#### FINAL MEETING SUMMARY

# HANFORD ADVISORY BOARD TANK WASTE COMMITTEE MEETING

June 9, 2011 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**

Dirk Dunning, Tank Waste Committee (TWC) vice-chair, welcomed the committee and introductions were made. Dirk said the February and May summaries were not ready for approval and he would address any suggested edits off-line. The committee will approve these summaries at their next meeting.

# Waste Management Area C Performance Assessment

Vince Panesko said he attended a workshop on the Waste Management Area (WMA) C Performance Assessment (PA). He said additional characterization is forthcoming and he was reminded of an earlier question on how models could be developed if the source of technetium is unknown. Vince referred to earlier comments Dirk made about the BC Crib area and the geology underneath it. He said he spoke with Dirk and others about lateral flow issues. Initial models for C Farm indicated flow is moving straight down. Vince said other results indicate there is lateral flow, although there is not a lot of evidence for this. He said there was clearly a feeling at the workshop that there is lateral flow.

Vince said the most fascinating talk concerned tanks. All of the tanks in C Farm overflowed at some point. He said salt layers can be seen in pictures above the steel layer on the concrete dome, indicating that the tank held more solution than it could contain.

Vince said Chris Kemp, United States Department of Energy-Office of River Protection (DOE-ORP), will discuss the Tank Closure & Waste Management Environmental Impact Statement (EIS) and PA. Vince said the PA is delayed until the EIS is issued. Tank retrieval is expected to be completed in 2014 with closure of C Farm in 2019.

Chris began his presentation by referring to DOE's current schedule for WMA C Working Sessions. He said the most recent working session addressed United States Environmental Protection Agency (EPA) risks. The agencies will work through topics they are concerned about at each session.

Chris reviewed DOE's summary of results so far. He said DOE was starting to detail features/events/processes using International Atomic Energy Agency criteria. Chris said DOE used lessons learned from the Savannah River PAs. DOE developed Parameter Sensitivity and Uncertainty Analysis for the Initial PA of WMA C. He said the single shell tank (SST) PA includes the post-closure timeframe. This PA covers what occurs during the operational phase and is used in part to calibrate the model, which is one of the lessons learned through the PA.

Bob Lober, DOE-ORP, said there are two methods for collecting data to use in a risk analysis. The first way involves using mice to see how contaminants propagate through the food chain. The other involves soil sampling, which is also being conducted for the ecological risk analysis. He said discussions at the PA workshop were not a big surprise to anyone. There were challenges with catching mice, leaving DOE short on the number of mice caught to date. Chris said DOE recently held a meeting with the Washington State Department of Ecology (Ecology) to determine how best to move forward with the available data. DOE will rely heavily on soil samples and there is some bias with mice. Chris said samples are still compliant to meet the obligations of ecological risk.

Chris said he knows there is an attempt to address lateral flow in the EIS. DOE is working to communicate their efforts investigating lateral flow concerns; they are not claiming it does not exist. Dave Bernhard said the Subsurface Transport over Multiple Phases (STOMP) model can create a diagonal flow path, which is probably the closest approximation to lateral flow. Lateral flow models would require tremendous computing power. Dirk said it is important to identify what is being described with lateral transport. The kinds of elements seen in a conceptual diagram show waste moving at some slant toward groundwater, but in reality water is travelling through existing flow systems within the soil that existed long before the Hanford Site was constructed.

#### Regulator Perspective

• Jeff Lyon, Ecology, said the PA is a good example of DOE maintaining open communication about work being conducted at the Hanford Site. Jeff said there are two

issues he would like the Hanford Advisory Board (Board or HAB) to consider about the PA. He said as a program manager for Ecology, he is unclear about what the ecological risk is and how to use the PA for decision-making. Jeff anticipated the sampling would be less than fruitful, as it is turning out to be regarding the mice. He said it is beneficial that a sampling protocol was agreed to as opposed to waiting and that the soil sampling protocol is good. Jeff said he is unsure how to apply this data to ecological risk for making sound decisions. He said the sampling presents an oversimplified understanding if DOE makes assumptions and discounts data. Models do not match what DOE believes the reality is.

Jeff said the second issue is how the EIS integrates with the PA and how the documents
will work together. Jeff said that DOE-Richland Operations Office (DOE-RL) conducted
site-wide monitoring, but he is confused as to how the composite and cumulative impacts
from the Hanford Site will work together. The analysis in the EIS will somehow be used
for the composite and the PA process. Jeff said the agencies will have to consider
scheduling issues.

## Committee Discussion

- Vince said he supports Jeff's two points. He said it would be helpful to consider what C Farm should look like in the future. He said C Farm is currently gravel surrounded by a more natural ecosystem. Chris said the final SST system barrier will be an evapotranspiration barrier. He said plantings are intentional to encourage animals. The tank farms are currently maintained in a gravel condition so not even insects will frequent the area.
- Jeff said one aspect of barrier performance is evapotranspiration performance. The engineers have been conducting this work for about five decades so the construction piece will be fairly clear. He asked Vince what his concerns are about performance. Vince said the cribs were designed not to fail within the last 50 years. He said barriers consisted of dirt over the top of the crib, but badgers disrupt the barriers and there are radioactive tumbleweeds. He said DOE is following the same approach as in the past. Vince said in his experience he has seen repeated surprises so he is skeptical about long-term performance.
- Vince referred to the closure schedule slide. DOE does not want to issue the PA until the EIS is available. He said discussions are needed about the Record of Decision process. Jeff mentioned the three closure documents due in 2012: the Resource Conservation and Recovery Act (RCRA) Closure Documents, DOE Closure Documents, and Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Closure Documents. He said the timelines on these documents will need to be squeezed in order to meet the 2013 deadline. Closure cannot begin until DOE obtains the permits from Ecology.
- Chris said a schedule is submitted to DOE-Headquarters (DOE-HQ). Currently, DOE is holding budget discussions that should conclude by the end of the month. Chris said he

does not want to mislead anyone when he is unsure about the schedule when the budget is not finalized. Chris said the final EIS should be issued in March 2012, which will cause the other documents to be delayed. This will compress the site preparation and final closure schedule to meet the milestones.

- Vince introduced the draft advice. He said TWC would discuss the advice again in August since they would like to bring it to the September Board meeting. Dirk said any concerns and issues should be brought up for the second draft in August. Cathy McCague, EnviroIssues said it would be helpful for the committee to reach consensus today to move the process forward.
- Vince said DOE is six months behind schedule. The Board as well as the public would like to see the schedule to ensure DOE does not get further behind.
- Pam Larsen asked when ancillary pipes will be dealt with. Dirk asked if the pipes would be removed. Chris said part of the process is to examine whether various components should be removed or left in place. His opinion is that many pipes should be left in place and buried. Chris does not think the schedule is realistic. He said the large amount of soil removal required to address contamination would leave hanging pipes. Chris added that tanks may need to be removed to address leaked waste in the soil. Vince said some pipes may need to be removed, which will need to be further discussed.
- Maynard Plahuta asked what the impact would be if the later part of the schedule is compressed. He asked if there is enough leeway to allow compression and whether DOE can complete work within a shorter time frame while still meeting the deadlines. Chris said construction right now is focused on retrievals. DOE has begun running a day shift and a swing shift. He said DOE cannot operate at the site 24 hours a day, seven days a week without greater chances of error. He added that there are some activities DOE can do in order to expedite progress. Chris said he and Jeff are committed to completing WMA C closure by 2019, but he cannot say whether that is actually possible or not.
- Susan Leckband said her question refers back to Jeff's confusion and consternation at how the documents fit together. She said Todd Martin made a suggestion at the River and Plateau (RAP) committee meeting the previous day. He suggested creating a simple file that identifies important documents including what it does, when it is due, what other documents feed into it and what it feeds into. Susan said a document that lays everything out in a simplified way would be very helpful to the public. Chris said there is a key Tri-Party Agreement document list that the agencies use. He said that document could probably be made available and he will follow-up with DOE.
- Jeff said creating something that outlines all the documents would be a worthwhile effort, but he suggested the Board agree on a deliverable. He said it would be helpful to have a common expression outlining what the Board would like.
- Shelley Cimon said part of the problem is the very different dynamics. She asked when conversations will happen that allow integration to occur. She commented that a document list will not be the answer.

- Dirk said many documents will become available for public comments in July. He suggested that the Executive Issues Committee (EIC) act as an Issue Manager (IM) group. The EIC could examine the documents and decide which would be appropriate for the Board to further discuss.
- Rob Davis said there is often a sequence that must be followed when there are multiple documents. He said the linkages between the documents are important, not necessarily the documents themselves. Rob proposed adding a second bullet to the draft advice stating that Ecology, DOE or another entity should conduct surveillance on the three closure documents that will be completed from 2012-2013. He said surveillance means establishing criteria and determining whether those are being met using benchmarks. Dirk suggested using the words tracking or monitoring instead of surveillance. Rob said DOE uses the term surveillance a lot. He said it could also be called an audit or status report.
- Chris suggested the Board examine Appendix I: SST System Waste Retrieval and Closure Process. He said DOE uses this process.
- Dirk said there may be surveillance of DOE activities, but there is no communication
  outside of that. Vince said the Board does receive updates whenever they are concerned
  about a topic. Rob said surveillance includes criteria for measuring success. Committee
  updates would include progress made against the calendar and whether documents
  include the correct content.
- Jeff Luke said he does not think it is within the purview of the Board to conduct surveillance on DOE. He said the Board can request a status update and report. Rob said the advice could be that DOE conduct their own surveillance or ensure the linkages between documents are clear.
- Dick Smith said it is not obvious to him where the alternatives for closure are being examined. He asked if that is addressed in the PA or closure documents. Chris said the PA is not a decision document and closure decisions will be discussed in the closure documents. Information to support these decisions is in the PA.
- Dick said there are decisions posed that are not supported in the documents. This makes him uncomfortable because the ultimate cost and risk associated with these decisions are used to make choices in the future. He said there are many choices to make within a short timeframe. Jeff said the 2012-2014 process laid out today will be used to express closure for permitting. The TPA includes a holistic approach where all documents will be considered together. Jeff said the documents will be available periodically through 2013-2015. He said DOE will present a draft of the proposed site-wide permit modification notification, which will be modified to reflect Board comments.
- Dick asked if all tanks will be treated in the same manner or if DOE will allow various alternatives to apply to different tanks. Jeff said DOE will conduct a PA on all tanks and consider the impacts of the proposed system. The process of examining tanks and making decisions will be unique to the situation.

## **Closure Schedule for WMA C**

Chris referred to Appendix I: SST System Waste Retrieval and Closure Process. He said this diagram contains the information DOE is attempting to summarize into an easy-to-read schedule. DOE appreciates TWC's input in how best to communicate the process.

Chris said the amount required to be compliant with the TPA is approximately \$529 million. The current budget proposal is \$394 million. Adjustments will need to be made and some things will need to be cut.

# Regulator Perspective

- Jeff said the tank process will consider each of the 149 tanks. The closure process will evaluate tanks collectively. Ecology will examine the WMA to see if impacts are acceptable or not. If impacts are found to be unacceptable, DOE will close all tanks in a similar fashion.
- Jeff said he has been asking for a detailed schedule for closure of WMA C because of all the confusion the committee has identified. He said his expectation and belief is that DOE worked hard to get the product in a detailed schedule. Jeff would like a detailed schedule outlining how DOE will meet their goals. He does not believe the schedule can be set yet since the data is not there.
- Jeff said the other aspect is how the RCRA and CERCLA documents integrate. He said this is more of a policy process and procedure than an integration issue. The integration of CERCLA/RCRA has been troublesome for the agencies and the issues have not been resolved. Jeff said this is part of the SST system. He said different language was being used and then one operable unit was created. Ecology believes that operable unit is where DOE will put all of the pipelines based on risk. DOE interpreted the language differently and decided to put pipelines in different places. Jeff would like to know what is being done with the SST pipelines.

#### Committee Discussion

- Larry Lockrem asked what part of the process establishes criteria for determining cleanup levels. Chris said that occurs early in the three sets of closure plans. Dirk said those decisions involve many people, but not the public. Rob said someone is making a statement before the decision is made for cleanup levels. If DOE does not follow the consent decree, they will follow TPA Appendix H.
- Jeff said the agencies have been discussing elements of the PA already. The regulators and public are fully engaged. He said he is concerned about what kind of information the general public requires, which may also be a concern for TWC. The PA will make assumptions that feed into closure plans and the public will examine those closure plans. DOE will then revise these plans based on comments received.

- Bob referred back to Appendix I. He said DOE is sampling residuals right now in a number of tanks. He said to meet the Board's surveillance needs there should be discussions on progress throughout the process.
- Dirk said DOE knows what the corrective measures are. The next step is to analyze what these measures are for future implications. Bob mentioned a comment from the DOE-RL deep vadose zone workshop. He said DOE is still working to determine sources of deep vadose zone contamination. There are 22 locations being drilled with 70 dry wells going through resistivity studies. Chris said the same thing is occurring with retrieval. All the products that are part of the disposition strategy could be used for other things. He said more early involvement would be more productive for everyone.
- Pam said this process is part of the TPA. The process has been vetted through public review and comment. The facts have not been vetted that were developed through the process, but the process itself has been discussed.
- Chris said they are discussing one waste management area out of a total of seven. The entire process will be completed seven times. Rob suspects there might be certain tanks or vessels that would fit clean closure criteria whereas others, even within the same farm, would not. He does not hear individual tank treatment being discussed. Chris said consideration for individual tanks will be included as required.
- Jeff referred to Appendix I. He said the figure is a very simple and useful tool that lays out all the processes for SST WMA waste retrieval and closure. Jeff said in an ideal world there would be a PA that determines the amount of waste that needs to be removed from the tanks for them to be considered safe. He said there is an arbitrary goal of 316 cubic feet for C Farm, which all the agencies agreed to. DOE's goal was to complete plans to determine the right move forward, which became Appendix H. Jeff said he initially thought this was a good idea, but now he does not think so. He said the process is not very iterative. DOE examined models for retrieval of technetium-99 in tanks and are doing a good job making predictions based on sampling conducted so far which will lead to a good PA.
- Harold Heacock said the tank farm leaks are very different so solutions must be tailored
  to each individual tank. He asked if DOE would follow that approach or attempt to create
  an overall treatment plan. Chris said there is a PA for each WMA and a closure plan for
  each area as well. He said Harold is correct that the intent is not to develop a one-sizefits-all approach. Jeff said the intent is to make decisions on each WMA even within parts
  of the WMAs as appropriate.
- Jeff said leaks to groundwater are a major issue in the EIS. If some of the issues are not addressed soon the potential to address them will be gone. He said all the scenarios could not clean the contamination fast enough. Jeff understands it is a complicated process, which is evident by the assumptions. He said it is unusual for WMA C to have groundwater wells with technetium-99 above standards. He asked how a compliant scenario can be developed when the system is not currently compliant. The question is

- when and how to reach compliance. Jeff said they need to understand how to balance decisions. Ideally, time would be spent on C Farm until it is clean. He asked if they really want to spend 13 years cleaning up waste without accomplishing other cleanup activities. The contamination will continue approaching groundwater.
- Dick said a few years ago there was a discussion about the criteria for leaving residual waste. Every effort was made to remove the remaining waste and then a magic number was left based on an analysis of the tanks content before waste was removed. That composition is used to develop the risk calculations and other criteria. The residuals did not resemble that composition. Chris said after every retrieval, DOE completes a retrieval data report. Work is completed on the residual, including a consideration of how mobile those residuals are. Dirk and Vince have information on excellent reports that DOE has prepared as part of the modeling. Bob said when examining the specifics for residual modeling there was instantaneous release and no credit for gravity. Early models were conservative. Now models take into account some degree of retention based on grout and other work, which were part of the discussions at the PA workshop.
- Harold said funding for programs is an issue. He said in ten years the Hanford Site will be the only site asking for money. Hanford will be competing with other programs and issues. He suggested prioritizing the largest risk areas for funding in the near-term. Harold is concerned that funding will be harder to obtain, but he does not believe it will cease completely.
- Chris provided an overview of the document review cycle for M-45-80, M-45-81, M-45-100, and M-45-101 series. He said the genesis of this cycle was in 2006 when C Farm demolition plans were approved by Ecology. There was an associated TPA Consent Decree milestone. The TPA action plans call for the M-45-100 and M-45-101 primary documents while other documents are secondary. Chris added that all dates for a DOE response are being moved to August 25.
- Chris said a white paper on RCRA/CERCLA integration was issued with a series of related workshops. The workshops were held in 2010 with WDOE, ORP and contractor staff. This paper was identified as a deliverable in the RPP-PLAN-46484 Waste Management Area C Closure Demonstration Project Plan. This RCRA/CERCLA integration paper describes how the closure of the entire WMA-C will be done (not just tanks/components without soils). WMA is part of the tank system governed under Washington Administrative Code 173-303-610. Tank liquids in soils from pipelines and tanks will have both hazardous/dangerous wastes along with radioactive constituents (mixed waste).
- Jeff said he will post pdfs of Ecology's responses to their website. Ginger Wireman, Ecology, and Pamela McCann, DOE-ORP, said they would also make that information available. Chris added that this is an opportune time to comment on the paper.
- Dirk brought up the schedule for August. He said there are two document components on the draft August schedule. He asked if there are others that should be put on the agenda.

Chris said the pipeline feasibility study is a priority, although it would be great to have advice on all documents. Vince said he had no further comments to offer on the Tank Removal Study. Chris said the four M-45-80 documents are important. Pam said that if Vince does not have concerns about the tank removal study, the Board could hear a briefing at the September Board meeting instead of offering advice. Pam said the September presentation should focus on the process and implications for removing tanks.

• Dirk said in August, the TWC will discuss two of the documents, which may lead to Board advice for September. TWC will also offer a briefing on the tank removal study for the Board without specific advice, which is an informational piece to help clarify the complexities involved with tank removal.

# Committee Discussion on System Plan

- Cathy provided copies of the DOE-ORP response to Board Advice #238. She said the System Plan will be a recurring topic for TWC.
- Dirk said all the advice response is addressed quite well and he feels DOE provided a good response to the Board. Cathy said the agencies have been putting a great deal of effort into responding to Board advice. Dirk asked if there is something the Board can do to respond to advice response. He said this response could be informal. The committee decided to verbally thank DOE at the next committee meeting.
- Rob said people seemed to lose track of the System Plan concept at the previous Board meeting. He said the System Plan is a great document for looking at where orphan streams are going. Dirk said it is fine to consider the intent and options of the System Plan. The distinction is often lost among management. Rob said the System Plan is useful in that it integrates many other elements. The first step is to conduct studies and then the item will appear on the federal facilities budget list. He said those are the safeguards to prevent management from making decisions.
- Maynard said a brief summary presentation for the Board with a description of the System Plan would be useful. There were many Board members who appeared to be confused. Even though the System Plan is a small part of the big picture, it puts everything in perspective. Dirk said even when information is kept as simple as possible it is still hard to understand for people who are not familiar with the issues. There is a lot of preparation work required for training people.
- Dan McDonald, Ecology, said he feels the System Plan is different from a budget baseline. He said the baseline is used to determine the difference or sameness of technologies. There is some technology engineering and opinion bias. Dan said System Plan 6 is the first time DOE is reviewing ten alternatives. It is also the first time the agencies have reached an agreement. He cautioned that there will always be mechanisms to identify constrained alternatives. There should be a cost-benefit analysis and point of no return, which is why some of the options initially discussed with technology readiness levels of one through six are not included. Technology readiness levels of three and above can be included for consideration. He said that these are qualitative measures, not

- quantitative. Dan said Advice #238 led DOE to System Plan 6. Dan said DOE intends to remain responsive regarding the overall process and whether technology merits and quality merits can be more closely aligned remains to be seen.
- Rob asked if DOE was satisfied they found all orphan streams. He suggested that future Board advice could include that DOE needs to find all orphan streams.
- Dirk said a lot of the System Plan includes how to conduct work. The system is not closed when material is taken to the Environmental Restoration and Disposal Facility (ERDF). Materials will return to the system. Rob cautioned the Board not to think that the System Plan will explain how to run the Waste Treatment Plant (WTP). He said anyone who is familiar with operations knows that there is a "sweet spot" where facilities run best. Rob said the plant sets the demand for how the feed can be delivered. He said another issue is that at least two of the tanks have high levels of mercury, which should be processed last. Rob said nobody is listening to that concern and the mercury waste will likely be processed in the first ten years.
- Dan said Board members have been around for a long time and are aware of the lack of
  integration between tank farms at the WTP contingent. He would like a concerted policy
  effort over time from the Board that speaks to the need for integration. Dirk
  recommended that Susan bring the issue up in EIC. Dan asked what integration the Board
  is undertaking to ensure this process is as consistent and as full of integrity as possible.
  Dirk said processing some waste early may adversely impact the plant. Dan said DOE,
  Ecology, and all other interested parties ensure there is enough integration to optimize
  WTP capacity for receiving waste.
- Dirk said there is a similar concern with carbon-14. He said most of the mercury moves out through the stacks, which leads to potential air emission issues. He said the presence of mercury or carbon-14 could create a problem elsewhere. Rob said mercury does not go up the stack; it is recycled back into the system. Mercury stays in the plant and is not removed, leading to corrosion concerns. Rob added that he would want garnet removed last because it is more abrasive than other contaminants. He said there are interface control documents (ICDs).
- Rob said this may be a policy issue for WTP. He said the Board could examine the various ICDs and provide a brief description. Dan said integration is crucial for the ICD to function.
- Dirk said the information needs to be simplified for the Board. He said the information is important, but the advice may be too complex to pass through the Board. The parties will know what the advice means, but there will be no Board consensus for the advice.
- Rob suggested it might be to TWC's benefit to request a two person presentation from DOE and/or Bechtel at a committee meeting on the interface documents for WTP waste.
- Harold said he is looking at the big picture. The tank farms must feed waste to the vitrification plant in a format that is acceptable to design and integration in terms of

capacity, etc. He said whether DOE uses a particular filtration process is not within the Board's purview. The policy point of view would be that a reliable filtration system is needed. He said the Board wants to ensure waste criteria is met and is concerned about storage capacity.

- Dick asked if ICDs change over time and how much success DOE is having with implementing changes in the interfaced ICDs. Rob said it is difficult. He said it is too early to be looking at an operations review.
- Maynard said Board advice is supposed to be policy level only, but this advice is more
  technical. He said lots of technical issues are policy and it can be difficult to separate the
  two. He said there are a number of people on the Board who say technology is not a
  policy, but it is. Dirk said this issue will never be resolved completely; advice can be
  policy depending on how it is viewed.
- Dirk said TWC will discuss this topic again on the September agenda. Rob will act as an IM.

# **Committee Business**

The committee reviewed the six month work plan and discussed meeting topics for August. Potential August topics include: DOE Order 435.1 Waste Determination Process for C Farm and leaked wastes in soils, WMA C closure schedule, RCRA/CERCLA white paper, tank removal study and pipeline feasibility study.

Vince said the only way to meet TPA deadlines is landfill closure and the committee needs to know if that is the case. He said excavating soil five feet does not go beyond 50 percent contaminant removal. Dirk asked why five feet was chosen. He asked how much of the dose is hands-on and why work was not being done remotely.

Vince said the key is overall risk reduction. He said there is a risk when tanks are left in place. A PA must be used to evaluate risk. Dirk said that is a policy problem. He asked what the other possibilities are beyond the two being examined. He asked what makes the difference between waste being excavated versus being sent to ERDF. Pam said it is important that the Board understand the key is risk reduction. Vince asked when DOE is going to use the PA for risk reduction.

Dirk said there are problems with how the WMA C issue is being framed. Vince said this topic should be on the agenda for August so they can have a dry run before the September meeting.

Dan said the question is if DOE can accomplish WMA C goals within cost and schedule. If DOE claims they can do it, what assumptions will be used. If clean closure is chosen over landfill closure, DOE will still have the same questions. Dick said many Board members believe that DOE should just remove the tanks, which will be an easy process. Pam said the Board needs to hear the difference between landfill and clean closure and how the tank removal study affects

that. Dirk said there are other ways to think about the question. Maynard said TWC should have another discussion in August. He feels September is probably too early to return with a presentation for the entire Board.

Rob wanted to comment on the Board's recent discussion on the System Plan advice. He said he does not see carbon-14 as much of an issue when there are so many other isotopes to worry about, including technetium-99. Rob wonders if they really want contaminants going to the Hanford Site or if they would prefer Yucca Mountain. DOE claims that Yucca Mountain is not available. The Hanford Site has been identified as one of the top three places for storing waste. Rob emphasized Hanford has been identified as a site to store waste, not to dispose of waste. If the cost of transportation is too high and too rigorous, then waste should be left on the Hanford Site and stored in the basalt. Cathy said RAP was discussing this issue as part of their Greater than Class C (GTCC) discussion.

The committee decided to hold a call in July to prepare for the August meeting. There will not be a June call.

# **Handouts**

- Waste Management Area C Update, Department of Energy-Office of River Protection, June, 9, 2011.
- Waste Management Area C Performance Assessment Draft Advice v.0. HAB Tank Waste Committee.
- Response to Hanford Advisory Board (HAB) Advice #238, "System Planning Process"

# **Attendees**

# HAB members and alternates

David Bernhard	Harold Heacock	Todd Martin
Al Boldt (phone)	Pam Larsen	Vince Panesko
Shelley Cimon	Susan Leckband	Maynard Plahuta
Rob Davis	Larry Lockrem	Dick Smith
Dirk Dunning	Jeff Luke	

# Others

Chris Kemp, DOE-ORP	Jeff Lyon, Ecology	Nicole Addington, EnviroIssues
Bob Lober, DOE-ORP	Dan McDonald, Ecology	Cathy McCague, EnviroIssues
Pamela McCann, DOE-ORP	Ginger Wireman, Ecology	Sharon Braswell, MSA
		Marcel Bergeron, WRPS
		Mike Berriochoa, WRPS
		Mike Connelly, WRPS
		Susan Eberlein, WRPS
		Les Fort, WRPS
		Keith Quigly, WRPS

# **Attachment 1: Transcribed Flip Chart Notes**

#### Waste Management Area C Performance Assessment

- 1. Topics/Issues to be discussed
  - a. Eco Risk Analysis does the committee want a presentation? How will the caps perform?
  - b. IM follow-up on lateral flow transport
  - c. EIC review of integration/linkage of key documents for both DOE-RL & DOE-ORP
    - i. Recommendation made for EIC to track/do

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## Waste Management Area C Performance Assessment cont'd

- 2. Add advice bullet about surveillance activity (tracking/status report/report out on) on three activities RCRA, DOE & CERCLA Closure Documents
  - a. What is the established criteria/benchmarks?
  - b. How do they plan to meet these activities between 2012 & 2013?
  - c. Measuring activities against criteria
    - i. Does the document have the right information in it?
- 3. Vince, Rob and Jeff to work out further advice bullet language to bring forward to the committee in August

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#### Waste Management Area C Performance Assessment cont'd

- 4. Leaving residuals in tanks an analysis
  - a. Volume # is not very useful key advice policy point
- 5. Funding considerations ORP should plan and focus on prioritizing risk areas for future funding given political uncertainty key advice policy point

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