

**DRAFT MEETING SUMMARY (v.0)**

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**HANFORD ADVISORY BOARD**

**TANK WASTE COMMITTEE**

*August 12, 2003*

*Richland, WA*

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*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.*

**Welcome and Introductions**

Committee Chair Doug Huston opened the meeting and reviewed the agenda. Summaries from the May Tank Waste Committee and joint Tank Waste/Budget and Contracts Committee meetings were adopted.

**Committee Business**

The committee discussed the committee leadership selection. Doug Huston and Leon Swenson were selected to continue in their current roles of Chair and Vice-chair.

**Draft Advice on Transuranic (TRU) Waste in the Tanks**

The committee reviewed versions of the advice drafted by Doug Huston, Al Boldt, and Gerry Pollet. The differences between these drafts were highlighted and discussed.

### *Committee Discussion*

- Pam Brown asserted the Hanford Advisory Board (Board) should not proceed with the advice. She believes the committee has wasted a lot of time arguing about the advice with individual agendas interfering with the discussions.
- Jeff Luke partially agreed with Pam. If the Board is ultimately interested in having the waste removed from the site earlier, then the advice should be more neutral in tone. The question to answer is, does the Board support the Department of Energy-Office of River Protection's (DOE-ORP) effort to confirm if the waste is transuranic (TRU) or not? The Board should not commit itself to the final path right now.
- Paige Knight stated she is not going to decide at this meeting whether or not to support DOE-ORP's efforts. It is important to note that the General Accounting Office (GAO) has commented on the mismanagement and assumptive thinking on DOE's part. Assumptions are being made with no data to support these assumptions. It would be best to say that the Board supports this project proceeding but that it must be done correctly.
- Al Boldt commented the Board should be careful to not move in the opposite direction by openly embracing and promoting the reclassification of waste. Additionally, DOE has not provided any data to the Board that demonstrates this process would be quicker and more cost effective. This process cannot be supported without the necessary data.
- Suzanne Dahl, Washington State Department of Ecology (Ecology), stated Ecology is not supportive of reclassifying any of the tank waste. However, they are supportive of looking at the TRU process for 8 or 9 of the tanks. Ecology is working on the first stages of a permit but this will need to be approved by Waste Isolation Pilot Plant (WIPP) first. If this process does move forward, Ecology does not want to see it used as a precedent for other tanks.
- Leon Swenson asked if there is cost information available which demonstrates the project will save money. John Kristofski, CH2MHill Hanford Group (CHG), said it has been difficult to create a clear cost estimate for this project. There are currently three options for the process, there are different costs associate with each of these, and DOE is trying to work with all of the entities to compare cost figures. The rough estimates to this date show a savings of \$500-800 million. There will be better estimates in the next three to four months for the treatment and management costs. This is a significant savings over the cost of sending the material to the Waste Treatment Plant (WTP).
- Leon asked if these estimates are for the eight tanks. John stated these figures are for 12 tanks but the savings ratio would stay the same for the eight tanks. Greg Jones, DOE-ORP, added that the final costs will be dependent upon what can be classified as TRU.

- Jeff asked the committee to note that he works in support of this effort. It would be helpful to include in the advice that at the earliest possible date, the Board should be provided broken down cost estimates for this project. Al suggested that DOE should do a discounted cash flow and present value analysis of the current costs. This would provide an equal comparison.
- Todd Martin expressed concern that at the Board meeting it may be difficult to maneuver through the fundamental conceptual level of and the language surrounding characterization and classification. Several committee members commented that Doug's presentation would be helpful, as would a concise summary of the argument against characterizing the waste as TRU.
- A committee member asked if the NRC has any regulatory authority at Hanford. Doug stated the NRC has regulatory authority over high-level waste, however, whether or not they have authority over DOE's high-level waste is debatable. John Kristofski added it is his understanding that the NRC has regulatory authority over the disposal site for high-level waste, but the NRC has clearly said they have no authority over the high-level waste in the tanks because the tanks are a storage unit, not a disposal unit.

The committee decided to proceed with bringing the advice to the September Board meeting. Doug Huston will revise the draft for discussion on the committee conference call next week.

### **Retrieval, Treatment and Disposal of Tank Waste and Closure of Single-Shell Tanks Environmental Impact Statement (EIS)**

Mary Beth Burandt, DOE-ORP, and Leif Erickson, DOE-ORP, gave a brief update on the EIS status. Mary Beth reviewed the alternatives presented in the EIS. The current alternatives are the result of comments from the previously-held scoping sessions. One of the most important issues raised during the scoping process was that people found the alternatives were too complex and addressed too many issues. The new alternatives are separated into those that deal with treatment, those that deal with retrieval and closure, and those that deal with management. There are several key decisions within each of these options.

Mary Beth also reviewed the materials ORP is planning to use for public presentations during the EIS comment period. Committee members noted the presentation might be confusing to the general public and provided a number of suggestions on how to make the presentation clearer for the public.

The goal of the EIS is to identify several points to assist the decision-makers with key programmatic analysis in the follow areas: treatment technology, closure, and tank

management. The benefit of the EIS is to enable actions in each of the three areas on key decisions to be addressed.

*Treatment:* What should “phased implementation” look like for tank waste treatment?

*Retrieval and Closure:* Does the relationship between the amount retrieved and the closure barrier have an impact? Also, what are the impact differences between closure with all tanks left in place, partial removal of some tanks, and removal of all tanks?

*Tank Management:* What are the necessary infrastructure management decisions to support longer-term activities?

The schedule for this draft EIS is as follows:

- Near term review starts 8/22/2003
- Draft EIS will be published 10/17/2003
- Public comment starts November 4, 2003 and will run for 45 days.
- Final EIS will be published March 8, 2004
- Record of Decision (ROD) will be issued 4/18/2004

These dates need to be met in order to proceed with certain closure activities.

### ***Regulator Perspective***

- Ecology is operating as a cooperating agency with DOE on this EIS. The parties have been able to resolve many issues, with the result that this EIS will not look like the Hanford Solid Waste EIS or face the problems that EIS encountered. Suzanne said Ecology appreciates DOE’s effort with this EIS, but is nervous that there is an option looking at using grout in 200 East, which will put grout on an even footing compared to the other technologies under consideration. Ecology would also like to see an apples to apples comparison of the modified Resource Conservation and Recovery Act (RCRA) barriers and the Hanford barrier. It is important that the use of a good barrier not be made into an excuse to leave more waste in the tanks.

### ***Committee Discussion***

- Several committee members asked if different barriers are described in the EIS and if these have been tested and tried. Mary Beth replied they are.
- Al stated that some members of the public want to see select removal of the worst leaking tanks and as well as the removal of the contaminated soil column. Suzanne added this is an addition that Ecology has requested.
- Jeff asked if partial clean closure would only include removal of equipment, not soil. Mary Beth replied this includes some soil removal.

- Several committee members noted that alternatives 2A and 2B do not have closure included but it appears the other alternatives do. Mary Beth stated this is because the Tank Waste Remediation System (TWRS) ROD did not include closure. These alternatives reflect the modifications that have been made to the TWRS ROD but do not change the fact that the ROD did not include a closure scenario. Leif added that these alternatives allow for a sensitivity study in which certain parameters are held steady.
- Todd stated it is important for the public to understand why comments from the scoping process are not addressed in the EIS and that explanation should be part of the presentations.
- Jeff commented it would be helpful to understand why closure is included in one alternative and not another. The differences in the alternatives need to be clearly identified.
- Several committee members asked about the EIS relationship to the supplemental technologies down select process. Leif replied that the EIS is not the down select tool. It is premature to make a decision on supplemental technologies in this EIS. Suzanne added that Ecology is concerned that the supplemental technology down select is taking place during the EIS process.
- Pam asked if sulfate removal will be used to strengthen the treatment form chosen. Mary Beth replied it will be used to strengthen a glass option.
- Leon asked why some of the alternatives do not use the existing pretreatment facilities and the low activity waste (LAW) melters. Suzanne answered that Yucca Mountain will run out of space so 90 percent of the waste will remain in canister storage. These alternatives have to account for increased storage capacity on the Hanford site.

The committee discussed the comment period and the Board's schedule: the EIS draft will be released too late for the committee to bring advice on the EIS to the November Board meeting and the Board will not meet again until February, after the comment period has closed. Committee members decided to draft a letter to ORP requesting either an early release of the draft or an extension of the comment period.

### **Waste Treatment Plant Tour**

The committee went on a tour of the WTP construction, including both the pre-treatment facility and the high-level waste facility sites. Currently, engineering is 50 percent complete and the construction is 13 percent complete. By next year, the outside of the buildings will be completed.

## **Tank Waste Treatment Tri-Party Agreement (TPA) Change Package**

Howard Gnann, DOE-ORP, reviewed the Change Package. Agreement has been reached on three milestone series: M-47, M-62, and M-90. It has been agreed that the baseline will be accelerated to finish treatment of the tank waste by 2028. In 2005 a draft baseline will be submitted outlining how the 2028 date will be met. A date will be negotiated in 2006 to lay out a path to completion. Agreement was also reached on the interim milestones for the completion and startup of the WTP. The final end date of 2011 will not change, but more time will be provided for cold commissioning and less for hot commissioning. A commitment by DOE-ORP was added to line up the dates for the installation of both the high-level and low-activity melters. Deadlines for M-47 were changed for the waste delivery feed because it will not be needed as early. Howard said DOE-ORP felt this was a good, meaningful discussion with lots of cooperation. The public comment period for these changes ends on September 10, 2003.

### ***Regulator Perspective***

- Suzanne stated that Ecology still has to resolve the issue of DOE changing the baseline without changing the TPA first. Ecology agreed to the schedule DOE proposed in the change package, however, DOE made a commitment to follow the TPA process in the future. The important point is that the schedule still meets the 2011 deadline.

### ***Committee Discussion***

- Al Boldt asked about how these changes affect M-62-08. Howard stated DOE is continuing to look at optimizing the two LAW melters in place currently. Some essential work is still needed to determine what the LAW melters will look like. As supplemental technologies mature, the decisions will become clearer.
- Al asked if there will be a third LAW melter. Howard stated that currently, the recommendation will be for two enhanced LAW melters. The budget has been increased through 2028 to accommodate supplemental technologies; this will become more defined as time goes on.
- A committee member asked if supplemental technology will be employed before the WTP is operational. Suzanne stated that after the down select occurs in September, further studies will be done on a pilot scale to obtain a full assessment of how the chosen technology or technologies will perform on the large scale. In 2006, a report will be issued to determine which option, the second vitrification plant or supplemental technologies, should be chosen. This would then become operational in 2011. Roy Schepens, DOE-ORP, stated DOE is assuming it will be successful in using supplemental technologies. This decision will be parallel with the decision on the optimum size plant needed. Jim Henschel, Bechtel National Inc. (BNI), stated that the supplemental treatment facility should be finished first because otherwise it

would hold up the operation of the pre-treatment facility, which is the more costly facility.

### **Status of Supplemental Technologies**

Rod Powell, CHG, gave a brief overview of the schedule, where they've been, and where they are going. He spoke about the Mission Acceleration Initiative teams, which have been meeting for the last year. These teams, which grew out of the Cleanup Constraints and Challenges Team (C3T) process, include staff from Ecology, the Environmental Protection Agency (EPA), DOE-ORP and DOE-RL. There has been one workshop so far and a second will be held the week of the September Board meeting to discuss waste form performance testing. Dana Bryson, DOE-ORP, added all of the technologies are being assessed in detail for waste form loading. The down select is an investment decision to determine what technology to invest more research time and money in. It is likely that several options will be chosen in the down select.

Rod stated that CHG is preparing their recommendation and intend to have it to DOE-ORP by September 15 instead of September 30. The hope is DOE-ORP can accelerate their review and make a down select decision by October 1.

### ***Committee Discussion***

- Leon commented it appears a decision is being made on a supplemental technology before it is known what the waste looks like in its qualified state. Rod stated that waste form qualification testing will continue after the number of options has been reduced. Dana added that currently they are trying to determine which are the best performing technologies. At this time, there is not enough information for permits or other decisions. In working with Ecology, they have to step back and look at the entire process. The selected and final technology will have to be as good as glass.
- Paige stated it appears CHG is making a decision on a down select on September 15, however, it seems like there is not enough data at this point to make these recommendations. Dana responded this is not a recommendation to treat the waste using the technologies; rather, it is a recommendation to develop more data and to decide where to invest further resources. Many of these technologies, especially grout, have changed a great deal in the last ten years and are now used at other sites throughout the country and in commercial applications. There is a lot of work to be done between this October and the final decision in 2005.
- Several committee members noted the handout shows a Board meeting as a public involvement activity, which is not the case. Sharon Braswell, DOE-ORP, clarified that this is a public information session; it needs to be clear that the Board is not providing input at this time. Todd noted that the down select schedule conflicts with both the committee's and the Board's schedule and makes it very difficult for the Board to comment on the decision.

- Pam Brown asserted the Board is skeptical about supplemental technologies because it appears to be a cost savings measure mandated by DOE Headquarters, not a technical decision. Pam added the concerns are also due to past concerns with grout. DOE's challenge is to convince the Board and the Northwest that supplemental technologies are beneficial. The more transparent the process is the better. Greg Jones responded the intent is to share all the information as it becomes available. Paige added DOE-ORP should also be ready to explain why a particular technology was not chosen.
- Suzanne commented that while the additional facility will not be as large as the LAW facility, it will process twice as much waste. It is a significant building with a significant mission.
- Dana noted that the chart he shared with the committee is not the best tool for presenting the information to the public. He added that they are trying to present the process not the decision.
- Pam stated that, due to the public's past experience, PCBs, organics, and technetium should be singled out for study of the technologies' effectiveness. Rod stated these are being studied and addressed with the public.
- Suzanne reemphasized Ecology's position that the essential criteria are that any supplemental technology must be as good as glass and meet the TPA requirements, not just the regulatory requirements. Due to the delay in building the facility and the cost of research, all the stakeholders are heavily invested in something as good as glass.
- Leon asked if it is probable that more than one technology will be chosen. Greg responded it is highly likely that the down select will be to a number fewer than three, in order to do 15 months of research cost effectively. Suzanne added that Ecology has already been approached about a design research permit for one technology.
- Paige asked Suzanne if she thought DOE-ORP should take another year for further study on these technologies. Suzanne responded that when Roy Schepens and Tom Fitzsimmons spoke, Tom stated a supplemental technology decision would not be made until a full waste form qualification had been done. Roy assured Tom that this would be available by 2005. This is a serious challenge and DOE is working to develop a program. We need to move forward with the next steps so a pilot program can be started.
- Doug asked if the team would like anything from the committee. Dana stated they want to be sure the committee understands the process and how it was developed. It is important that all the stakeholders understand the criteria for the selection so they can feel comfortable with the process.

- Doug asked if the committee wanted to provide input on the September 15<sup>th</sup> down select decision. Leon asserted the committee's hands are tied: there is not an opportunity in the schedule for the Board to comment on the down select. Shortly after that, the contracts will be put into place so there will not be any opportunity for input on those decisions.
- Todd noted two of the biggest items DOE-ORP has asked the committee to address in the next year will not work with the Board's the schedule. Tank waste issues are scheduled as the focus for the November Board meeting, however, that will be too late for the down select and too early for the EIS. Both of these items are too important for the Board not to address and he is not sure how to resolve the timing conflicts. He asked if it would it be reasonable for DOE-ORP to extend the down select deadline past November. Greg replied there would then be problems on the other end of the schedule because the deadline is already so short.
- Leon expressed concern that the Board has been asked to participate but, given the timing, there is no opportunity for that. Doug added that additional data must be provided before there is a down select. Greg responded that there will be workshops held before the September Board meeting and perhaps some committee members can provide information from those at the Board meeting. Then advice could be generated at the Board meeting.
- Todd stated the issue is the large information gaps. There is no time for process. DOE-ORP has put enough priority on this decision that in November the Board should be able to say if they made a good or poor decision. But even if everything was cleared off the Board's schedule between when the decision was made and when the planning starts, it would still not work.

The committee decided to develop advice for September commenting the public involvement part of the down select process was poor. The advice will include comments on criteria the Board feels are important in the down select decisions.

### **2004 Board Priorities**

Todd briefly outlined the priorities and schedule for the Board in fiscal year 2004. The list of priorities is what has been identified to date as important in the coming year, but as new issues arise this list may change. The list of priorities related to the tanks was developed with input from Roy Schepens, Greg Jones, and Leif Erickson. The list will be provided to the agencies in September for further review and will then be approved.

## **Handouts**

- Tank Waste Committee Agenda, August 12, 2003.
  - Retrieval, Treatment, and Disposal of Tank Waste and the Closure of Single-Shell Tanks EIS, Mary Beth Burandt DOE-ORP, August 12, 2003
  - Tentative Agreement and Resolution of Negotiations, Tri-Party Agreement Members, June 27, 2003.
  - Supplemental Treatment Selection, CH2MHill, August 7, 2003.
  - Supplemental Treatment Technologies Selection Process and Schedule, CH2MHill, August 8, 2003.
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## **Attendees**

### **HAB Members and Alternates**

Al Boldt	Paige Knight	Maynard Plahuta
Pam Brown	Jeff Luke	Leon Swenson
Doug Huston	Todd Martin	

### **Others**

Yvonne Sherman, DOE-RL	Suzanne Dahl, Ecology	Suzanne Heaston, BNI
Kim Ballinger, DOE-ORP		Dru Butler, CH2MHill
Sharon Braswell, DOE-ORP		Bryan Kidder, CH2MHill
Dana Bryson, DOE-ORP		John Kristofzski, CH2MHill
Brian Harkins, DOE-ORP		Liana Herron, EnviroIssues
Greg Jones, DOE-ORP		Lynn Lefkoff, EnviroIssues
Erik Olds, DOE-ORP		John Stang, Tri-City Herald
Roy Schepens, DOE-ORP		