

FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

November 7-8, 2002

Kennewick, Washington

Topics in this Meeting Summary

Executive Summary..... 1
Welcome and Introductions..... 3
Announcements..... 3
Meeting Summary 4
Chair’s Meeting Overview 4
Focus on Tanks: Setting the Context/Framework 4
Department of Energy - Office of River Protection (DOE-ORP) Perspective 4
TPA Perspective from the Washington State Department of Ecology 6
Washington State Department of Health Perspective..... 7
Focus on Tanks: Tank Waste Treatment..... 7
Panel Discussion – Tank Waste Issues and Challenges..... 14
HAB Sounding Board – Tank Waste Issues..... 16
Sounding Board – Agency Response..... 22
Long-Term Stewardship..... 23
Draft Advice on Public Meeting Notice..... 23
Proposal on HAB Media Releases Process 25
Update on Draft Hanford Solid Waste Environmental Impact Statement (HSW-EIS) 26
Site-Specific Advisory Board Meeting Report 29
Committee Updates 30
Agency Updates 31
Response to Advice 32
Board Business..... 34
Public Comment..... 35
Attendees..... 36

This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Executive Summary

Board Actions

The Hanford Advisory Board (Board) adopted one piece of advice at the November 2002 meeting.

PUBLIC MEETING NOTICES

The Board adopted advice on recommended measures to ensure high quality public notices. It advised following guidelines outlined in the Tri-Party Agreement (TPA) Community Relations Plan, Public Involvement Committee White Paper, and National Environmental Policy Act (NEPA). Notices should be timely, regular, and substantive, which includes explanations of how actions or decisions might affect public or environmental health.

OTHER BOARD BUSINESS

Press Releases

The Board adopted a process for issuing press releases when Board action is newsworthy. The Board also adopted a process for publishing media alerts about Board agendas and items of interest to the public before meetings.

FOCUS ON TANKS

Roy Schepens, Manager of DOE-ORP addressed the Board on progress with the Waste Treatment Plant and retrieval and closure of tank farms. Suzanne Dahl and Roger Stanley gave the Department of Ecology perspective. Al Conklin talked about the permitting being done by the Department of Health.

Ron Naventi updated the Board on the new Bechtel National contract and the status of the Waste Treatment Plant. Ed Aromi gave an update on CHG's activities on tank retrieval and closure.

The Board had an opportunity to ask questions of this panel of people.

SOUNDING BOARD

At least one representative of each seat on the Board was given an opportunity to list top concerns about the Waste Treatment Plant and the retrieval and closure of tanks.

UPDATE ON DRAFT SOLID WASTE EIS

Mike Collins said Keith Klein will issue a letter with his decision on the draft Solid Waste Environmental Impact Statement. They will either issue supplemental information or a new draft. The State of Washington has sent a letter to Energy Secretary Abraham saying the State does not want TRU waste shipped to Hanford before the EIS is complete.

AGENCY UPDATES

DOE-RL

The DR reactor has been closed. Five or six MCOs of spent fuel are being processed each week. Plutonium stabilization is going well. Contract negotiations are in progress with Fluor.

EPA

Nick Ceto said EPA has told Keith Klein they expect a new draft of the EIS. They will help rescope it after that decision is made.

An Inspector General did a review of Ecology's oversight of DOE in the K-100 Area. The report said Ecology did not push DOE enough to meet milestones.

Ecology

Jane Hedges said the shock sensitive chemical violation has been settled, and the monetary penalty will be used to provide training to avoid another problem.

HANFORD ADVISORY BOARD
Draft Meeting Summary
November 7-8, 2002
Kennewick, Washington

Todd Martin, Chair, called the meeting of the Hanford Advisory Board (Board, or HAB) to order. The meeting was open to the public and offered three public comment periods: two on Thursday and one on Friday.

Board members in attendance are listed on the last page of this summary, as are members of the public. All Board seats were represented.

Welcome and Introductions

Tom Stoops, Oregon Office of Energy (State of Oregon), is a new alternate from the Oregon Office of Energy. He is a hydrologist. Dennis Rhodes, City of West Richland (Local Government Interests), is an urban regional planner. He is the community development director for the City of West Richland. Allyn Boldt, Government Accountability Project (Hanford Work Force), is a retired Hanford worker. He has been working on tank waste issues for the last ten to twelve years and has been a regular attendee at Board meetings. Todd Martin has been reclassified from a public at-large member to a representative of Citizens for a Clean Eastern Washington (Regional Citizens, Environmental & Public Interest)

Announcements

The following items were available for members on the back table:

- Summaries of the Hanford Environmental Report and the Groundwater Monitoring Report by the Pacific Northwest National Laboratory (PNNL) and a CD containing these and some other reports. (Contact Yvonne Sherman, Department of Energy – Richland Operations Office (DOE-RL), for additional copies or full copies of the reports.)
- The draft Long-Term Stewardship Plan and agenda for the November 13th Long-Term Stewardship workshop.
- Copy of a letter to the editor of the *Tri-Cities Herald* written by Paige Knight, Hanford Watch of Oregon (Regional Citizens & Environmental Interests).
- The groundwater brochure.
- The handouts from the Wednesday evening informational session on supplemental technologies to vitrification.
- The M-45 change package.

Todd announced that Charles Kilbury, City of Pasco (Local Government Interests), is considering leaving the Board. He may not come to the December meeting. Todd thanked Charles for his many years of service to the Board and assured Charles of the esteem the Board members hold for him.

Susan Leckband, Non-Union, Non-Management (Hanford Work Force), announced the Long-Term Stewardship workshop on Wednesday, November 13th at the Federal Building from 9:00 to 3:00. Everyone is invited to attend.

Doug Huston, Oregon Office of Energy (State of Oregon), announced that the State of Oregon will file a Friend of the Court brief in the next week or two in the National Resources Defense

Council (NRDC), Snake River Alliance and Tribal lawsuit on DOE's plans for reclassifying tank wastes.

Penny Mabie, EnviroIssues (contractor), announced that no on-site copy machine was available at this meeting as a Board cost-saving measure. Members may give comments on how this works to Todd or the facilitation team.

Roger Stanley, WA State Department of Ecology (Ecology), has retired from the Department of Ecology but will remain under contract as a consultant for the next two years.

Meeting Summary

The meeting summary from the September meeting was approved with minor changes.

Chair's Meeting Overview

Todd explained that the format of this meeting was experimental. It consisted of a tutorial on tank waste with plenty of opportunity for Board members to engage in discussion and present their concerns about tank waste issues.

One goal coming out of last year's leadership retreat was to improve the relationship between the Board and the agency heads. Todd is doing a periodic one-page briefing for Roy Schepens, Department of Energy, Office of River Protection (DOE-ORP), Keith Klein, Department of Energy-Richland Operations Office (DOE-RL), Mike Gearheard, Environmental Protection Agency (EPA), and Tom Fitzsimmons, Washington State Department of Ecology (Ecology), on the Board's focus and activities. In his briefing Todd told the agency heads that many Board members have a good historical background on the baseline for the current waste treatment plant and the approach to retrieving and treating waste. Some of the proposed new initiatives seem to change some fundamental assumptions. The changes are rather dramatic, and the Board will have questions for the agencies.

Focus on Tanks: Setting the Context/Framework

Department of Energy - Office of River Protection (DOE-ORP) Perspective

Roy Schepens, DOE-ORP Manager, began by stressing the importance of being open to change. While DOE continues to evaluate processes for relevance and efficiency, the underlying commitments and values will remain the same. Change is inevitable in a project as complex as Hanford's tanks, but according to Roy, DOE's commitment to finishing the cleanup job in compliance with the Tri-Party Agreement (TPA) will not change.

Roy highlighted a number of important points in his overview of what is going on at DOE-ORP.

1. DOE-ORP is keenly aware of Ecology's regulatory authority over tank waste cleanup. DOE-ORP is pleased to be working with Ecology to chart the process for interim closure of tank C-106 under the M-45 milestones. Lessons learned from the interim closure process on tank C-106 will be applied to subsequent closure processes.
2. DOE-ORP recognizes that decisions must be made within the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) determinations and with full and meaningful public and stakeholder support. A NEPA decision will be required in 2004 to

support the accelerated closure of single-shell tanks (SSTs). As a result, DOE-ORP plans to issue a notice of intent to elicit public comment on the scope of the tank closure Environmental Impact Statement (EIS) by December 16th. DOE intends to complete this EIS in 14 months. Mary Beth Berant is the EIS project manager for DOE. To have a successful process, information will be shared with the Board, stakeholders, the public, area Tribes, and others on a real-time basis.

3. These initiatives reflect Roy's commitment to drive cleanup, not be driven by it. He intends to work within the TPA but will challenge assumptions and seek innovation, without getting too far afield of the Board and the regulators or compromising worker safety or the quality of the environmental cleanup.

Roy has received approval to reorganize DOE-ORP to better align the office to manage the two major business lines: tank farms and the WTP. He believes this structure can serve as a catalyst for improved accountability, stronger project controls, and better federal ownership of the activities needed to finish the tank cleanup mission. A chart of this reorganization was available on the back table.

Roy has decided not to seek additional staffing; his current staff is doing a good job and is adequate to carry out all responsibilities. Roy believes he can work within the federal staffing levels identified by the Office of Environmental Management, and can reach this number through attrition as the workload begins to decrease.

The status of the WTP is as follows: 20,000 cubic yards of concrete have been poured and 4,000 tons of rebar have been laid in the pretreatment facility. DOE Headquarters (HQ) has approved continued construction and steel will begin to go up above ground level soon. The Bechtel National, Inc. (BNI) craft laborers finished their work on the rebar and concrete 20% under budget, a savings of \$5.7 million.

A major challenge to the WTP is the \$800 million cost increase recently estimated by BNI. Roy has recommended adding additional technical contingency to achieve an 80% confidence level of bringing the project in under budget, increasing the overall projected costs to \$5.6 billion. Roy and his staff are looking at ways to reduce this cost and bring the project in on time and under budget. DOE-ORP is implementing institutional controls to encourage people involved with the WTP design and construction to bring good ideas, remove over-conservatism, and improve efficiencies in the plant. DOE-ORP and BNI are negotiating changes in the contract to better define contract requirements and put in better controls. They are holding meaningful talks and hope to conclude them in the next three or four weeks.

DOE-ORP has announced four performance incentives for CH2M Hill Hanford Group (CHG). These incentives do not change the goals and priorities for CHG's work in the tank farms, but add focus. The roots of these aggressive incentives are in the Cleanup, Constraints, and Challenges Team (C3T) process and the initiatives in the Performance Management Plan (PMP).

A major milestone for moving waste from single-shell to double-shell tanks was beaten by a few days even though DOE-ORP did not expect to meet this goal when Roy arrived last summer. To date, over 2.5 million gallons of waste have been pumped from SSTs to double-shell tanks (DSTs). Since the September Board meeting, over 50,000 additional gallons have been pumped. When the installation of the last pump is complete in tank C-103, another milestone will be met about five months ahead of schedule.

Salt cake dissolution testing will begin in tank U-107 next week. Water will be sprayed into the tank to dissolve the salt cake and the resulting liquid will be pumped out. DOE-ORP and Ecology have agreed to remove up to 100,000 gallons of waste from this tank as a demonstration project.

Two miles of pipe have already been installed and the last 1.5 miles is being installed to connect the tank farms with the waste treatment plant.

According to Roy, the number one priority at DOE-ORP in 2003 will be worker and environmental safety. Roy's personal goal is to beat as many TPA milestones as possible and implement initiatives for accelerated cleanup. He intends to earn the trust of the Board by being open and honest about his goals and vision and producing the promised results.

TPA Perspective from the Washington State Department of Ecology

Roger Stanley, Washington State Department of Ecology (Ecology), supplied two documents for Board members: an October 29th letter from the Governor of Washington and the State Attorney General regarding shipment of off-site waste to Hanford and a November 1st response from Roy Schepens to Ecology regarding Mike Wilson's letter of October 17th.

Ecology has taken the position over the last five years that DOE needed to get on with cleanup. Retrieval had lagged, and Ecology entered into a lengthy TPA dispute process to get it back on track.

In September of 1999, the big issue was the interim stabilization consent decree that arose when DOE ran the project budget for interim stabilization down to a dangerously low \$10 million.

In March 2000 and July 2001, there were two tank waste final determinations, each preceded by disputes. The State pressed to get the WTP construction off the ground without further delay. The "accountability provision" in the 2000 final determination redefined "compliance" so that Ecology does not have to wait until an out-year milestone is missed to take action. It also prohibits DOE from giving contractors directives contrary to required TPA work. In late 2001, the State asked for a recovery plan after the failure of the WTP privatization plan. In each of these cases, Ecology took action because they did not see action by DOE.

Today, Ecology is supportive of acceleration of cleanup if the quality of the cleanup is maintained. Some concerns today include possibly decreasing the treatment capability of the LAW vitrification (vit) plant. Ecology is watching potential supplemental technologies and the possibility of dropping treatment for technetium at the WTP. At first glance, these moves seem inconsistent with "right-sizing" the treatment complex and the C3T discussion of maximizing the capability of the treatment complex. Ecology only agreed to look at supplemental technologies as a basis for getting as much treatment capability as possible from the treatment facilities.

Ecology is also watching the tank closure issue very carefully. They are unwilling to rush into a "quick and dirty" tank closure plan. The regulatory closure plan process is a very complex project because of the complexities of the tank wastes, but it does need to be started at some point.

Over the coming year or so, there will be several major efforts moving in parallel with one another:

- The NEPA and SEPA processes associated with retrieval and closure. Roger feels DOE-ORP's goal of finishing the EIS by the end of 2003 is very optimistic.
- Cleanup of the tank farms is going to take a number of years. Ecology needs to keep a close eye on the risk at the outset so that we can have an environmentally sound and clearly defensible final product.
- The States of Washington and Oregon need to manage their way through the litigation associated with DOE Order 435.1 which deals with how much waste might be left in tanks and how it might be classified.

As these things play out over the coming year, the climate of acceleration will increase the potential for increased risk. The waste in the tanks is only one factor. There is also waste in the soil and in ancillary equipment. We need to know the risks associated with that contamination and how to encompass it in the whole cleanup process.

We are coming into a period of acceleration, of closure plan development, EISs, DOE orders. Roger urged the Tri-Parties to share documents with all interested parties as they are developed so that everyone is informed on a real-time basis.

Washington State Department of Health Perspective

Al Conklin, Washington State Department of Health (DOH), said the DOH is not involved in the programmatic responsibilities and decisions of the Tri-Parties. As the state's radiation control authority and regulatory agency over radioactive air emissions, DOH fully supports any of the projects that will help to get on with and accelerate cleanup.

The challenge on the WTP is that it is being designed as construction proceeds. This is only possible because DOE-ORP and BNI developed a policy to have a very open partnership in communicating challenges, needs, designs, and questions so that DOH can see draft materials rather than waiting for finalized documents. DOH has had four staff members working on this plan full time for the last two years.

The WTP is being permitted in phases. Phase One is proceeding while Phase Two is being permitted. The next challenge is the possibility of using supplemental technologies and changing the number of melters (which would change the design of the plant). Changing the melter configuration alters the throughput capacity. The feed rate is used to determine potential radioactive air emissions and so affects decisions on physical and administrative controls.

DOH has been concerned about continuing construction while these changes are being discussed. DOH has been authorized to allow construction to continue as they permit Phase Two. DOE may proceed with construction as long as they are willing to take the risks of permitting problems arising from design changes.

Adequate staffing to meet the needs and schedules of DOE acceleration plans is a challenge in today's budget conditions, but Al promised that his department would do whatever is necessary to support the demands. The open, honest cooperation between DOH, DOE, and BNI has been, and will continue to be, the key to success.

Focus on Tanks: Tank Waste Treatment

Cost Estimates

Ron Naventi, BNI, explained the WTP cost estimates. The target cost is the number in the contract that determines how well they are doing relative to the cost fees and incentives applied; that number has not changed from the original contract, \$3.965 billion. When BNI submitted the April 2001 baseline (\$4.375 billion), they identified "pending items" or potential differences between their original assumptions and what they found subsequently.

The current cost of pending items is \$670 million. BNI is in discussions with DOE on requests for equitable adjustments. Four pending items -- the training simulator, the laboratory, commissioning, and the Hanford connectors -- make up about 75% of the additional costs.

Everyone agrees that the training simulator is a good idea; a facility and equipment is needed for operator training. The facility will be built and located at the Hazardous Materials Management and Emergency Response Training and Education Center (HAMMER). The analytical laboratory was added because, based on the experience of West Valley and Savannah River, a separate facility is needed for sampling. Some of the commissioning costs are due to the WTP being bigger and more robust than planned. Finally, the number of and cost of manufacturing the Hanford connectors were missed in the beginning.

DOE Order 413.3 adds additional risk analysis for technical, programmatic and operational risks. Those risks and their likelihood have been identified, although some risks will not be resolved until start up and commissioning. The research and technology program tries to drive the technical risk as close to zero as possible. When the project started, the technical risks were in the \$400-\$500 million range. They are now down to the \$100 million range and with additional data, they should go down more.

The efficiency of the ion exchange columns for separation of the waste stream is an operational risk. The ability of the full-scale melters to deliver full production capability and reliability is a technical and operational risk. Potential impacts from the regulatory process and interfaces with the rest of the DOE-RL site are programmatic risks outside the boundary of the basic design.

To get the total project cost, add the project cost, the pending items, and the contingency. Independent review teams place that number at \$5.4-\$5.6 billion. Over the years, DOE has developed this process to avoid having to ask Congress for additional funding.

BNI has an aggressive program to drive down costs without compromising safety and quality. A reward program pays workers if their ideas save money. The goal of the program is \$310 million in savings; they have saved \$141 million so far. The other part of the program looks at eliminating wasted work: unnecessary steps, documentation, and information being generated. The savings goal is \$100 million.

Melter Configuration

An analysis has been done to determine the best configuration of high-level waste (HLW) melters and LAW melters. The current plan calls for one HLW melter and three LAW melters starting in 2010, moving in 2018 to two HLW melters and two three-unit LAW plants.

Ron described a number of melter scenarios that have been examined. According to BNI, from an economic standpoint, the best configuration is two HLW and two LAW melters. All scenarios show a need for supplemental technologies to get to a completion date of 2028.

Under the acceleration plan, DOE will assess the potential of some of the supplemental technologies in about three years. They want to see what benefit there might be to having two HLW melters from the beginning and focus on getting the most risky waste out of the tanks. This would not preclude making a decision in 2005 to build a supplemental LAW processing plant or add additional melters on the LAW side.

Ecology Perspective

Suzanne Dahl, Ecology, gave a history of past attempts to get tank waste treatment capability at Hanford. Over the course of these attempts, there has been a lack of funding commitment, misjudgments of the sizes of facilities, contract experimentation, and several re-analyses of the agreed-to approaches.

The good news is that concrete is being poured and DOH and Ecology permits are being issued. There is a final permit in place for the current design. As the design packages are done, they are being reviewed, sent out for public comment, and the permits are being modified, though that process is probably slower than everyone would like. Also, there are more temporary authorizations than anticipated, but so far it has not been necessary to stop work on the WTP to wait for approvals.

Since the beginning of the C3T process and the letter from DOE-HQ that talked about reducing the amount of vitrified waste by 75%, however, there has been a slow erosion in the plan to vitrify all tank waste. It began with the idea of looking at supplemental technology. Ecology initially agreed to consider alternative ways to treat the remaining waste and be done by 2028. Now there is discussion of reducing the number of melters.

The Hanford PMP this summer had two HLW melters and three LAW melters with the additional pretreatment facility on line by 2007. That is the facility that was promised and that we have been working toward for some time. In October, DOE proposed using the third LAW melter to pay for the second HLW melter, because the acceleration money had not come through. Since February, when 30% of waste was being considered for other forms of treatment, the number has grown and is now 70% being put into something other than glass.

There appear to be big changes in focus; at least insofar as LAW treatment is concerned. In the past, such changes of focus have resulted in delays and derailment. As a result of that history, Ecology will stay focused on the WTP and the milestone to treat and vitrify all tank waste by 2028. Ecology will not be distracted. A willingness to discuss supplemental technologies does not indicate a change in policy: until a better result can be proven, Ecology will hold to the current TPA agreement.

Board Questions

Greg deBruler, Columbia Riverkeeper (Regional Citizen, Environmental & Public Interest Organizations), asked Ron Naventi what his confidence level is in the projections for completion. Ron said his confidence is high (90%) for HLW based on experience at Savannah River and West Valley. That is why he wants to put in two HLW melters in right away. On the LAW side, confidence is lower (60-70%); that is why BNI wants to slow down on the LAW side and see if there are other technologies that can be effective.

Greg expressed a stronger interest in cleanup quality than time.

Betty Tabbutt, WA League of Women Voters, (Regional Citizen, Environmental & Public Interest Organizations), asked Suzanne Dahl about basing the confidence levels on experience with vitrifying waste in other places; Betty was under the impression that Hanford waste is different than wastes in other locations. Suzanne said testing over the past few years has increased confidence in the productivity of making glass.

Jim Trombold, Physicians for Social Responsibility (Regional Citizen, Environmental & Public Interest Organizations), asked if the plans cannot be permitted or if permitting requirements add significantly to costs, does Ecology or DOH have the clout to stop the plan? Al Conklin said, by law, DOH has authority to stop construction if they see problems. As long as DOE is willing to accept the risk of adding more capacity, they can continue to build while DOH makes their determination.

Keith Smith, Public-at-Large, expressed his concern about engineering problems that have caused delays and layoffs. He asked if this adds costs. Ron Naventi said this could reduce savings they had hoped to make, but the lull was not unexpected.

Pam Brown, City of Richland (Local Government Interests), expressed a common concern about the continuing budget resolution in Congress and the limitation of staying at 2002 funding levels. She asked if Ron is able to maintain steady procurement over the next several months. BNI has been working with DOE to avoid limitations that would affect the ability to make commitments on the current plan. So far there is no impact.

Bob Parks, City of Kennewick (Local Government Interests), raised worker concerns about transitioning to the 2007 start up. Ron said they intend to look at operator training toward the end of 2004 and are working on job descriptions and procedures now. Ron said BNI is building the plant, but will not operate it, so it is really too early to address this issue. Bob would like to be kept informed.

Tim Takaro, University of Washington (University), was interested in the delay to consider supplemental technologies and asked if the third melter would be part of the plan until a decision is made. Ron said the original plan called for an empty cell that could accept a third melter. That capability will remain, or it could be used for another technology.

Roger Stanley has seen a request for approval from BNI to Roy Schepens to move forward with the two-plus-two option. One of the appendices included a very detailed list of the work that would be stopped. Roger believes the request stated the design will not have a provision for a melter in the third bay. Ron said the letter specifically says the design will not preclude a third melter.

Ken Bracken, Benton County (Local Government Interests), asked if the priorities outlined for 2003 depend on increased funding for acceleration. Roy Schepens said DOE's 2003 budget calls for increased funding. DOE is working with their contractors on accelerating cleanup and is expecting to receive the promised increased funding.

Todd Martin asked, under the two-plus-two plan, how much waste would require supplemental technology to treat all waste by 2028. Ron replied that it is uncertain right now, as there may be multiple supplemental technologies utilized.

Roy Schepens pointed out that, since DOE has a lot of experience vitrifying HLW, they can focus on doing the right thing with the LAW. According to Roy, the LAW is basically water with very

low levels of radionuclides, some chemicals and organics in it, so if you put that into a melter, you are just vitrifying water with some low-level components in it. DOE recognizes the TPA requires all waste to be vitrified by 2028, but they are glad Ecology is allowing them to look at alternatives. DOE will be working with CHG to look at those technologies and will report on them to the Board.

Suzanne Dahl emphasized Ecology does not consider the LAW feed to be wastewater. They see it primarily as mixed waste with a certain amount of radionuclides in it. Suzanne cautioned against taking backward steps by calling LAW wastewater.

Focus on Tanks: Retrieval and Closure

Ed Aromi joined CHG as the deputy general manager last August. In March of this year, he became president of the company.

Fiscal year 2002 was a good year for CH2M Hill in the tank farms. They celebrated 1 million safe employee hours followed by 2 million safe employee hours.

The cold test facility was brought on line in June, on time and under budget. It allows CHG to move forward in an uncontaminated environment to find ways to work in the tanks: to manipulate waste, address different waste forms, and allow technologies to come forward in an inexpensive and safe way.

CHG has done a lot of work upgrading the DST farms. These farms will still be in use for some time, so CHG continues to make sure they are compliant with the Resource Conservation and Recovery Act (RCRA), and that the pumps are pumping and the piping is in good shape. CHG is proud of finishing interim stabilization a few days early because of the tremendous cooperation it took to do something no one thought could be done.

Under new contract incentives reflecting this administration's goal to accelerate cleanup and closure of tanks, CHG has agreed to attempt to close a tank and determine what the next steps are after closure. This change focuses CHG on the three parts of their mission: first, they must run the tank farms safely and efficiently under the terms of the contract, including all relevant DOE orders and the TPA. Next, they must support the WTP. The DST farms have to be upgraded so liquids can be pumped into the pipelines, among other things. Third, they have to complete the first step to closure: interim stabilization. Before CHG earns any fee, they have to get the last liquid out and close the SST farm.

CHG has reached an agreement with Ecology to use tank C-106 to do a salt cake dissolution demonstration. Though C-106 has had attention at various times, it has never been completely emptied. The first agreement is to take out 100,000 gallons of this liquid by spraying water into the tank to dissolve the salt cake. Then, CHG will work with Ecology to define what interim closure of this tank means. They are meeting daily or weekly trying to figure out how to do each step of this process within the TPA.

CHG has discovered ten tanks, seven SSTs and three DSTs, that appear to contain transuranic (TRU) waste. Ed thinks they can probably retrieve the waste from the seven SSTs, package it, and send it to the Waste Isolation Pilot Plant (WIPP) long before the vit plant is ready to receive it or Yucca Mountain is ready to take the glass made from it. The volumes of waste in the ten tanks would require running the vit plant for two years at an operating cost of \$800 million.

CHG continues to participate in system planning with all other parties on the site. One of CHG's directions is to get ready to feed the vit plant on the assumption the plant will be completed and operated. They are working with BNI to make sure they are doing things right and on time but keeping the flexibility to make changes.

Ecology Perspective

Suzanne Dahl explained that through the TPA negotiations and the C3T process, Ecology decided it was time to start to look at how to deal with tank closure. They decided they needed to develop the process on a couple of sets of tanks to make sure the mechanical, retrieval, closure and paper systems work, and that the process of approvals and getting the public involved worked. When Ecology and DOE-ORP negotiated the latest set of milestones for three retrievals, they put a closure component on the end of it. They also chose tank C-106 and added three additional tanks, for a total of seven. They picked high-risk tanks because the more high-risk waste you get out of SSTs and into DSTs, the better and safer for the environment. This M-45 milestone change package is still out for public comment.

In the negotiation process and the weekly meetings on closure, Ecology reaffirmed the use of closure plans, which are actually modifications of the site-wide dangerous waste permit. Over the last seven or eight months, Ecology and DOE-ORP have looked at what would go into these closure plans. The process they are looking at is as follows: DOE and its contractors will write a draft closure plan; then Ecology will resolve their comments on it; then Ecology will write the final closure plan and add permit conditions and compliance schedules. The closure plans will not become final in the site-wide permit until after public comments are received and incorporated.

There is an obvious need for an EIS. DOE must be NEPA compliant and the State must apply SEPA requirements, so a tiered approach to closure plans has been proposed. First, there will be an overarching umbrella framework document for all tank closures. The next tier down is on a waste management area basis, including waste in ancillary equipment, the soil, the groundwater, and the tank farm as a whole.

The final tier is individual components. After a tank is empty enough to meet TPA guidelines, a risk assessment aids the decision on what to do with the tank itself. The acceptable risk for any given tank depends on the cumulative waste in that entire tank farm and throughout the entire 200 Area.

On Suzanne's "roadmap" to SST closure, the starting point is the closure requirements in the TPA to retrieve 99% or as much waste as "technically possible." This language is somewhat nebulous. In the larger tanks, you have to get down to at least 360 cubic feet, about 1 percent of the volume, or about an inch on the bottom of the tank. For the smaller tanks, the standard is 30 cubic feet.

Next, the risk has to be calculated prior to retrieving to determine if the retrieval action might make something worse. That commitment was made to the Board about ten years ago. It might be necessary to get more than that final 1% out.

DOE also has its own requirements, such as DOE Order 435.1. Their requirements have to be as close to Ecology's as possible. Then there is the decision of what to do with the tanks themselves: leave them in place, do a clean closure, do a landfill closure or modified closure. If they are left in place, what amount of residual risk is acceptable? If not enough is known about a particular tank farm and its risks, it may be put aside in some interim state and dealt with later for final

closure. There are risk assessments besides NEPA and SEPA documentation and all of this has to be done in concert with the risk assessments in the individual farm and the 200 Area.

Under acceleration, Ecology agreed to go forward with closure demonstrations on seven tanks. DOE-ORP and CHG have now announced they are going to do more tanks in less time. There are lots of unanswered questions, some of which are starting to appear in responses to letters Ecology has sent to DOE-ORP: how it will be done, how it will be paid for, what the trade-offs are in paying for these retrievals, and where all this waste go without building more DSTs. But more answers are needed.

Suzanne believes DOE will reach seven tank closures by 2011 -- the latest TPA negotiation -- and will probably exceed that. Will DOE be able to rush to do something that Ecology or the stakeholders disagree with, such as pouring concrete in a tank that has not been retrieved or has not been retrieved well enough? The answer is no, because the closure plan process controls it. If we are serious about getting all the waste out of SSTs by 2018 and all of the waste treated by 2028, we are going to require some sort of acceleration. It may not be 40 tanks by 2006, but it will have to be more than seven tanks by 2011.

Clarifying Questions

Greg deBruler asked if there is a sampling plan for the characterization of the waste in the tanks selected for early closure. Greg said he could not understand how an EIS could be put together in 14 months given the lack of characterization and lack of information on the vadose zone. At some point DOE will start doing a risk assessment based on the information they have to calculate what can be left in the tank. Without all the necessary information, the risk assessment won't be valid.

Ed Aromi replied CHG does have sampling plans and Greg is welcome to see them; they cover everything in the tank farm and the seven tanks chosen for demonstration. There are seven tanks coming up, so CHG will develop a data quality objectives (DQO) process for each one of those. The sampling that will take place in C-106 is not going to happen with the tank as it is now; it will be sampled when they are done with the retrieval and have a good idea of what is left in the tank. They want to be sure of what is going to be left in the tank before they close it.

Norm Dyer, Oregon Hanford Waste Board (State of Oregon), questioned the validity of using volume as a measurement in the TPA. Volume and risk are not directly related. Suzanne replies they had to set a goal in the TPA in 1993, so it does talk about volume. But in the closure plan process when you look at the risk, you also look at the risk threshold. RCRA says to decontaminate or remove the structure to the maximum extent possible. That is the first threshold. The TPA recognized that might be a very difficult goal to meet, so it set the threshold goal of at least 1%.

Wade Riggsbee, Yakama Nation (Tribal Government), said the need for more DST space was casually brushed over. He asked when we are going to take a hard look at that. Ed Aromi said they are taking a hard look at the short term, meaning the next four to ten years, based on the absolute assumption that there will be a vit plant to begin processing waste. Based on CHG's knowledge of the inventory and how they will have to manage it, they do not believe they are being driven to build any more DSTs. This also assumes some alternate technology like TRU retrieval.

Roger Stanley said the state is not constrained by DOE's 14-month time frame. The State is starting to ask questions to make sure an adequate environmental review is done. There is pressure to do it as fast as possible, but that does not take away from the requirement that it be a quality job. It has to be done before basic closure decisions are made.

Roy Schepens proposed a separate meeting for DOE's risk assessment person to make a presentation of the data DOE and CHG have, so Board members can draw their own conclusions. Roy promised the EIS will be done right; DOE-ORP will share the information they have and solicit input.

Panel Discussion – Tank Waste Issues and Challenges

Leon Swenson, Public-at-Large, introduced the panel discussion by suggesting four ground rules:

- Do not speechify on the questions or the answers.
- Ask questions you do not already know the answer to.
- Remember we will not get all the answers today.
- Issues that come up today will be used as these discussions continue in future months.

Leon asked the first question and directed it at the DOE-ORP representatives: What are the two highest uncertainties or risks or technical issues that you see that could potentially derail the cleanup effort and cause the TPA milestones to be missed?

Greg Jones, DOE-ORP, named two major categories of risk. This first is risks outside of DOE's control, the major one being funding limitations. The other area is technical, programmatic, and operational uncertainties and risks.

John Swailes, DOE-ORP, said the plans for getting ready to deliver feed to the WTP are planned out as well as any project he has ever seen. The largest single risk will be cash flow funding to sustain the implementation of the plans. The biggest technical risks are in the area of long-term excellence of maintenance, operations, and construction. Workers, the public, the government, and the regulators must have a perception that the operations are safe. The balance between safety and getting a lot of work done is fragile.

Bill Taylor, DOE-ORP, said DOE-ORP is being very vigilant on the design and construction of the WTP. The ability to get changes made and put into the air and dangerous waste permits, going forward with the safety evaluation report for the safety authorization basis, the initial dangerous waste permit application, and trying to keep the design in front of the construction have presented a big risk.

Suzanne Dahl said the amount of money needed to do the right job is an overall risk factor. There is uncertainty on the path forward on LAW treatment, whether it is making the decision to stick with previous decisions or utilizing some other combination of treatments.

Tim Takaro asked when the clock starts on waiting two or three years to make a decision on supplemental technologies. John Swailes said in the original plan, additional treatment was to come on line in 2018. DOE-ORP wants to get LAW supplemental processing on line by 2010, which means making design decisions in 2004-2005.

Suzanne Dahl said Ron Naventi's chart on the configuration of melters showed her that the HLW treatment is really restricted by the number of LAW melters. The right-size answer in her view is a two-plus-three configuration. If it is legitimate to pay for a second high-level melter now, pay for it, but not at the expense of the LAW melter.

Dave Johnson, Heart of America Northwest (Regional Citizen, Environmental & Public Interest Organizations), asked how a closure plan could be prepared and approved by Ecology before we know how much waste will be left; before an EIS is done listing alternatives and impacts; and before compliance with groundwater characterization and monitoring. John Swailes said the closure plan would include all those things; they are all well along in progress now. The NEPA process will describe many of those things and provide several elements for the plan. The closure plan is the sum total of all the technical activities written out, scheduled, and executed by a group of people in a way that is regulatory- and TPA-compliant, consent-decree compliant, and which has been mutually agreed upon by DOE and Ecology to protect the health and safety of the public and workers.

Suzanne said the things Dave talked about are the key components to a closure plan for an individual tank. They will learn from C-106 what should be in a plan.

Greg deBruler said there have been several terms used -- interim closure, component closure -- that have yet to be defined. Betty Tabbutt also acknowledged the confusion with the word closure and recommended using some other term for where we are now such as "retrieval target." The word closure sounds like you are going to walk away and never come back. Suzanne said those terms will be defined in the overarching document she spoke about earlier. A RCRA closure will be on the whole package -- tank farms, ancillary equipment, groundwater, and soil -- at some future date.

Jim Curdy, Grant and Franklin Counties (Local Government), recommended doing one tank at a time and taking each one to final closure. Moving waste from one container to another along a path spreads contamination.

Suzanne pointed out that tank waste is just one part of closure. They will look at all components and will not close a tank farm until everything is addressed; for example, if the contamination in the soil puts the tank over the risk threshold, there will have to be some other action taken such as removing or remediating the soil in addition to emptying the tank.

Paige Knight asked if there are cost comparisons available between vitrification and the four supplemental technologies being considered. It is not currently available, but will be as the technologies are studied. Paige asked that the Board get cost comparison information when it is available.

Paige asked Suzanne to articulate the biggest differences between where Ecology and DOE are on accelerated cleanup. Suzanne said that the difference is that DOE, by making the decision to put off the third LAW melter in order to bring in the second HLW melter, is making the decision that at least a good portion of the LAW will be in something other than glass. Ecology thinks until something is proven better, it will all be in glass.

Ken Bracken, Benton County (Local Government Interests), said it is good news that we are discussing the end of the program rather than the beginning. Ken would like to have the background or the assumptions made that allows BNI to come to the dates and times on Ron Naventi's chart. For Ken, the chart asks more questions than it answers.

Leon Swenson brought up Ed Aromi's presentation about the accelerated closure strategy. Ed talked about aggressively developing a common risk methodology. The Board has asked repeatedly for the risk methodology and the risk numbers.

Leon asked if the programmatic risk gets formalized. That is the focus of a lot of the Board's questions having seen these processes stretch out for decades now. How will those things be evaluated? John Swailes said the word "risk" is used in many contexts. Some meanings are technical. Risk in another context being dealt with fairly formally by DOE is risk to the successful completion of a project activity.

Norma Jean Germond, Public-at-Large, expressed concern about what will be done for the vadose zone and the soil under the tanks so that we can be assured that the risk is insignificant or nonexistent. Suzanne said the purpose of having a tiered system is to look at the soil and groundwater and make remediation decisions at that point

Greg asserted that there has not been enough characterization done in the vadose zone to provide the needed information. Suzanne replied there has been ongoing tank farm vadose zone characterization for the past five years. If that data is not available on tanks when they are to be closed, it will be a requirement as part of the closure plan.

John Swailes said they feel they have done an excellent job of gathering data over the last several years. It is a tremendous challenge. They will have all the appropriate public input. It will be done when it is done right and if more data is needed, they will get it.

HAB Sounding Board – Tank Waste Issues

Each Board seat was given three minutes to present two or three top concerns about tanks and the vit plant. After all seats present had spoken, alternates were given an opportunity to speak. The purpose of this exercise was to give the Tank Waste Committee input for the focus of their work over the coming year.

Ken Bracken, Benton County (Local Government Interests), said his concern is trying to use political answers for technical questions. We should be focusing on the closure EIS and right-sizing of the treatment plant. He is more concerned about getting an operating plant than the configuration. We need a technical baseline and to keep our eye on the plant construction because that is where the political answers for technical questions will come up again.

Dennis Rhodes, City of West Richland (Local Government Interests), declined to comment since this is his first Board meeting

Charles Kilbury, City of Pasco (Local Government Interests), wants to see improvement in the procedures being tried. He is not convinced the vit plant will provide us with an adequate recovery. He wants to get on with it to get things completed in time.

Bob Parks, City of Kennewick (Local Government Interests), is a CHG employee and a nuclear operator in the tank farms. He is excited to see CHG willing to work with DOE to get things moving. Retrieval coincides with closure. We cannot be so focused on the EIS that it becomes an obstacle. We need to keep options open. He wants to see quality, not quantity, in retrieval; mistakes were made with grout. He would like to see DOE stick with the vitrification plan. It is close to fruition.

Jim Curdy, Grant and Franklin Counties (Grant and Franklin Counties), said we do not have the solutions we need right now. We should take one tank and do a complete job on it. We have some of the best thinkers in the world in Richland. We should not do things that will preclude future actions; people coming up in the future will find the solutions we need.

Pam Brown, City of Richland (Local Government Interests), is very concerned DOE Headquarters has made some decisions and is forcing them to happen through performance based incentives (PBI) and contracts. DOE-HQ is saying they will do adequate scientific analysis, but they are making decisions now assuming that the scientific analysis is going to be adequate. They are putting a contractor in an inappropriate role: CHG is going to have to be in front working with Ecology on tank closure. That is DOE's responsibility. DOE has made a policy decision by moving to a second high-level melter and reducing low-level melters assuming that we are not going to vitrify low-level waste. They have not proven that there is a safe manner of treating that waste other than vitrification, but they have made a decision in a capital budget.

Pam strongly advised ORP to look at how this Board felt about an inadequate EIS from RL. We will not accept an inadequate EIS. ORP must demonstrate to us scientifically in understandable terms that the path forward is justified. There are people around this Board who have the ability to file lawsuits, and she thinks they will. She asked ORP to take the Board very seriously. We want to be sure this material is moved from the tanks, is treated, and is safe to stay in this region forever, because she does not see it going to Yucca Mountain. Prove the alternate technologies work and do not make policy decision through a budget instead of a NEPA process.

Maynard Plahuta, City of Richland (Local Government Interests), supports getting on with it. He liked the comment to focus on retrieval and the vit plant. He favors looking at supplemental technologies, but does not want to count on it. He commended the committee for this meeting format and recommends doing this every six months to a year on this topic so senior DOE and agency people can hear it in person. This would also be valuable to Headquarters. This meeting is some of the best public involvement we have had.

Shelley Cimon, Oregon Hanford Waste Board (State of Oregon), does not believe there is a clear path forward. She is very appreciative of Suzanne Dahl, the Board, and the work the committee is tasked with. She has deep concerns about political versus technical solutions. It is as if we are grasping to find out what the mindset is in Washington, D.C.

Shelley appreciated Roger Stanley's comments yesterday about the SST tank waste: the complexity of it and not going into a fast closure. We need to be diligent in understanding what is happening with doing construction and design in tandem. Construction gets ahead of design, things slow down, and workers have to wait. We need to make sure the contingencies are built in so we are covered in terms of the number of melters we need. Supplemental technologies are great, but they should take second place to the vit plant. Retrieval should be separate from closure. We need to start some kind of dialog about boundaries in terms of cumulative risk for discrete areas. We need a framework for that dialog. She is concerned about the ancillary equipment and piping. She has never liked grout. She is concerned for the workers now and in the future.

Norm Dyer, Oregon Hanford Waste Board (State of Oregon), strongly supports getting on with it. The vit program and supplemental technologies have the potential to get on with it with all deliberate speed. We have to make sure this effort is not derailed by technical and political problems. DOE cannot easily control the political problems. The only way to control them is to

have a good technical program. The statement made by a DOE manager about vitrifying water was a ludicrous statement, raising concerns as to whether DOE management really understands the technical aspects.

Doug Huston, Oregon Office of Energy (State of Oregon), likes the idea of acceleration in principle. He has concerns with the current acceleration plan for cleaning up the tanks. He is unhappy about using the term "closure" to describe a process that clearly does not meet the legal definition of closure. The implications of calling a tank closed in Washington, D.C., are reduced motivation to go back and do anything else after that process is over. He is concerned about the push to close the additional 26 to 40 tanks by 2006. This means large amounts of waste will be left in the tanks because there is nowhere to put it. He is very interested in reclassification of some of the tank wastes as TRU. He does not want this to be a purely administrative exercise; it must involve extensive sampling of the tank wastes to ensure what they are.

Betty Tabbutt, WA League of Women Voters (Regional Citizen, Environmental & Public Interest Organizations), said her major concern is the lack of a fall back position, cutting off options up front. For example, if the supplemental technology does not pan out, can we still go back to our original plan?

Madeleine Brown, League of Women Voters (Regional Citizen, Environmental & Public Interest Organizations), admonished the committee to remember at Hanford, progress does not mean success. We need to act together to overcome the noise being made to distract us from the vit plant.

Gerry Pollet, Heart of America Northwest (Regional Citizen, Environmental & Public Interest Organizations), was concerned about closure versus retrieval and the premature decision to reduce capacity for LAW streams. The public will not accept the present plans for closure. Ecology is being pressed into accepting things they should not accept. Characterization needs to occur before closure. You cannot do a risk assessment until you have completed retrieval, and without a risk assessment you cannot do an EIS. It is a waste of money to look at closure at this point.

Gerry pointed out there is no regulatory or public decision-making process to allow removal of melters. DOE has been told for years that we expect greater capacity. Now, because of the ability to get greater throughput, they are reducing the number of melters rather than keeping the melters planned and getting done sooner.

Dave Johnson, Heart of America Northwest (Regional Citizen, Environmental & Public Interest Organizations), is concerned about right-sizing and supplemental technologies. The current baseline is one high-level melter and three low-activity melters. He is not in favor of reducing the low-activity melters. In terms of meeting the deadline, it makes more sense to add melters. Dave is interested in the idea of changing the glass type to increase the throughput and perhaps meeting the milestone with just that. He proposed that as a way to right-size and use supplemental technologies.

Margery Swint, Benton-Franklin Public Health (Regional Citizen, Environmental & Public Interest Organizations), said we have to be open to alternate technologies for the next 40 years. We cannot settle everything before we start. We keep putting obstacles in the way of getting on with it. She said the agencies are responsible for protecting the public and the environment. We can keep on with the characterization and EIS process for the next 40 years and never actually do

anything. We can blame the government, funding, and so on, but we should not be the obstacle to progress.

Paige Knight, Hanford Watch (Regional Citizen, Environmental & Public Interest Organizations), listed her three concerns. She feels cleanup is going to be derailed. She wants to support acceleration, but fears we are being sold a bill of goods. She was very concerned when she heard from the new management and the contractors that they did not understand why we did not understand that this is so wonderful. She is very concerned that we will have big political changes in Congress and we will have a new plan within another year. We have to stand firm on getting the vit plant. The supplemental technologies are displacing the vit plant; this cannot be allowed.

Al Boldt, Government Accountability Project (Hanford Work Force), supports the decision to go to a second high-level waste melter and early retrieval demonstration on tanks so we can get into how clean is clean and how do we permit it. We are being too ambitious in the number of tanks we start with. He thinks the supplemental technologies are unjustified economically. The third low-level melter cuts off 17 years of processing versus two years for the TRU waste. He requested that DOE look at switching borosilicate glass to a phosphate glass formulation. It could lower the quantity of glass and increase the throughput. .

Clare Gilbert, Government Accountability Project (Hanford Work Force), was concerned by the statement that LAW is basically water with a little bit of radionuclides in it plus some chemicals and organics, so vitrifying it is basically like vitrifying water. If this comes from the manager of ORP, she is very worried about the future of the Columbia River.

Becky Holland, HAMTC (Hanford Work Force), said her major focus is for the workers on the tank farms. She has been a CHG employee at the tank farms for 16 years. She said with the accelerated plans and trying to work faster, many people are getting burned out, increasing the potential for accidents. The workers in her group have over 1,000 hours of overtime this year. She warned about the future risk to workers if tanks are filled and need to be emptied later.

Susan Leckband, Non-Union, Non-Management (Hanford Work Force), agreed that we need to be flexible. She wants the tank committee to continue investigating alternatives and question information, keeping the additional burden on storage in mind. She would like them to closely monitor the negotiations that occur between the TPA agencies when changes occur, especially in regard to decision documents and TPA changes relative to tank cleanup. She would like them to follow tank closure as it relates to the ancillary equipment and contaminated soil mitigation in discrete tank farms, because they are not all the same. We want to protect the river and water sources.

Jeff Luke, Non-Union, Non-Management (Hanford Work Force), is concerned that the political agenda is taking us away from the technical solutions. He asked that the Board take every opportunity to give input. If we do not feel we are given adequate time to give meaningful input, we should say so.

Rich Berglund, Central Washington Building Trades Council (Hanford Work Force), said historically at the Hanford site, we see storage buildings built before we have a facility to produce the logs to be stored in them. We did not know how big the logs would be, but we were able to build the storage unit. We are in a process that could produce good results. People always have and always will anticipate new technologies. We cannot stop building the vit plant and cleaning up waste just because someone will have a good idea in the future.

Harold Heacock, TRIDEC (Local Business Interests), is concerned that our path forward has been lost. There is pressure to speed up cleanup and do it cheaper and better. There are different proposals on the number of melters, alternative technologies, possibly shipping TRU from the tanks with no clear definition of how that would happen. We do not have a clear path. The regulatory agencies have not been brought in to come to agreement. Costs for the vit plant have increased. Before we start down any new path, there needs to be a definition of tank closure and what the risks are. There is no risk analysis to support closure decisions. How clean is clean? We need a clear, well thought out, agreed upon path forward.

Jim Cochran, Washington State University (University), said nothing is black and white. He thinks we do have a path forward, it just is not a straight path. He likes the breadth of our options right now. We are going forward with the plant. This is the first time in the last decade we have had such progress. We need to be watchful and follow the supplemental treatment technologies closely. The handling of potential TRU waste was passed over fairly quickly. That needs to be a priority item because it impacts the question of whether we will or will not need double-shell tanks in the future. We need to be particularly sensitive to that. How the regulatory process regarding closure unfolds is high on his agenda.

John Abbots spoke on behalf of Tim Takaro, University of Washington (University), who could not stay for this session. Tim was concerned about risk and wanted to follow up on a comment from Roger Stanley yesterday that Ecology has not seen risk assessment documents from DOE on the supplemental technologies. Tim observed that several different project areas described at this meeting pose a need for risk assessment. For each there are potential trade-offs with regard to risk categories and time periods -- before, during, and after remediation activities. Tim urges that risk assessments incorporate evaluations of all these categories and that they be shared with the Board and the public.

Tim is also concerned about the potential for risk increase over time. Each technology has its own set of uncertainties, and if the time line slips or if evaluation delays tank waste treatment time lines, health and ecological risks may increase.

Tim observed that history seems to be repeating itself. The question of glass versus grout for LAW has been asked and answered in favor of glass through at least two detailed technical analyses. He urged that those previous analyses not be forgotten as the new analyses go forward. They are the basis of the current TPA scheme. If things have changed, it needs to be clear where they have changed. Pam Brown asked Greg Jones to be sure that people new to ORP have those two studies.

Jim Trombold, Physicians for Social Responsibility (Local and Regional Public Health), pointed out that this problem affects everyone from the Tri-Cities to the world. He agrees with the concern about the people here, but we are all invested in cleanup. Anytime you go faster, unless you are very careful, the potential for danger increases. If you do acceleration properly in order to save money in the long run, you have to put out more money up front. The original TPA calls for vitrification of the tank waste. There has to be very good scientific evidence to do anything else with any tank waste and change the TPA. And they have to explain it to the public. We are not acting out of fear, but enlightened concern to want to treat all the tank waste. We need risk assessment as we accelerate.

Dan Simpson, Public-at-Large, focused on the ability to define an acceptable end state. The cleanup flow chart shows multiple repetitive treatment and movement of waste, but does not

show getting rid of waste, especially radiological materials. Defining the end state allows you to analyze methods of reaching it. Alternatives need to be evaluated for treatment, but we need one concept that will minimize the number of steps of processing. Vitrification is feasible. We need to follow through.

Norma Jean Germond, Public-at-Large, agreed that a primary concern is the end state. She is concerned with what the tank farm will be like for future generations. Her paramount concern is the safety of the people in this area and the environment. We must be vigilant and remain involved with DOE and the agencies. She is looking forward to the risk assessments. The vit plant needs to go forward and the supplemental technologies need to be investigated. Flexibility is key. We need to be alert to the quality of the glass to make sure it holds up indefinitely.

Gordon Rogers, Public-at-Large, takes strong exception to the Ecology bias towards vitrification of all the waste coming out of the tanks. We have several million tons of LAW scattered around the site already. It is foolhardy to use the most expensive treatment option (vitrification) to the exclusion of other alternatives. He supports the completion of the original vit plant. If they can add capability for additional melters, they should do so. A little increase in initial cost is worth it to keep options open. He favors evaluating alternatives for LAW and the potential TRU waste in the tanks to reduce the amount of vitrification required and save time to complete the job. We need to use the available risk assessment technologies to get comparisons of risks from the waste forms we end up with.

Leon Swenson, Public at Large, is encouraged by the construction on the plant, but also recognizes that does not guarantee an operating plant. He is generally supportive of speeding up the cleanup process. His concern is whether this approach is consistent with treating the highest risks first. They have set the number of tanks to be closed, but we were told when the PMP was being developed that we were going to use a risk-based cleanup approach. He does not see anything that supports the understanding that cleaning these 26 or 40 tanks is going to reduce the highest risks right now. He would like to see some concrete comparative risk assessments that would provide the scientific basis for support of this. The supplemental technologies offer significant hope, and a lot of uncertainty. Betting the ranch on the payoff of those technologies carries a very significant programmatic risk and the risk should be assessed in real terms. We have to remain focused on the actual cleanup or stabilization to achieve a state that is fully protective of the workers, the public, and the environment. We have to get on with it.

Todd Martin is a fan of tank closure. That is our mission. But he is not a fan of unrealistic cleanup commitments. That led to problems with spent fuel that we are still recovering from six years later. It puts workers at undue risk. Todd cannot understand how we can close 26 to 40 tanks in four years. That is one tank every five to seven weeks. He would like the Tank Waste Committee to help us better understand not just NEPA and closure plan activities, but logistics of how this would work. Do we actually have the capability to do this? We do not have an operating vit plant yet. The Board should know better than most that rebar and concrete in the ground does not necessarily mean a finished project.

Exploring supplemental technologies is appropriate and necessary because we will need to augment the facility to finish in a reasonable time frame. However, Todd heard yesterday that we are going to clean up faster and cheaper using supplemental technologies by decreasing the capability of the WTP we are building. Supplemental technologies should augment that facility, not take anything away from it. He is concerned about making extremely optimistic assumptions about technologies that are unproven. The amount of waste that has been routed to the supplemental technology arena is large, on the order of 60 to 80 metric tons a day. We should

explore those technologies to the extent it does not distract us from building and operating a WTP at Hanford.

Sounding Board – Agency Response

Greg Jones said he appreciated the constructive comments and healthy dialog in this meeting format. The agencies need to hear this. Roy Schepens has said he is committed to following the TPA process and milestones. That is one reason for acceleration. We do not have all the answers, but we know many answers, and we know we need to build the WTP. He shares Ken Bracken's concern about political answers to technical problems. The best defense to that is progress, getting the plant built, doing retrieval, and working toward closure of tanks. The only way a DOE field office can do that is to work with Ecology, and DOE is committed to that. True progress is actually getting waste out of tanks, actually getting the plant built. If we do that, it will be very difficult to stop us.

Suzanne Dahl said DOE and the agencies really need the dialog at this meeting. When we are at a potential time of change, getting the input from the stakeholders is very important. What she heard is that we need to move forward with the vit plant and keep going in that direction. There is some support for exploring supplemental technologies because the planned vit plant does not get the whole job done. She heard that we need a plan for looking at those technologies, comparing them to the baseline, and how all the options are considered so we all can come to that together and make good decisions on how to move forward in the next several years. She shares Todd's concern that concrete and rebar is not a guarantee.

Nick Ceto said EPA is interested in this project though not directly involved. Ecology is the lead and they are doing a good job of working with DOE. EPA has broad responsibilities as a party to the TPA and for groundwater, which is impacted by what happens in tank closure. They see the TPA as the guiding document on cleanup, and there is a date to get this work done. There was explanation of what dates may or may not be met. It is EPA's expectation that the dates will be met.

Roger Stanley added that, philosophically, Ecology is open to looking at other technologies. It always makes sense to do that. But with the idea coming up now that we are going to start treatability studies to look at supplemental technologies, he wonders where everyone has been the previous ten or twenty years. You need to get on with the plant and get it operating. If, on the path, there are efficiencies or better ways to meet the same environmental goals, they are not averse to that. If they are cheaper or more effective, as resources are freed up, they would like to see DOE come back to the TPA parties and talk about where that money goes because there are other risks at the site beyond tanks.

Dennis Faulk spoke as someone who has observed the Board for many years. He advised the Board not to lose focus on getting vitrification and retrieval, and not to let DOE sell the Board a bill of goods or oversell the program. Credibility is very important.

Beth Bilson said DOE-RL is very supportive of ORP. They view their relationship as partners. They share their best ideas. Beth shares the concern about political answers to technical problems; she cannot control the political wind but she holds DOE responsible to make sure the technical end is sound.

Wrap up

Gerry Pollet wanted everyone to be aware of the Budget and Contract Committee agenda for next week: there are related questions coming out of the tank waste discussion the committee will address.

Gerry wanted a transcript of the sounding board put into the record and responded to for the M-45 change package. Suzanne Dahl liked that idea. She reminded everyone the M-45 change package deals only with retrieval and closure, so the TPA agencies will respond to the portions of the comments that dealt with that or risk assessments. She encouraged people to look at the M-45 change package in case they have additional comments.

Dennis Faulk suggested the Tank Waste Committee come back to the Board in December and report on where they are going.

Long-Term Stewardship

Jim Daily, DOE-RL, invited Board members to participate in the third long-term stewardship (LTS) workshop on November 13th. Participants will work together to squeeze out any last ideas that might have been missed in this LTS plan. He asked people to study the document before they arrive; it has been streamlined since the last version. He assured everyone that every idea brought up in the workshops has been incorporated into the document. The LTS Plan is a living document, currently embryonic, but evolving. As other DOE sites reach long-term stewardship, Hanford will be able to benefit from their experiences. DOE-RL is under no strict requirement to write this document, but decided to begin with a vision for long-term stewardship and work backward. DOE-RL has experimented with some public involvement that they don't traditionally use, such as the first two workshops.

Jim is very pleased that senior management took the time to thoroughly review the document. The LTS group made efforts to elicit comments from a wide variety of sources including the Board, Tribes, prior participants and the public. The plan is on the DOE web site and comments can be submitted via e-mail to an address on the web site. Comments are due by December 9th.

Issue Manager Susan Leckband said that Board members would begin to draft advice on the plan at the end of the workshop, and complete the advice in the following day's River and Plateau Committee meeting to bring to the Board in December.

Amber asked about the public notice for the workshop. Jim clarified that it is really a focus group, but that the public is welcome to come. This workshop is being held at the request of the issue manager, Susan Leckband. It wasn't advertised heavily except through word of mouth. The public will have a good opportunity to comment on the plan during the public comment period.

Amber said it would have been helpful to include the meeting time and place on the fact sheet that was e-mailed. She also suggested that the people outside the Board who participated in the Exposure Scenario Task Force would be interested. Susan explained that the agencies that participated in the Task Force had participated in the previous LTS workshops, so they were notified of the workshop. Todd suggested the Board issue Task Force participants invitations to any Board activities that resembled the Exposure Scenarios Task Force. Amber wanted to be sure that the Board follows appropriate public involvement processes.

Draft Advice on Public Meeting Notice

On behalf of the Public Involvement and Communication Committee, Amber presented the draft advice on effective notice of public meetings. The committee felt this advice was timely because of the large number of public involvement opportunities coming up. Most of the points in the advice are articulated in the Community Relations Plan issued last year. The bulleted points in the advice were taken from the Public Involvement and Communication Committee White Paper adopted by the Board last June. The bullets covered timeliness, regularity, and issues of substance. People should be notified in nonscientific terms telling them how the issue of a meeting might affect their health and the environment.

Harold Heacock questioned the need for the advice. Amber explained that this advice arose from problems with the public involvement process with the Draft Hanford Solid Waste EIS. Though these ideas are in the other documents, they are not being followed consistently. Committee members Norma Jean Germond and Jim Trombold emphasized the importance of explaining the purpose of the meeting.

Norm Dyer felt the Board needs something more specifically addressed to a particular problem, which the advice does not do. Doug Huston did not think the Board should send out advice every time a problem occurs. Dennis Faulk said this has been an ongoing problem: it came up first during the Community Relations Plan and the issue of how NEPA relates hasn't been settled.

Ken thought the White Paper sent to the agencies already covered the issues in the advice. Amber relayed that the agencies interpreted the White Paper as a values statement and asked for more specificity, so the committee was trying to be more specific without being prescriptive. The advice does not single out NEPA because it talks about all processes that require public participation.

Paige reminded the Board of the hard work and success it had in helping the agencies create something specific and understandable to the public. She suggested the advice be more specific about what goes in the notice.

Joy Turner also asked that the advice be more specific. She suggested the advice more clearly call out that NEPA processes should also follow the Community Relations Plan guidelines, even though not required to do so by regulations. She emphasized that Ecology will follow the Community Relations Plan, as it is an agency and stakeholder produced document.

Dennis Faulk said in the original discussion about this advice, the target was non Tri-Party Agreement activities. He suggested the main point of the advice be that the Board would like all public involvement to follow TPA procedures.

Gordon suggested the agencies keep a record of how many people attend particular public meetings and how much the meetings cost. A periodic report on how many people came and what it cost would allow the agencies to do a better job. Jim questioned this because public meetings are part of the DOE mission; DOE may not want to show the costs because the meetings are not cost effective. Margery liked the idea of keeping track to see where the turnout is better. Joy Turner said it would be easy to track turnout, but more challenging to decide what to do with the information after it is gathered. This idea will be sent to the committee for consideration.

Susan noted the difficulty in getting people to public meetings. She suggested that the committee develop a month-at-a-glance notice of relevant activities to serve as direct communication activity from the Board and the committee.

Betty, Norm Dyer, Gordon, and Mary Anne Wuennecke, Ecology, made changes to the advice. Changes were added to reflect the desire to use the TPA process for all meetings. The point on NEPA was given more emphasis. A few more specifics were added.

The advice was adopted and will be sent to the Tri-Parties, U.S. Fish and Wildlife, and the Congressional delegation. This is not newsworthy.

Proposal on HAB Media Releases Process

After a less than smooth effort to issue a press release after the last Board meeting, it was decided to draft an internal document on how to issue press releases. This is something the Board used to do fairly often.

Betty explained that the proposal consists of two things: a mechanism for alerting the press to the agenda for upcoming meetings and issues that may be of special interest to the public, and how to issue releases after Board meetings on things that the Board feels the public should be aware of. It suggests developing a piece to go with any press releases that states the Board's mission and includes a very brief statement about the cleanup at Hanford. Directly after taking action, the Board will decide whether it is newsworthy. The Board chair and vice chairs would write a statement after the meeting that would be released the following Monday.

Susan liked the idea of distributing the agenda before the meeting and suggested including it in the *Hanford Reach*, which goes to Hanford employees. She suggested having the employee representatives on the Board be listed for questions. It was agreed to specifically include the *Reach*.

Betty said the idea is to publish specific things that would be on the agenda, but the agenda could be included in the *Reach*. Marla Marvin stressed that this process is between the Board and the *Reach*, not DOE-RL. Betty said the committee is asking the DOE Office of Communication to be the distributor because it has a list serve for the media. Marla said DOE-RL would be happy to do the burst fax, but expressed reluctance at establishing another process for the DOE-RL Public Information Office staff. Dennis Presswell publishes the *Reach*. The facilitation team will contact Dennis to figure out what the Board is supposed to do. Marla will do a burst fax before every Board meeting and occasionally when the Board deems something newsworthy.

Tim was happy to see this codified. He asked how Todd decides when to pursue an area of newsworthiness. Todd explained that when the Board issues advice, there is usually an indication from a committee in advance on whether it is newsworthy. Most of the time it won't be. The executive committee can talk about it. He did test the idea of doing editorial board meetings around the region, but it lost steam.

Tim said he feels a phase of increased confusion is beginning, in which the Board will either completely lose the public or will need to involve them in some way beyond public meetings, which do not reach very much of the public. He urged more creative use of the media through the next few years before the vitrification plant starts up.

Gordon would like to see the committee keep track of public sign-ins at meetings and how many media outlets run the Board's submittals and take action as appropriate. Marla Marvin said her shop and the facilitation team do get clips every day. Todd suggested tabulating the articles to let people draw their own conclusions.

Ken voiced concern with the phrase in the advice; "Let the Board speak for itself" since the Board's mission is to advise the agencies. Using the media for Board actions runs counter to his belief of the Board's purpose. Frequent press releases would diminish their impact. Todd shared the concern and assured him that Board consensus would be necessary to deem something newsworthy.

Betty reminded people that the Board is interested in public input. This proposal outlines a way to notify the public of opportunities to express their opinion. The proposal lets the Board do what it expects the agencies to do vis-à-vis the public.

Jim Hagar agreed that press releases should be used judiciously. The HAB is not a public board, does not have a monopoly on knowledge and getting information to people who work at the site, and getting people to public meetings to express opinions and provide information can't be a bad thing. If the Board thinks something is newsworthy, so do the media and they will report on it anyway.

Norma Jean expressed support for putting together news releases on important issues to help bring people to public meetings.

Margery Swint thought Board press releases might be slanted. John Stang of the *Tri-City Herald* covers HAB meetings and is less biased and he picks the things that are important to the public. She wondered if other papers pick up the articles from the Tri-City Herald or if they were interested, would they send somebody from their own paper to cover a board meeting. She said there would be less chance of pushing one opinion or interest over another if stories came from the press.

Norm Dyer asked to have the statement, "Let the Board speak for itself" taken out. Everyone agreed.

Jim Hagar had concerns about how long it would take for the Board to write its own press releases. Todd explained that in the proposed process, advice will just be attached to an introductory statement; Todd isn't comfortable doing more than that.

This internal document was adopted.

Update on Draft Hanford Solid Waste Environmental Impact Statement (HSW-EIS)

By phone, Mike Collins, DOE-RL, provided an update on the Draft Hanford Solid Waste Environmental Impact Statement (HSW-EIS). DOE is still trying to decide how to package the EIS and send it out for public review, so he told the Pacific Northwest National Laboratory (PNNL) people who are preparing it to answer the questions fully as if this were the final EIS and. In the next few weeks, Keith Klein will decide how he wants the EIS done and will give the Board more information on it.

Todd pointed out a letter in the packet that said, "We want to give you good information rather than fast information."

Dennis Faulk asked when people would actually see the information. Mike's guess was in the spring, around April. DOE-RL is still trying to decide whether it would be supplemental information or the whole thing. Todd asked for verification that the letter from Keith in the packet was still valid. It states, "When we issue this supplemental information, which will be part

of the National Environmental Policy Act document process, we will hold a 45-day public comment period and regional public meetings." Norma Jean's understanding at the last meeting was that the Board told DOE-RL it wanted the whole thing put together. Mike said Keith understands that.

Harold wanted to know when all the comments DOE-RL received would be responded to. Mike said it depends on whether this is a supplemental package or a new draft. If it is supplemental, they will highlight the major comments in a supplemental package and address those. Then in the final EIS, there would be a comment response document addressing each comment individually. If it is a new draft, that comment response document would be part of the new draft.

Harold asked whether DOE is planning to bring any new shipments of waste to Hanford before the EIS process is complete, or continue what has been coming in. Mike said as far as mixed low-level waste (LLW), he has no information that anything is going to be sent until the EIS is out. DOE-RL is continuing the policy of shipping LLW from historic generators.

Greg asked who is going to make the final decision, when will it be made or how will it be made regarding a new draft. Mike assumed Keith Klein would send out a letter when he makes the decision.

Gerry Pollet asked what DOE-RL is doing now if it has not decided whether to rewrite the EIS or do a supplemental package. Mike said at some point DOE-RL must address all the comments in a final EIS, so PNNL has been instructed to address the comments and revise the EIS as though it were the final draft. Gerry commented that when people write comments that DOE-RL needs to perform an analysis of something, it is not adequate to simply respond in a response. Mike said some of the responses would be new analyses.

Nick Ceto said Ecology and EPA expect the EIS not to be simply a supplement, but to include a comprehensive look and be a redraft. They have told DOE-RL this numerous times and hope to soon meet with DOE-RL to re-scope the alternatives for the new draft.

Noting that DOE is planning to try to move 12,000 barrels out of the Central Waste Complex (CWC) to be disposed of in the Environmental Restoration Disposal Facility (ERDF), Gerry asked if DOE would do this before completing the EIS. The Board would want to look at the alternatives, potential impacts, and have a description of the characteristics of those wastes for consideration. Beth Bilson didn't have an answer right off the top of her head but said DOE has been looking at these issues separately, and needs to think it through before answering. Gerry said many people and the Board commented that it is not legal to view the issues separately. He requested a formal response before DOE starts wasting more taxpayer money and doing an Engineering Evaluation/Cost Estimate (EE/CA) when it is not known what is in the waste. There is no documentation of the alternatives for treatment or disposal and a comparison of the impacts. He was concerned that the Board's comments are being ignored.

Nick Ceto said EPA is reviewing a draft EE/CA. Gerry expressed confusion over how EPA can look at a plan that does not consider the alternatives for treatment and characterization data and does not include a public review, such as there would be if CWC wastes were included in the Solid Waste EIS. Nick clarified that there would have to be an EIS for a CERCLA action. Waste can be taken from that area because it was already subject to a CERCLA action in the past, and there can be amendments to a CERCLA action to include that waste. If the agencies make that decision, there will be a public comment period on that change, but it will not be an EIS process (although it will be the substantive equivalent).

Gerry said whether or not DOE is free to do it, NEPA legally requires DOE to consider related actions, alternatives, and impacts. DOE can't sweep it under the rug of this EE/CA and act as if 12,000 barrels are not sitting in CWC as part of this analysis and separate the two. The same would be true for the TRU waste shipments and consideration of them before they arrive. Gerry wanted to know if consideration of the TRU waste shipments was being included in this new analysis and when it would be available.

Mike said DOE-RL is planning to do an EIS addressing the shipment of off-site TRU waste to Hanford. DOE-HQ has argued that since Hanford is already covered by NEPA for the Energy Technology Engineering Center (ETEC) and Battelle Columbus shipment, it would not be necessary to wait for the Solid Waste EIS. Gerry asked what the difference is between those wastes and any other waste that can be shipped without including it in the Solid Waste-EIS when the Waste Management-Programmatic EIS (PEIS) and the Record of Decision stated that there would be no shipments to alternate sites without additional site-specific EISs.

Mike explained that DOE-HQ logic was that it is a continuing activity because Hanford already stores this type of waste. The waste volume is very small compared to what was analyzed with regard to transportation in the PEIS and in comparison to the volumes already being handled at Hanford.

Gerry asked rhetorically how they know the impact is small since it is not covered in the EIS. Although this issue was too late breaking for the Board to issue advice at this meeting, he felt advice could be issued in December saying that DOE can't ship this TRU waste without legal action because DOE hasn't considered the impacts in the EIS. DOE promised to do that if it was ever going to change the Record of Decision (ROD). The State of Washington has spoken, and Gerry hopes Oregon will as well. DOE should not consider storing the waste in unlined soil trenches with carbon tetrachloride contamination coming from them or in the Central Waste Complex without an EIS.

Greg deBruler asked whether DOE got documentation of the characterization data with the EE/CA or if it was a summary report. Greg wanted to see the characterization data to see how much was actually done. Nick said Dave Einan manages the Environmental Restoration Disposal Facility (ERDF) facility and is looking at how the data align with the waste acceptance criteria. DOE will not accept waste that does not meet those criteria.

Todd said Shelley and he had lunch with Jessie Roberson at the site specific advisory board (SSAB) chairs' meeting and they got to ask one question. The Solid Waste EIS was the question. Jessie said the Board was really hard on DOE and she and Keith Klein hadn't decided what to do yet.

Committee Call week for November

The call week has been changed to accommodate the packet deadline. The change was handed out on Friday to all Board members.

Monday, Nov. 18th - Tank Waste Committee 3:00
Health, Safety and Environmental Protection 2:00

Tuesday, Nov. 19th - River and Plateau 9:00
Budgets and Contracts 10:30
Public Involvement and Communication 11:30

Executive Issues call 3:00

After the Executive Issues call, EnviroIssues will quickly turn around a draft Board agenda for the December meeting and send it out to the Executive Issues group. They will have until noon on Wednesday to give comments. It will go in the packet for the deadline on Wednesday. The packet will be mailed Friday, the 21st. Because of the back-to-back meetings and the Thanksgiving holiday, the packets will be a bit late. Nov. 21st is the deadline to reserve a hotel room in Portland for December.

Joy announced dates and locations for the state of the site meetings:

- January 8th, Seattle;
- January 15th, Hood River;
- January 22nd, Portland;
- January 29th, Tri-Cities.

Todd talked about the SSAB workshop on January 31st to February 2nd at the Waste Isolation Pilot Plant (WIPP) in New Mexico. Doug, Leon, Harold, and Susan signed up to go. Funding comes from DOE-HQ, but may be limited. Todd will be the one to decide who goes if money falls short. WIPP needs to have a head count ahead of time. The purpose of the meeting is to learn about WIPP and the transuranic system. The organizers want the top three concerns of the Board on the transuranic system. Board members are requested to jot down their concerns and submit them to Susan before the December Board meeting. The purpose is to provide an information packet to the participants. There is the potential for a national panel at the meeting. The Board would decide whether it wants any of its delegation to serve on that. Susan volunteered to serve as a point person on agenda calls, although the agenda seems pretty well set.

Site-Specific Advisory Board Meeting Report

Todd and Shelley recently attended a SSAB Chairs meeting in Knoxville, Tennessee. Jessie Roberson was present for a portion of the meeting. The meeting included a tour of Oak Ridge, but had no particular focus and served to ensure that everyone had an opportunity to talk. Todd's packet of information was available to look at.

Beth said DOE received the text of Jessie Roberson's speech to the Chairs. Beth felt it was a particularly good view of the world from Jessie's perspective, something that Beth is continuing to try and understand. Todd said the transcript wasn't all of what she said; she actually called out the Hanford Advisory Board and DOE-RL in a complementary way. It was the only Board she specifically mentioned.

Tim asked if there was any discussion of disposition of nuclear materials across the country. Todd said he brought it up and discussion centered on whether another workshop was necessary after WIPP. A potential future workshop topic is high-level waste. He suggested the topic of transportation and disposition of nuclear materials. There has been a workshop on it, but enough things have changed to merit another one. There was a moderate amount of energy around that. Ken will get to the next chairs' meeting at Rocky Flats.

Todd said the letter the Board authorized him to sign seven months ago was signed at the meeting.

Committee Updates

Budgets and Contracts

Harold announced an all-day committee meeting on Tuesday, Nov. 12. There is still no information on the FY 2003 budget. Congress may not act on the budget until January, and it may be March before there is any final allocation of funding. DOE is spending money on a continuing resolution approach. Public information on the FY 2004 budget request may be later than the normal March or April time frame.

Gerry encouraged people to keep their eye on coordinating tank waste with the feed stream, cost escalation, the cost of one melter versus another, and what alternatives that might lead to.

Susan asked if the Fluor PBIs would be discussed. They are not yet available, but the committee will get an update on the subject.

Health, Safety and Environmental Protection

Keith Smith said the committee had a phone meeting a couple of weeks ago. Everyone on the committee has an assignment to look at Initiative 6 in the Performance Management Plan and send comments to Keith on its impact on health, safety and environmental protection. The Board has commented on the full PMP, but there are specific concerns to address. Risk management is supposed to be a primary consideration, but it isn't evident. The committee is concerned about the effect of acceleration on workers and the environment, alternative waste treatment, the steam reforming process, and infrastructure.

The committee was told that if alternatives don't stabilize waste adequately, that will be the problem of whoever receives and stores the waste. There are people in old buildings that are not adequate to last another 20 years or more until the end of vitrification. In the central shops, office workers are sent home when the wind blows because you can't see because of dust. There will probably be advice in the next couple of Board meetings.

Public Involvement and Communication

On behalf of Amber, Penny reported that the committee is working on advice for the public involvement for the B/C area risk assessment pilot for the December Board meeting. The committee will review its work plan and will meet in December.

River and Plateau

Pam reported that at the committee meeting next week the focus is on soil and vadose zone issues in preparation for a major focus at the December Board meeting. The committee has had good conversations with the regulators and Dick Wilde and his staff in preparation. Susan, Pam, Gordon, and perhaps Gariann are going to the site on Monday with Dick Wilde to look at various related activities. This meeting is going to be held at the Richland Police Station conference room because there were no rooms available at the federal building. There is no phone line in that room for people to call in for the meeting. The committee hopes to have advice on stewardship at the December meeting.

Tank Waste Committee

Doug thanked everyone on the committee and the agency personnel who helped put this Board meeting together.

Leon Swenson said he thought this was a very helpful and productive process and thought it could be a model for Board work in the future. He agreed the committee needs to do something with this information.

Dave Johnson reported on the Wednesday evening informational session. In preparation for this Board meeting, the Tank Waste Committee sponsored an informational tutorial session Wednesday evening to share information about supplemental technologies in addition to vitrification being considered for LAW processing. About fifteen Board members attended the session. Some of the concerns heard at the meeting were:

- Ecology said the TPA is still in place and all tank waste will be vitrified by 2028.
- Costs of supplemental technologies are unknown at this point.
- Putting money into supplemental technologies would eventually rob the WTP.
- Policies are being formed now to change the melter configuration because much of the LAW will be treated with an unproven supplemental technology.
- Schedules for the supplemental technologies do not reflect the decision points for selection and public process, including an EIS, NEPA process with public input, DOE orders, and likely TPA changes.
- As much as 70% of LAW might not be vitrified.
- There are technical, legal, and regulatory reasons to believe that supplemental technologies will be difficult to implement and may take much longer than anticipated.
- We might be getting to the point where the vit plant is set in concrete and it's too hard to change.

Agency Updates

DOE-RL

Beth said DOE-RL recently celebrated the closure of DR reactor. Spent fuel is moving faster than ever; five or six MCOs are routinely moved per week. DOE-RL does not know if it will meet the milestones. The focus has shifted to beginning movement of fuel from the east basin to the west basin and making sure the system is ready for sludge. Plutonium stabilization is going well. There were very high targets, and DOE-RL didn't meet them all, but was pleased with the progress in many areas. Beth will tell Keith Smith about negotiations with Fluor, since they will be focusing a little differently on safety, and his committee will be interested in those details.

DOE-ORP

Greg Jones gave no additional update since the meeting was devoted to ORP issues.

EPA

Nick Ceto said the Richland staff has been working closely with DOE and Ecology for the last month on the Solid Waste EIS discussion and the upcoming tank closure EIS. When DOE decides how to format those documents, the agencies will help to re-scope them. The tank closure EIS in some ways needs to be integrated with the SW-EIS because material that comes out of that will have to go to solid waste disposal. This reflects the advice from the Board about integration. The material that comes out of the tank closure will have to be integrated into the solid waste complex across the site.

EPA's inspector general (IG) recently finished an audit of EPA's oversight of DOE work in the K-100 Area. It should be on the web site in the next week or so. The IG was critical of the speed with which fuel has been removed from the K Basin and some of the groundwater pump and treat systems. EPA's view in Region 10 is that in the last few months, the pace has really picked up at K Basin. DOE-RL is nearing the TPA goals. The pump and treat system has had starts and stops, but this summer the pumping capacity went up 50 to 80 percent from a year ago. EPA proposed a milestone change to DOE-RL last week asking to bring another pump on line.

Acceleration is being discussed on several fronts. EPA is enthusiastic about the idea of doing it, but is concerned about how some of the performance incentives might affect work. If acceleration results in the ability to do work differently, the Tri-Parties need to be involved in reprioritizing work and the public should have input as well. EPA wants the highest risks addressed first.

ECOLOGY

Jane Hedges reported that the shock sensitive chemical violation, the calodian penalty, has been settled. The monetary penalty has been set aside to train people so the problem doesn't happen again.

Ecology is working on the off-site waste issue at high levels. The Governor sent a letter to Energy Secretary Abraham expressing the State's strong concern about importation of waste with the current status of the EIS and other issues. Ecology will share more when legally able to do so; some information is legally sensitive.

Gerry asked about the IG report on the K Basins. Gerry is concerned, as are workers, about the radiation contamination incident and the uncontrolled spread when transporting a Multi-Canister Overpack (MCO) from cold vacuum drying to the canister storage building. A transport truck and the external MCO were contaminated and there are concerns that this was transported on the roads. Gerry asked how it happened, what the oversight was, and if it was the result of acceleration pressures. He asked who is reviewing it, what the results of the review are, and what the implications are for worker safety. Beth didn't know the specifics, but will get the right person to call Gerry. DOE-RL is taking the incident very seriously, looking at all of those aspects and demanding that Fluor look at it as well. There is no acceleration if safety doesn't go with it or ahead of it. It is unacceptable.

Nick said EPA was notified of the incident. EPA has the report, and is waiting for follow up from DOE on how they will prevent it in the future.

Response to Advice

Advice #135 – Exposure Scenarios Task Force on the River Corridor

Advice #135 will be discussed in December. Nick said the response was that EPA supports the things that the Board lined up. EPA is looking at the scenarios that the Board requested.

Nick met with Greg Hughes from U.S. Fish and Wildlife (FWS) last week. FWS needs someone on staff that can get engaged in these issues since FWS will have a large role in the river corridor down the road. Beth said the B/C effort is a pilot, moving forward in plenty of time to meet the milestone. However, DOE-RL will slow down and not move forward until someone from FWS is involved or until it is definite that no one from FWS will be able to participate.

Advice #136 – Draft Hanford Solid Waste Environmental Impact Statement

Pam Brown said most of the response to Advice #136 on the draft Hanford Solid Waste EIS (SW-EIS) defends the shipment of TRU waste to Hanford. A small part of it says they are continuing to work on the form and content of information to address the comments received. The advice had a lot of substance that the response did not address.

Pam spoke to Dr. Inez Triay, the site manager for Carlsbad, a couple of weeks ago at a conference. Pam had expressed the Board's concern that if the remote TRU comes to Hanford packaged in a way that is assumed to be acceptable for WIPP when there are no remote waste acceptance criteria, it poses a financial burden on Hanford in the future to repackage it. Ms. Trey described at length the analysis the containers have gone through. Pam is happy they are well-designed containers, but that doesn't mean they meet the State of New Mexico's acceptance criteria. That concern remains.

The local communities have informed DOE that they would like tipping fees imposed for off-site waste. Ecology is also looking at this. The communities think the fees should be made available for emergency response and road improvements – the things that are not funded associated with impacts to the community of being a national nuclear waste disposal site.

Todd said the Board stated that it does not want any TRU until the EIS is done, but the response says the amount of waste is small and will be sent anyway. It says they don't believe they need any more NEPA analysis to send this. Todd asked if Pam, as committee chair, considers this issue closed. Pam said the State of Washington has a very firm response on this. If that weren't the case, Pam would have to think about it. Jane Hedges wasn't able to expand on that because of legal issues, but she agreed that the State has a strong opinion and concern about it.

Bob Parks met with Pam a few weeks ago at the Hanford Communities Board. Bob is troubled that the Governor hasn't realized that tipping fees could provide substantial reimbursement to local communities to provide emergency response, roads, and other things. It would be a big boon to small communities. He isn't opposed to bring TRU here as long as they lay out in the EIS what is in it and how much they will bring. They need to be honest.

Gerry said the letter that Ms. Gregoire and Governor Locke sent is something the Board should feel good about and the public is very supportive of. Several hundred of Heart of America Northwest's members have written the governor in the last two months since the record of decision on the PEIS came out without mentioning the TRU or requiring an EIS. The response from the State of Washington has been widely circulated among the people who were concerned, and they are pleased.

The Government Accountability Project (GAP) and Heart of America Northwest issued a statement about the roadblocks DOE expect if TRU is sent to Hanford. Gerry said the waste will not come, one way or the other. Gerry is very concerned about whether DOE-RL ever informed DOE-HQ of what it was stepping into. At a C3T meeting, Gerry told Keith Klein and Jessie Roberson that it was clear Jessie Roberson made it a national priority back in June to move this TRU. Gerry felt Hanford mismanaged the issue by not telling her at that time that TRU needed to be included in the SW-EIS.

Gerry has supported tipping fees in the past. State finances could be enhanced. Heart of America Northwest proposed budget authority and legislation this year about the commercial waste stream. Gerry said if local governments spend \$70,000 of local tax dollars suing DOE on the Fast

Flux Test Facility (FFTF), it doesn't look as if their priorities are emergency response and handling the problems that come with accepting this waste.

Keith Smith said he understands the legal implications of importing waste and he supports a thorough review. But if this waste has to be handled, the Hanford workers are probably the best workers in the country to handle it.

Pam pointed out that not everyone is supporting FFTF. This EIS process represents a good indication of the Board's determination that things should be done legally and with scientific analysis. She felt that Board members, as advocates, should be talking with the Attorney General's office.

Jim Trombold commented that there is always an economic carrot for expediency. There may be an economic incentive to import more waste, but there is a scientific basis for some of these legal requirements. He thinks the more involved the state is the better.

Ken suggested the committee focus on the decision within the next two weeks on the form of the SW-EIS. If DOE decides on supplemental information, that could be a catalyst for the committee to present formal actions the Board could take in opposing that.

Board Business

At the Board leadership meeting Wednesday night, the leaders decided to continue to encourage only seeing things at the Board meetings that come with committee consensus. The Board will still remain flexible if important issues arise.

There is a lot of energy in the leadership group to try to reduce the number of HAB conference calls. They do not have a solution yet, but they are working on it.

There is potential for a retreat follow up in the spring or early summer.

Todd commented that the Board's committee structure should be reevaluated periodically to see how it reflects the work we're doing. He will put more detail in his e-mail to everyone. He invites the executive issues people to augment or correct anything he says in that e-mail.

Todd's term is up in February. Something needs to be done at the December meeting. If anyone has any suggestions, get them to the facilitation team between now and December.

December Meeting Topics

The focus for the December Board meeting is on groundwater and long-term stewardship through the River and Plateau Committee. The tanks committee will report back from this meeting.

Potential Advice: Long-term stewardship
116-N-1 trench advice
Advice on the B/C Pilot Risk Assessment public involvement activities
Advice from the Budgets and Contracts committee

Meeting Locations

The Executive Committee is looking for a creative place for the April meeting. The Yakama Cultural Center is too small for the meeting. The February meeting will be in Richland.

Public Comment

John Cox works for the confederated tribes on the Umatilla Reservation. He is employed as a technical person. He listened to this meeting and didn't hear anything that meets the Tribal position on what cleanup is. The Tribes have a government-to-government relationship with the Tri-Parties, and they are relaying their message on cleanup, but they don't see them reflected in what DOE has presented. They don't see the mechanism for protecting the river.

A letter was received from William Simmons, President of Energy Metals Corporation in Salt Lake City. He said his company offers a process that makes radioactive waste benign at a cost that is less than vitrification. This would eliminate the need to encapsulate and bury the waste. This process can be done on site.

Attendees

HAB Members and Alternates

Richard Berglund, Member	Bob Parks, Member	Clare Gilbert, Alternate
Ken Bracken, Member	Gerald Pollet, Member	Jim Hagar, Alternate
Pam Brown, Member	Dennis Rhodes, Member	Rebecca Holland, Alternate
Shelley Cimon, Member	Gordon Rogers, Member	Dave Johnson, Alternate
James Cochran, Member	Leon Swenson, Member	Wanda Munn, Alternate
Jim Curdy, Member	Margery Swint, Member	Maynard Plahuta, Alternate
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Susan Leckband, Member	Madeleine Brown, Alternate	Charles Weems, Alternate
Jeff Luke, Member	Norm Dyer, Alternate	
Todd Martin, Member	Garianne Gelston, Alternate	Al Conklin, Ex-officio

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Woody Russell, DOE-ORP	Ken Rueter, WTP	Barbara Wise, Fluor
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