letter from the Board.
- Myth #4 – The Board wants unrealistic perfect cleanup. This is not true. The Board adopted the Future Site Uses Working Group report; which acknowledges that large amounts of tank waste will stay on site in perpetuity. Over the last year the Board has issued advice stating that, while retrieve, treat and dispose (RTD) is the Board's ideal; the Board recognizes that this is not always possible or feasible.

- Myth #5 – The Board’s advice is not clear. This may have been true in the past, but in the last year the Board has revised the advice format. The new format clearly differentiates the advice section.
- Myth #6 – the Board is not focused on policy issues. A review of the list of advice products from the last year clearly shows that every piece of advice pertained to policy issues.

Todd reiterated that the Board cannot ever be too efficient or too effective or too clear on advice. He urged Board members to continue to work on these things, so that the Board will continue to be defensible in the future.

Agency Perspectives

Senior managers from each of the participating agencies presented their perspectives on the Board’s work and the Hanford Site in the past year.

Roy Schepens, Department of Energy – Office of River Protection (DOE-ORP), noted that the following were the areas of focus for DOE-ORP in 2005:

- The Tank Closure Environmental Impact Statement (TC-EIS) – the TC-EIS is taking longer than initially expected. The Technical Guidance Document has been developed. There will be an issue manager workshop on September 13, 2005. The draft should be out for review in Summer 2006.
- Transuranic (TRU) tank waste and long-term storage permits with the State of New Mexico – TRU activities have been deferred to address regulatory permitting and National Environmental Policy Act of 1969 (NEPA) actions.
- Bulk vitrification (BV) technology demonstration program – initial calibration verification (ICV) Box test 38A1 is complete and will undergo destructive inspection and testing. This was the first full-scale bottoms-up melt. Another test will be one at Horn Rapids using simulated waste from S109. An independent review of the Off Gas System was completed August 19, 2005. Due to cost growth CH2MHill has paused procurement and construction activities, but research/development activities continue. CH2MHill has completed a recovery plan. DOE-ORP is developing a recovery plan. BV is still a viable technology. Results to date indicate that the technology can immobilize low activity waste (LAW) comparable to the Waste Treatment Plant (WTP). BV also allows for treatment flexibility in treating difficult waste streams and does not produce orphan waste streams. Results from BV testing will have implications for WTP operation. BV technology may allow for interim LAW treatment, prior to WTP startup.
- Retrieval in support of tank closure activities – Tanks C-106, C-202 and C-203 have been retrieved. Retrieval of S-112 and S-102 are in progress and C-201 and C-103 are being prepared for retrieval. New technologies are being developed and refined to tackle the salt cakes and other challenges to tank retrieval.
- Complete construction of the Integrated Disposal Facility (IDF) – The permit to complete construction was approved August 16, 2005. Installations of the Cell 2 leak detection system, secondary leak detection systems for both cells and the three-foot Admix layer for the entire facility have been completed. Geotextile liners are currently being installed. Construction is to be completed by February 2006.
- Continued design and construction of the WTP – Construction focus is on the LAW facility, the Analytical Laboratory facility and the balance of facilities. Engineering focus is on the Pretreatment facility and high-level waste (HLW) facility. They are also working to incorporate the revised seismic criteria.

Keith Klein, Department of Energy – Richland (DOE-RL), commended the Board on the previous year’s work. He expressed concerns and frustrations that he thinks the Board can help with, including groundwater issues and process issues. He stated there are two different timeframes operating at the Hanford complex. One is an immediate and urgent, minute-to-minute timeframe where people are in danger and decisions must be made rapidly. The other is a more long term, geologic timeframe. Six years ago the urgent risks included plutonium, spent fuel and the leaking tanks. Plutonium and spent fuel are urgent and with the number of experienced workers leaving he is being pressed to find

solutions to these issues quickly; while he still has the expertise on hand. The River Corridor is another priority. Right now, plutonium cleanup and spent fuel eat a large portion of the budget. DOE-RL is closing in on these and he anticipates freeing up more money for River Corridor cleanup. He is also concerned about getting contracts in place to support the cleanup projects and programs. He is determined to do things right the first time, maintain efficiency and find the right level of cleanup. He sees a looming issue with the budget as closing sites means Hanford is losing allies in Washington, D.C. Closure of smaller sites should mean more money for Hanford, but that doesn't seem to be happening. Ultimately he would like to find a way to get the plutonium off site, as the cost for safeguarding it will significantly affect the cleanup budget. Keith reiterated that he is very proud of the work the workforce is doing on the various cleanup projects around the site. He also appreciates the work the Board does and acknowledged the usefulness of the Board's work in helping establish site focus and priorities. He stated the decisions to be made in the coming year will have far reaching impacts. He would like to see more public involvement and good public process, especially increased involvement with the Tribes to help give a balanced perspective. Worker transition is also a concern. While it is the nature of project work to wind down and require a different skill set for each phase, contracts are how workers are hired at Hanford and DOE has a responsibility to workers, past and present. Keith then reviewed some of the plumes on the Hanford site. He is encouraged by the progress made in getting plume contaminants down to remedial action levels. He acknowledged that it will take several hundred years for the water under the Central Plateau to be drinkable, but the progress is a cause for hope.

Jay Manning, Washington State Department of Ecology (Ecology), stated the Hanford Site story is now a tale of hope. It has not always been a tale of hope and the changes that have taken place can be partially attributed to the work of the Board and, in particular, to Betty Tabbutt, Washington League of Women Voters (Regional Citizen, Environmental & Public Interests), who was very instrumental in the early years of moving from defense mission to cleanup. In 1985 the site was a closed government facility and inspectors were not even allowed in. There has been a huge shift from production to cleanup. During the drafting of the Tri Party Agreement (TPA) he was doubtful about the feasibility of the 2018 and 2028 milestones, but seeing the bottom of the retrieved tanks has encouraged him. The progress on site is ever increasing and he does not want to see this halted. The budget is a big issue, but he thinks the WTP delays are even bigger. The tanks and tank waste must be dealt with and the WTP is the way to clean them up. WTP is over budget and over schedule and no one knows how big the delay and cost overruns will be. He would like to figure out how big this is and then find a strategy to deal with it while maintaining safety and efficiency. Regarding the budget, he would like to see pressure maintained to keep the budget request as high as possible, keeping in mind that it will be somewhat difficult due to Hurricane Katrina cleanup.

The next tier of issues includes waste reclassification, groundwater, off-site waste and the Solid Waste Environmental Impact Statement (SW-EIS). This has been the subject of litigation. Ecology is concerned that DOE will try to reclassify waste to prevent having to retrieve it from tanks. The TPA requires that they retrieve all they can at a high level of technology. Roy has assured Jay that they will not reclassify prior to retrieval and that they just want to reclassify waste that is leftover after TPA retrieval. Jay stated he does not think there are uncontrolled plumes racing to the Columbia River, but he thinks the TPA is inadequate for dealing with the groundwater issues at Hanford. One disaster that should not happen at Hanford is to have significant plumes reach the river. He acknowledged there are small plumes reaching the river now, but the Central Plateau plumes cannot reach the river. He would like to see a plan more distinctly spelled out in the TPA. Ecology is also concerned as to how much waste is coming in to Hanford. Hanford will have more than its share of waste even without storing off-site waste. The fact that the state does not want to store off-site waste has given Hanford a reputation for being difficult and obstructionist which may contribute to the budget shortfalls. Ecology and DOE are working together on the Hanford SW-EIS. They are currently working on a potential settlement. It is possible that a small amount of waste would come in from the Battelle Columbus site. The site has just this small amount of waste that is preventing it from closing completely. If there is a reasonable accommodation to be reached, they will find it, but this will not be done without regard to cost. Jay commended the Board on all the hard work and progress it has made in the past year.

Dan Opalski, Environmental Protection Agency, Region 10, stated Hanford is unique in its complexity. He agrees with most of the statements made by the previous senior managers. He thinks there is currently a great opportunity for open communication between agencies. Roy and Keith are open and willing to discuss the pertinent issues and Jay is invaluable with his institutional knowledge and unique perspective. As for the Board, he appreciates all the time and effort the Board members put into Hanford. A common theme from the State of the Site meeting from Wednesday evening was a focus on the structure of the meetings. He thinks the Board will have a significant role in advising on community involvement. He asked that the Board consider the entire system of public involvement and not just one particular meeting. Keeping people engaged is the key to keeping the budget flowing. Dan reiterated he appreciates the Board's efforts and looks forward to future advice.

Todd noted that the Board's success is thanks to the agencies and, in particular the EPA staff. He acknowledged that the last year's work was, at times, difficult and he thanked the agencies for their support.

Board Discussion and Questions

Pam Larsen, City of Richland (Local Government) stated she enjoys the Board meeting when the senior managers visit as it reminds the Board of the totality of the work at Hanford. She stated she has been overwhelmed and frightened at what has been happening with the budget. She is concerned the budget shortfalls will slow the momentum gained in the last couple years. She noted she has learned that one person can make a difference. She has had the chance to visit with the new EM1 and is well pleased. She is also pleased with the congressional delegation. She thinks the resources are in place to move forward with cleanup.

Maynard Plahuta, Benton County (Local Government), commended the agencies for the work completed in the last year. He expressed concern that research and development (R&D) dollars seem to have been taken out of the budget, especially in concerns to groundwater. If more research is not done, a solution to Hanford's groundwater troubles will not be found. Keith replied he is a proponent for R&D, too. He stated he has not had any trouble getting funding for WTP or Savannah River R&D.

Susan Leckband, "Non-Union, Non-Management" Employees (Hanford Work Force), noted that, when she first joined the Board, it seemed that the problems in the 200 Area were too difficult to grasp. She is very pleased with the Board's Decisions Flow Chart. One of her lingering concerns is workforce benefits. Retirees from the Manhattan Project were promised a certain level of benefits. The change from production to cleanup has caused a change in those benefits and has resulted in an unjust reduction in the retiree's benefits. She would like to see this injustice corrected.

Gerry Pollett, Heart of America Northwest (Regional Citizen, Environmental & Public Interests), thanked the senior managers for coming and speaking at both the Board meeting and the State of the Site meeting Wednesday evening. He sees the site coming to a major crossroads concerning the budget. The upcoming contract changes will be a good opportunity for the Board to have input. He is concerned for the apparent lack of transparency regarding the bulk vitrification project. Gerry expressed skepticism regarding the possible increase in funds once other sites close, stating this has been promised in the past, but has clearly never happened. Another concern is that DOE will not try to retrieve any waste at all and will opt to simply cap sites. The Board's key value is retrieval, however the agencies seem to be embracing landfill closure of HLW farms, ignoring the one million gallons of waste released. If the agencies base their plans on capping without soil cleanup, it violates state and federal law. He advised DOE to retrieve and treat to the extent practical.

Greg deBruler, Columbia Riverkeeper (Regional Citizen, Environmental & Public Interests), stated the lawmakers back east were resentful they were sued. The problem isn't a "not in my back yard" issue, it is a NEPA issue. The people of Washington State were clear; Hanford is the most contaminated site. It doesn't make sense to take any more waste until the contamination that is already here is cleaned up. It becomes clear that Hanford needs a site-wide comprehensive cumulative assessment of the current waste load prior to accepting off-site waste. Another disturbing trend is the reduction in characterization. He stated the

people of Washington would more readily accept off-site waste if a comprehensive cumulative analysis is done for the site. He supports Keith's vision for more in depth public involvement, especially tribal involvement. He would like to see the Tribes involved in the 5-year review. He noted that if public involvement goes away, so does the money and then Hanford stays dirty.

Ken Niles, Oregon Department of Energy (State of Oregon), asked Jay what his plan for cleaning up groundwater would be. Jay stated his focus is on controlling the source first. The sources are many including leaking tanks and liquid discharges. These sources have been stopped and most of the liquids have been retrieved, but there is still plenty to do. There are some milestones for groundwater, but they are skeletal. Plumes near the river have a more complete plan than Central Plateau groundwater. He would add more interim milestones to drive cleanup and technology development and not just compliance. Nick Ceto remarked the structure is in place, they just hope DOE will be willing to sit down and work out the steps along the way. Currently they have a good idea of what was in the tanks and what is probably in the plumes. DOE did respond when asked to investigate a particular plume, but the Vadose zone inventory is still a big question. This relates to Maynard's comment on R&D. If the feasibility study is not done beforehand, then you end up managing the process afterwards.

Keith showed the Board slides showing placement and relative size of known plumes. He stated tritium is nearly impossible to remove from the groundwater, but it is not as big a concern as strontium or uranium. For the most part, DOE has an idea of how big, where and how fast these plumes are moving. They have been doing pump and treat on a plume in the Central Plateau and have removed 88 tons of carbon tetrachloride and have gotten concentrations below their goals. They are now waiting to see if the levels will go back up again. Currently DOE is trying to isolate the plumes, preventing migration and driving factors. Keith noted groundwater is a good place to note where tradeoffs may occur. He stated it may take a year or so to come up with good interim milestones for groundwater cleanup. Different models and ideas of precision can escalate to court battles. Groundwater presents a difficult issue and coming to the right conclusion is of the utmost importance. Jay agreed with Keith. Stopping contaminants before they reach the groundwater is always the preferred method, as there is no good inexpensive way to treat groundwater. Containment remedies are protective, but are more expensive in the long-term. The regulations call for cleanup because it is more thorough and protective. The difference at Hanford is the contaminants are uncommon. With containment you hope that the organic components will breakdown over time and become harmless, but contaminants like strontium do not change over time. Containment is less viable for these metals.

Paige Knight, Hanford Watch (Regional Citizen, Environmental & Public Interests), noted the meeting has a different tone this year. The Board and agencies are not as defensive. She attributes this to an increase in trust on both sides. She would like to see this trust continue to grow by fixing some of the public involvement jams. There has definitely been less public involvement lately. This is partly due to fewer environmental impact statement (EIS) and comment periods, but she would like to see public involvement get back on track. She expressed dissatisfaction with combining the State of the Site meetings with Board meetings. She stated Roy is great at painting a rosy picture, but that is not what the public and Washington, D.C. need to hear right now. They need to know that cleanup is being and will continue to be affected by the budgetary shortfalls.

Jim Curdy, Grant & Franklin Counties (Local Government Interests), attributes the budget shortfalls to the fact that the Board and agencies have not let the congressional bodies know the things that have been accomplished at the site. He reminded the senior managers of the State of the Site meeting in Richland and suggested that they do their best to do right by their employees, as they can support or hurt the cleanup operation easily.

Armand Minthorn, Confederated Tribes of the Umatilla Indian Reservation (Ex-Officio), noted the Tribes will make an effort to have a greater presence on the Board. Also, the Tribes have only had one meeting on the SW-EIS. They would like to be consulted directly as Keith indicated. Also, from a meeting last year in Hood River, there were five questions that Roy was supposed to get answers on. Armand has not received a response on any of those five questions. He urged Roy and Keith to take the initiative and not wait for DOE-HQ to issue policy for dealing with the Tribes. A policy would help to guide the government-to-

government relations and support the existing relationships. He commented that Jay's priority of protecting the river is also a priority for the Tribes. He would like to combine efforts to protect the Hanford Reach and contain/treat groundwater plumes. He noted the ongoing negotiations with the state regarding the natural resources damages suit, but no negotiations have been initiated with the Tribes. The Tribes do have treaty resources on the site and being excluded from these negotiations is bad. Also, the Oregon Cleanup Board has asked why DOE has not addressed the fluctuating water levels in the Reach with the public utilities district. This is affecting sacred sites and killing redds. He would also like to hear about long-term stewardship on the site.

Mike Keizer, Central Washington Building Trades Council (Hanford Work Force), expressed concern for the situation at the WTP and the impact it is having on workers. It is hard on workers, those who have already been laid off and those who don't know from day-to-day whether or not they will be laid off next. This is causing distractions among the workforce.

Rob Davis, City of Pasco (Local Governmental Interests), remarked he thinks the Board has accomplished a lot in the past year, especially regarding the barriers. There are still a lot of challenges on the horizon, though. One change that has happened in the last year is that much of the work is being done in committees and this makes the committee meetings exciting. He urged DOE to think in terms of the 200 year event, like Katrina, when planning for disaster preparedness.

Norma Jean Germond, Public-at-Large, asked Roy if he mentioned that the groundwater teams were testing to find a way to immobilize Iodine-129. He said Pacific Northwest Laboratory has a scope of work they are working from. He will get back to her with their progress.

Maxine Hines, Oregon Hanford Cleanup Board (State of Oregon), stated she would like to see less emphasis on capping. Keith observed that there are some tough questions that are considered when caps are considered. He noted that, what happens when a site is RTD is that the material is removed, possibly treated and then moved somewhere else on site to be capped. He asked what the difference is between capping in place and capping elsewhere on the site. There are liners and leachate collection systems, but after the operational period, the leachate system is shut down. Every time something is moved, there is the risk of exposure and accidents. These are all things that must be considered when looking at cleaning up a site. In the long term, caps will be used as this is the preferred method for preventing liquids from infiltrating the burial grounds and vadose zone and driving contaminants to the groundwater.

Waste Treatment Plant

Paige prefaced the advice by stating that long-term thinking will always win out over short-term thinking, as illustrated by the catastrophe experienced by Katrina victims. The impetus for this advice is it is taking too long to get information about the status of the WTP, specifically information regarding cost overruns and the anticipated duration of schedule delays. Costs will only continue to increase the longer the schedule delays.

Board Discussion and Questions

Rob stated he would like to know when the Board will get to see the Corp of Engineers report. This is another example of poor communication. Paige noted it seems the people who are working on these issues automatically assume that the Board and public know and understand things in a certain way.

Ken suggested wording to capture the idea that funding for WTP should not hinder funding for other site cleanup.

The advice was adopted.

Bulk Vitrification

Rob Davis stated, in order to get the right kind of waste immobilizing glass it has to pass numerous tests. This is a difficult task. Billions are being spent to build the WTP to make this great glass. On the other

hand, they are spending millions to make bulk glass. There is a need for another glass form or other alternative technology to meet the 2028 milestone. Initially there were 20 plus possible technologies. These were narrowed down to three: bulk vitrification, steam reforming and containerized grout. Bulk vitrification was the ultimate choice to go through the demonstration process. Now the process keeps increasing in size. It was supposed to be a simple research project, but now Roy has called it a pilot project. The committee would like DOE to come up with a decision-making criteria dialog. They would like a reference document; information on the cost and an estimate of the cost escalation; and data on the quality of the glass produced, leach rates at the glass in the refractory and off-stream wastes. This would mean DOE has to get more selective about what they are solidifying.

Board Discussion and Questions

Gerry Pollett stated he was assigned the cross-cutting job of doing work for the Budgets and Contracts Committee (BCC) for this advice. There have been rumors of the cost overruns on this project. Numbers between \$102 and \$150 million have been discussed which is significantly higher than the original estimate. The latest cost estimate Suzanne Dahl, Ecology, heard is around \$137 million, but this is with significant levels of uncertainty. Gerry submitted two additional concerns to be added to the advice. His concerns were bulk vitrification was touted as a way to restore technetium removal to the WTP activities. Now, not only does the technology cost more, it also does not restore technetium removal. Also, the RD&D permit cannot be converted to a long-term use permit.

Pam agreed with Gerry. Bechtel eliminated the equipment that would remove technetium from pretreatment at WTP. If technetium is not immobilized by bulk vitrification, then it needs to be removed in pretreatment. Suzanne noted if technetium is not taken care of as part of the bulk vitrification process, it may not be a viable alternative. They have resolved the issues where technetium was plating out on top and in the porous layers, but there are other issues. Pam asked why it couldn't just be removed in pretreatment. Suzanne stated there would still need to be a secondary vitrification plant or other alternative technology.

Dick Smith, City of Kennewick (Local Government Interests), noted that this was to be an alternative technology that is "as good as glass" for a lower cost. It is not clear if the finished product is "as good as glass" and it will probably not be at a lower cost. He suggested reviewing the cost of adding additional low-level waste melters at WTP to provide the additional capacity bulk vitrification was to provide. Comparing the costs may show them to be nearly equivalent due to cost overruns at the bulk vitrification facility. If bulk vitrification doesn't save money to start with, it seems foolish to continue to pursue it.

Susan Leckband asked if it was true that there are no criteria for evaluating the bulk vitrification demonstration. Suzanne Dahl stated there are criteria. The state is considering the option of having a second LAW vitrification plant. The cost for the bulk vitrification project is being compared to the cost of a second vitrification plant. She noted that the agencies may not have done a good job of sharing the criteria for bulk vitrification selection, but she assured the Board criteria do exist. The approval process starts and stops with Ecology. If there is a problem with a test run, and the problem is not fixed with the next run, Ecology can require further tests until the finished product is acceptable.

Howard Gnann, DOE-ORP, stated that, even though bulk vitrification is an operations and development expense, it is being managed in the baseline and is tracked as a cost. They are aware of the cost overruns, but they intend to finish the demonstration. They plan to finish the design and work through the Defense Nuclear Facilities Safety Board (DNFSB) issues. Tank retrieval is also getting a lot of attention. Future cleanup is dependent on more than just the bulk vitrification demonstration. He stated that the demonstration plant was always meant to be proven as a one line plant. If it works, DOE could start processing material from the single shell tanks before the WTP is ready in 2011.

Todd asked Howard and Suzanne if there is a formal process for applying selection criteria and if that could be sent with a response to the advice. Howard stated, DOE needs to continue to evaluate the cost and schedule. The technical basis and risk of moving ahead will be outlined in the change package going to DOE-HQ to request the approval to move funds around.

Gerry noted, the point of the advice is to not wait until the plant is constructed or a milestone is missed to evaluate whether this is a worthwhile project. There needs to be checks along the way and criteria to be met. With Howard mentioning the need to shift funds to the demonstration project, it begs the question of whether this is a worthy project, since there are so many other cost changes coming. The project may be a bigger priority in a few years. He suggested pulling the plug on it for a few years and coming back to it.

Betty stated she reads a lot of bias into the advice. It seems the Board has already decided bulk vitrification is not working and should be shut down. She is somewhat concerned that Howard mentioned that DOE is looking at the cost, but he did not say Ecology or the public is looking at the cost.

Al Boldt, Government Accountability Project (Hanford Work Force), noted that milestone 62-08 has already been put off once. One thing not in Roy's presentation was that DOE-ORP has a path forward for bulk vitrification. He thinks DOE-HQ will develop an answer, but the regulators will never see how this answer will be employed. Howard stated this is not how it will happen. They understand the hazards in the facility and the design and will work them through with DNFSB. The Tank Waste Committee will be kept informed of the performance of the glass, technical issues and the cost. When he takes the change control package to DOE-HQ he will have to answer another series of questions and have an independent review of the development efforts.

Rob stated a big concern is that the demonstration project will produce a block of non-compliant waste. How will they recycle a 50-ton block of non-compliant waste? The committee is also skeptical about the existence of extra space at IDF.

Jeff Luke, "Non-Union, Non-Management" Employees (Hanford Work Force), stated he also thinks the advice sounds somewhat biased. He suggested the advice might need to go back to TWC. The existence of evaluation criteria should be investigated.

Paige stated the advice stems from the fact that the Board has not been communicated with clearly and she is not sure how to ensure increased and clearer communication. Howard stated bulk vitrification and the cost overruns have been discussed with the Board several times. He is unsure as to why there seems to be a communication gap now. He is concerned that the data that is being presented is untrue. DOE is only building IDF with enough capacity for Hanford waste. DOE is also attempting to significantly reduce the risk of making bad glass. That is the reason for the demonstration project and all the checks and balances that are in place there. The permit only allows for 400 days of testing, generating between 40 and 50 boxes. This one plant would never be enough to handle the additional from WTP. Paige suggest the advice may need to be sent back to TWC.

Todd summarized the main points of the advice:

- Concern with escalating costs and potential impacts on other tank farm operations
- Desire to apply go/no go decision criteria soon and often to confirm the value of continuing with the demonstration project
- Public discussion of criteria application and results of budget issues and priority funding trade-offs
- Reconsideration of taking technetium-99 out of WTP and evaluation of the impacts of this decision
- RD&D permit not converted into long-term permit. Cost increase requires notifying congress

Maynard stated he would like to see the RD&D continue and an increase in the communication from DOE. He advised DOE not to spend money beyond what is necessary to make good decisions.

Due to issues with wording, tone and the existence of criteria the committee was unfamiliar with, the advice was sent back to committee.

Board Priorities for 2006

Board members have seen the 2006 Board Priorities previously. There were two changes from the Public Involvement Committee (PIC): inclusion of the development of a static display board to be displayed outside Board meeting rooms and the creation of a speaker's bureau of sorts. Norma Jean also proposed a panel of University of Washington professors and graduate students for the next Board meeting. The panel would coincide with the Board's priority for increased outreach to the community.

Board Discussion and Questions

Maynard suggested having Todd do an interview for a call-in radio talk show. It would reach a large number of people who probably wouldn't come to a public meeting and would give those who don't normally weigh in on Hanford a chance to ask questions. Board members could call in with questions/comments if the general public does not respond.

Todd pointed out that the request for more public meetings is a 180-degree turnaround from the results of the leadership retreat. The PIC did say they want more public meetings.

Jerry Peltier, City of West Richland (Local Government Interests), would like to see a "canned program" that Hanford speakers could take out to the public. This would ensure consistency in messaging. He noted that getting a turnout at a public hearing or public meeting is the hardest thing to do.

Paige noted there is community radio and public TV that carry Hanford programming. Wednesday's State of the Site meeting will be airing on Portland public television forever. She thinks there needs to be an increase in public meetings, mostly because there has been such a decrease recently.

Agency Perspective

Nolan Curtis stated Ecology's perspective. Ecology's leadership group proposed seven "priorities" to guide Board work in 2006:

- The Board's values for prioritizing cleanup work - The Board's determination to focus on how cleanup priorities will be decided based on reduced staff, funding resources, and programmatic changes is certainly ripe for discussion given the current state of affairs. Ecology believes it is also useful for the Board to identify its priorities for cleanup activities not currently in the Tri-Party Agreement or site baselines.
- Values/principles/strategies for Central Plateau remedy selection and waste management - Last year, Linda Hoffman encouraged the Board to continue its focus on values / principles / strategies for the Central Plateau. This past year's work on waste consolidation from throughout Hanford in the 200 areas, preventing the spread of contamination from the 200 areas to other parts of the site or off-site, and the Board's work on capping issues – including development of the Board's capping decision-tool – should pave the way for similar work on tank closure and the composite analysis. Ecology appreciates the Board's willingness to continue to educate itself on important technical issues and believes the Board can be most effective in its role when it articulates its core values for technical issues like risk assessment rather than in-depth analysis of the methodologies themselves.
- Leadership and membership development
- Public education and public involvement - As the Board moves forward, certainly its ability to remain viable -- both robust and relevant – is of concern to the agency. Ecology relies on the Board to be a key component in helping to shape the agencies' decisions about Hanford cleanup. It is important to commit the resources to focus inward on leadership, membership, and organization development. We also applaud the Board's efforts to reach broader constituencies – including their tireless efforts to "encourage and compel" the Tri-Party agencies to be more engaged with the public.

- Cooperation with other sites on DOE complex-wide interdependencies - Ecology believes that despite the uniqueness of each of the cleanup sites, especially Hanford, there still needs to be a national dialogue, an open and honest dialogue, around many of the issues our site faces. There needs to be more national consensus and impetus behind cleanup of US DOE sites. A national dialogue is an important strategic component of Hanford Cleanup.
- Procurement of major cleanup contracts - Ecology remains hopeful that the US DOE contract strategy and procurement process will be made more sensitive to and reflective of stakeholder values and concerns.
- Groundwater - Groundwater should remain constantly as an area of focus, priority, and concern. It is the great unifier of site issues. There are still a number of inputs that the HAB can provide to help with decision-making. In some instances, we may be approaching limits within our current technologies to effectively resolve all of the threats.

Ecology remains hopeful and encouraging of the Board and its actions and will continue to encourage the Board to focus its efforts on those areas where its consensus values can have the greatest impact on cleanup decision-making at the policy level. To reiterate Jay's message, Ecology is grateful to the Board, confident in their ability to reach consensus on many issues and accurately reflect the values and desires of impacted and interested constituencies. They look forward to the Board continuing its important work of assisting Ecology, and all of the agencies, in understanding and including stakeholder values in Hanford cleanup decision-making.

Nick Ceto stated he is unsure how public involvement is most effective. It is a good debate. EPA will continue to do some outreach independent of the Board. One thing he would like to see added to the Board's priority list is transportation. The CERCLA 5-Year Review is also not listed as a priority. It will be important for the Board to be involved when it is released. EPA would like to hear the Board's perspective on what was evaluated and if the right conclusions have been drawn. Groundwater continues to be an important issue. One of the final end states documents made Nick think DOE was trying to steer people away from groundwater issues, but now there is a realization that groundwater will need to be cleaned up. Nick stated he can see the Board's point as far as capping. The ultimate goal is to shrink the footprint. The Board will need to keep up the pressure on that front.

Mike Weiss, DOE-RL, stated he has gained valuable insight as to how the Board works as a whole and how individuals work together towards the common goal, cleanup. Looking at the Board's priorities DOE-RL is mostly in agreement.

- The Board's values for prioritizing cleanup work - DOE-RL does think about how to prioritize cleanup activities. They would like to see more transparency in expectations. There has been a cultural shift in the department in terms of contractors, which will be good in the long run.
- Values/principles/strategies for Central Plateau remedy selection and waste management – DOE-RL is working through this with the NEPA process. The Board's work in this area has been very helpful.
- Public education and public involvement – Public involvement is very important. DOE-RL has been having a hard time tracking who is doing what.
- Cooperation with other sites on DOE complex- Mike encouraged the Board to attend the national forum and help build consensus as they do at Board and committee meetings.
- Procurement of major cleanup contracts – Procurements are the only way DOE can change specific strategies for cleanup. Unique contracts help drive performance.
- Groundwater – There are upcoming decisions in the 300 Area that DOE would like the Board's help with.
- Leadership and membership development – Mike congratulated the Board for taking the time and dedication to development and self-growth. This is an issue for all organizations and it is commendable that the Board has chosen to make this a priority.

Howard agreed with Mike and said the same is true for DOE-ORP. Regarding the Central Plateau work, he is optimistic that there will be a good discussion coming out of the Tank Closure EIS (TC-EIS).

Board members agreed to add the concept of transportation and site interdependencies to the priority list as well as the CERCLA 5-Year Review.

Board 2006 Meeting Schedule

Ken suggested substituting LeGrande for Pendleton as, in the past, Oregon has had trouble drawing crowds in Pendleton. Todd clarified that it is actually Mission they will be visiting near Pendleton.

Harold suggested Moscow or Pullman, instead of Lewiston, so that students could be involved. Several Board members expressed the desire to keep Lewiston on the schedule, as there is a college in Lewiston, too.

Site Specific Advisory Boards (SSAB)

Susan Leckband, Shelley Cimon, Public-at-Large, and Todd will be going to Idaho Falls for the next SSAB Chairs meeting. They will be presenting Hanford's issues with plutonium, HLW, LLW and mixed LLW and questions on Yucca Mountain. The top issues for the quarter will be Central Plateau, cleanup, NEPA risk assessments and the upcoming contract renewals. They will also receive an update on the national forum.

Susan stated that Hanford's involvement with the SSAB chairs is crucial in light of the number of sites that are closing. It will be good to have Shelley representing the Board as National Liason.

Al said that, while they are talking about redistribution of waste, he would like them to ask Idaho about their waste that is supposed to be disposed of at the Waste Isolation Pilot Plant (WIPP) in New Mexico. He would like to get a feel for the amount of remote handled TRU (RH-TRU) Idaho is proposing to dispose of at WIPP, as Hanford is also proposing a rather large amount. Nick said he is not certain Idaho RH-TRU is proposed to go to WIPP.

Tri-Party Agency Updates

DOE-ORP

Howard Gnann stated he did not have anything additional to add as Roy Schepens already covered everything.

DOE-RL

Mike Weiss stated he did not have anything additional to add as everything was covered by Keith Klein and during the Board Priority discussion.

Washington State Department of Ecology

Nolan Curtis reminded the Board that the IDF comment period ends soon. He also noted there are several comment periods coming up in the next couple of weeks. Ecology is reviewing the bulk vitrification permit. There is not a formal comment period, but if Board members would like to, they can submit their comments to Kathy Conaway (kcon461@ecy.wa.gov). They are also looking at the site wide Resource Conservation and Recovery Act of 1976 (RCRA) ten year permit renewal and the 216-U-12 RCRA permit modification.

Dick asked for clarification of the significance of the 1987 date for buried waste at 216-U-12. Gerry stated that this is the date when the State of Washington was recognized as having RCRA authority at the Hanford

site. Gerry would like to know why comment periods are not being held for all the U site. He noted that they are not doing full characterization at the sites, but rather are using analogous modeling. RCRA requires real characterization. He would like to know why other U sites are not undergoing RCRA closure. He thinks the state is rewarding DOE for evading RCRA requirements. Nolan offered to have John Price, Ecology, attend a RAP meeting to respond to Gerry's concerns. Nick stated the main concern is getting the cleanup done right. It doesn't matter which cleanup regulation is used. Todd noted that this issue would be flagged for RAP.

EPA

Nick mentioned that a delegation from France had been in town over the last couple of days, looking at the technology employed at Hanford. A few interesting things to note, they have never had to deal with a backlog of liquid waste as Hanford has; they also have orphan waste streams and France has 55 active nuclear power plants. The French delegation was interested in how waste is stored/handled and how DOE deals with the public. Hanford has also had a delegation from Great Britain recently. They will continue to host these whenever possible. Howard noted that both France and Great Britain have vitrification technology, but neither of them store their waste below ground. Susan Leckband noted that France has long had a personal mandate to wean themselves from foreign oil. They use and reuse their nuclear fuel until it is seriously reduced, so they don't have the brew that Hanford is dealing with.

Committee Reports and Issue Manager Updates

Tank Waste Committee (TWC): Al Boldt advised there is an upcoming issue managers meeting on the TC-EIS. It will be a very technical meeting regarding how TC-EIS calculations are being performed, especially for groundwater. He is hoping that both the TC-EIS and SW-EIS contain consistent assumptions and information. They will be looking for policy issues for the Board to address. Pam added that DOE-ORP will be going to England to see what their facilities are like.

River and Plateau Committee (RAP): Maynard Plahuta stated that there would be an update on the Plutonium Finishing Plant (PFP) and K-basin sludge at the next meeting. They will also receive a status report on risk assessments, which are currently underway.

Health Safety and Environmental Committee's (HSEP): The committee received an update on the worker's compensation program and the complaints against the program as illustrated by the workers at the Richland State of the Site meeting. The upcoming meeting will cover several interesting topics including a report on the progress with non-radiological hazards and the components of monitoring.

Budget and Contracts Committee (BCC): Gerry stated the committee will be making an effort to review the approach to massive new contracts and put together lessons learned. The committee is concerned that the appropriations for 2006 still have not been approved. When it is approved BCC will work with the agencies to review the allocation and distribution. The worker's compensation item is a crosscutting issue.

Public Involvement Committee (PIC): Norma Jean stated that Wednesday's PIC meeting was productive. Much of what was discussed was covered in the Board meeting, including the expansion of the Board priorities to include the development of a process to actively seek opportunities to provide speakers to groups interested in Hanford; the Board static display; and a request for an increase in the number of public meetings. The committee also presented the Board with the idea of outreach to the University of Washington community via a panel of experts at the November Board meeting. The panel would be comprised of UW professors and graduate students.

Jim Curdy mentioned that he had found a website about a power plant in Galina, Alaska. It is to be self-sufficient for thirty-plus years and supply electricity for the 700 residents. The site address is: http://www.atomicinsights.com/AI_03-20-05.html.

Todd noted PIC has also recommended Board Leadership make a concerted effort to visit editorial boards, especially in conjunction with Board meetings.

Board Business

Todd said he had a meeting with the new EM-1, Jim Rispoli, DOE-HQ. He gave Jim an overview of the Board’s position on Hanford issues, especially the more frequently misunderstood issues. Todd said Mr. Rispoli seemed to have a lot of energy on the plutonium issue and the national forum is at the top of his list. Overall it was a positive visit.

Announcements

There will be a new member orientation during the November Board meeting.

Calling cards have been discontinued complex-wide. This mainly affects Board members who call in to perform their Board business and pay for their long distance. Unfortunately, DOE has decided not to support this activity in any way. It is possible that calls could be routed through the Hanford operator. DOE-ORP will look in to this possibility.

September Board Topics

Todd noted the following as possible topics for September’s Board meeting:

- Bulk vitrification advice
- UW professor and student panel
- Cleanup priorities from the Board’s priority list
- BCC education on major sites procurement
- Possible information from GAO reports
- PIC process for speaker’s bureau

Public Comment

Lynn Sims, Hanford Watch, offered written public comment; the text follows:

Thank you all for your stamina and work you do with the current resources, situation and administration. Thank you for meetings in Portland. More folks would come if time allowed and if we were not so terribly busy with school, job, Iraq War issues and health care. Local cable access presentations are effective. Thank you.

Attendees

HAB MEMBERS AND ALTERNATES

Madeleine Brown, Member	Jerry Peltier, Member	Jeanie Sedgely, Alternate
Jim Curdy, Member	Maynard Plahuta, Member	Dick Smith, Alternate
Rob Davis, Member	Gerald Pollet, Member	John Stanfil, Alternate
Greg deBruler, Member	Margery Swint, Member	Betty Tabbutt, Alternate
Norma Jean Germond, Member	Jim Trombold, Member	Dave Watrous, Alternate
Harold Heacock, Member	Jane Twaddle, Member	Charles Weems, Alternate
Rebecca Holland, Member	Gene Van Liew, Member	Steve White, Alternate
Mike Keizer, Member		
Paige Knight, Member	Al Boldt, Alternate	
Pam Larsen, Member	Gabe Bohnee, Alternate	Allen Conklin, Ex-Officio
Susan Leckband, Member	Gerry Dagle, Alternate	Debra McBaugh, Ex-Officio

Jeff Luke, Member	Maxine Hines, Alternate	Armand Minthorn, Ex-Officio
Gwen Luper, Member	Jerri Main, Alternate	
Todd Martin, Member	Dave Molnaa, Alternate	
Ken Niles, Member	Wanda Munn, Alternate	
Bob Parazin, Member	Nancy Murray, Alternate	

AGENCY, CONTRACTOR, AND SUPPORT STAFF

Steve Chalk DOE-RL	Laura Cusack, Ecology	Barbara Wise, Fluor Hanford
Keith Klein, DOE-RL	Nolan Cutis, Ecology	Sharon Braswell, Nuvotec-ORP
Joe Voice DOE-RL	Suzanne Dahl, Ecology	Kelly Brazil, Innovations-ORP
Mike Weis, DOE-RL	Jane Hedges, Ecology	Lynette Bernnett, WCH
	Tim Hill, Ecology	Angela Newell,
Howard Gnann DOE-ORP	Jay Manning, Ecology	
Eric Olds DOE-ORP	Mike Wilson, Ecology	
Roy Schepens DOE-ORP		
	Tammie Holm, EnviroIssues	
	Stacey Howery, EnviroIssues	
Nick Ceto, EPA	Penny Mabie, EnviroIssues	
Dennis Faulk, EPA	Cathy McCague, EnviroIssues	
Dan Opalski, EPA		

MEMBERS OF THE PUBLIC

Annette Cary, Tri-City Herald	Doug Riggs, Hanford Info Network	Lynn Simms, Hanford Watch
Mark Oberle, University of Washington	Shannon Cramm, University of Oregon	L.C. Davenport, Self