

**FINAL MEETING SUMMARY**  
**HANFORD ADVISORY BOARD**  
**TANK WASTE COMMITTEE MEETING**  
*March 8, 2011*  
*Richland, WA*

**Topics in this Meeting Summary**

Welcome and Introductions ..... 1  
Waste Management Area C Performance Assessment ..... 1  
Garnet Cutting for Mobile Arm Retrieval System..... 6  
Committee of the Whole on Tank Closure Debrief ..... 9  
System Plan Rev 6 ..... 11  
Committee Business..... 13  
Handouts ..... 14  
Attendees..... 14  
Attachment 1: Transcribed Flip Chart Notes ..... 15

*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**

Larry Lockrem, Tank Waste Committee (TWC) chair, welcomed the committee and introductions were made. The committee decided to allow more time for review of the February meeting summary before adopting it.

**Waste Management Area C Performance Assessment**

Vince Panesko, issue manger (IM) for the Waste Management Area C Performance Assessment (WMA-C PA), said he and Dirk Dunning have been attending workshops on the topic. He said that the fundamental purpose of a PA is to examine the final waste disposition at Hanford, such as waste in the tanks at C-Farm. Vince said the quest is to model waste movement over 10,000 years, considering impacts to groundwater and the Columbia River in addition to potential exposures to people. He said the purpose of this exercise is to determine whether the current model is satisfactory or not in terms of dose predictions. If the model is not satisfactory, the tanks will need to be re-evaluated to find a better solution. Vince said lines of defense are needed to prevent contaminants from leaking and to obtain acceptable dose levels. He stressed the PA is

an iterative process and noted that the U.S. Department of Energy (DOE) is modeling under various conditions. Vince added that the Tank Closure & Waste Management Environmental Impact Statement (TC&WM EIS) has not been issued yet.

Jerry Peltier asked if the WMA-C PA is based on the assumption that residual liquids will remain in the tanks. Vince said there are different options. One option is to assume remaining material and another option assumes no remaining material. He said the initial modeling does look at contamination left in the tank, but the question is still being debated. Vince said the whole concept of the WMA-C PA over the previous two years was as a modeling exercise and did not make decisions. He said the PA was put on hold after the last workshop because it gives the appearance that DOE has decided to leave material in the tanks, although the agency has not decided anything yet. The PA is being delayed until the TC&WM EIS is issued, although DOE is still modeling various pieces.

Vince said there are questions surrounding DOE Order 435.1. This order requires a PA, but it really only requires addressing the tank itself. DOE Order 435.1 does not address all of the contamination that is in the soil and how those contaminants might be moving through the groundwater. He said there is a composite analysis (CA) under the Comprehensive Environmental Response and Liability Act (CERCLA) closure, which covers all the contamination around the tanks. He said this process is confusing and there are many questions about how it will work.

Vince said it was interesting to hear that DOE could not seem to relate technetium found in groundwater to any tanks. He said at the previous workshop, Dirk made a point that if DOE does not know how technetium entered the groundwater, how can they model it? Vince said there were places under the tank farm with solid layers. When contamination moves through the soil and hits this solid layer, it moves sideways. The modeling currently done has assumed that any contamination moves vertically downward. Vince said they discussed lateral movement quite a bit at the previous workshop. He brought up the example of 200-East where everyone thought the site would be clean, but it was found to be contaminated. The contamination was determined to have come from the cribs, which are 600-800 feet away from 200-East. DOE questioned how the contamination moved such a long distance. They found that a very thin layer of solid material, approximately two or three inches thick, was transporting the contamination. Vince said the people drilling the boreholes and interpreting samples are not looking for these types of transport mechanisms because they do not have the same experience base as people with more extensive geological knowledge. Vince said this is an area of contention that affects modeling of the area.

Vince said another question is how the PA and the CA will work together. He said Chris Kemp, DOE-Office of River Protection (DOE-ORP), may be able to provide clarification.

#### *Agency Perspective*

- Chris said he appreciates the opportunity to speak with the committee and the opportunity to work with Vince and Dirk at the workshop sessions. He said DOE is following the same process for tank closure used at Idaho and Savannah River. DOE has work sessions and scoping sessions with participants from regulatory agencies, the Hanford Advisory

Board (Board or HAB), the tribes and anyone else who is interested in the process. He said it is very apparent that there are different ways to do modeling. He said it was a failure on the part of DOE to fully explain their modeling process. He said Vince is right in that they are able to use DOE Order 435.1, a CERCLA risk assessment or another risk assessment process. Chris said DOE is conducting one risk assessment for the residuals remaining in the tanks, one for the contaminants on the soil, and another for contaminants in groundwater. He said DOE is required by the Tri-Party Agreement (TPA) to conduct one risk assessment for all of those various components, which is an important point to remember.

- Chris addressed the question of when the TC&WM EIS would be available. He said Inés Triay, DOE Assistant Secretary for Environmental Management, is considering a supplemental analysis for the TC&WM EIS, but he is not sure what the resulting delay might be. He said Inés Triay is concerned that DOE is taking a different approach for the WMA-C PA that is outside the bounding conditions of the TC&WM EIS. The TC&WM EIS uses a Subsurface Transport over Multiple Phases (STOMP) model in the vadose zone and they do not want to use something different.
- Chris said the TC&WM EIS is an excellent body of work for considering site-wide impacts, but an earlier draft called for the need for site-specific modeling to address particular needs. He said DOE wants features, events and process steps documented very clearly. The Washington State Department of Ecology (Ecology) would like an eco-workshop in May with a discussion on lessons learned from Savannah River.
- Chris described the ecological risk assessment. He said it documents potential ecological events that could occur down to the minor impacts of ants and badgers transporting material. He said the Nuclear Regulation Commission (NRC) requires all impacts to be completely documented. Chris said DOE is not ready to do modeling right now as it takes the modelers much time to process a dataset. He said modeling is an iterative process that requires quality controls and the ability to work with the numbers. Chris said right now DOE is focused on retrieving tank waste and closing Area C, while keeping workers safe. He said the decisions have not all be made; they are currently being discussed at a high level.

### *Regulator Perspective*

- Jeff Lyon, Ecology asked for clarification on which decisions have not been made. Chris said decisions on the TC&WM EIS schedule and when DOE would be able to start modeling for C-Farm have not been made. Chris said he would like to finish the data package and begin modeling in October or November, but he is unsure if that is realistic because of the large amount of work that must be completed during that timeframe.
- Jeff said the PA is meant to encompass TPA needs and the intended actions of DOE. The PA does not just adhere to DOE Order 435.1. He expressed concerned about DOE's chosen actions. He said an initial PA was generated and published several years prior with similar scenarios to those under consideration currently. Jeff said in the draft

TC&WM EIS there was a statement about the preferred alternative so he is unsure why the EIS would delay the modeling process.

- Jeff said the PA delay, the permitting process and the closure process are all related in his mind. He said meeting the schedule and overcoming difficult issues will require a lot of cooperative work. He said the workshops are meant to be transparent to help people understand the complexity of the process, which is part of DOE's commitment to transparency and communication to public. He said the decision would not be an easy one and nobody will be entirely pleased with the end result.

### *Committee Discussion*

- Dick Smith said he has not heard anybody mention how to address the stratification layer spreading contamination. He asked whether anyone was working on the issue and how the situation could be modeled. Chris said they are fully aware of the issue and are working with others on alternative conceptual models.
- Jeff said they have already written a workplan for the Resource Conservation and Recovery Act (RCRA) facility investigation. They have identified samples areas with high contamination that are more important to take samples from than others. He said they also evaluate soil characteristics in all samples. Jeff said they considered alternative conceptual models to help explain the results. He said one problem when constructing models is that records are not always complete.
- Larry asked what other models besides STOMP DOE was using. Chris said they were not using models other than STOMP. Inés Triay's concern was that they would use other models for the different modeling scenarios, but that is not the case.
- Jeff Luke discussed the supplemental analysis from a National Environmental Policy Act (NEPA) perspective. He asked if the supplemental analysis would be conducted on tank waste closure after the TC&WM EIS is issued or if the analysis will be a supplemental part of the EIS itself. Chris said he heard the supplemental analysis on the TC&WM EIS will be completed before it is final. Dan McDonald, Ecology, said the TC&WM EIS analysis went out for public comment and they would conduct a supplemental analysis afterward. He said the question is when the TC&WM EIS will be finalized and available for public comment again. Dan said the team working on the TC&WM EIS should be the ones to communicate that information.
- Al Boldt said the impermeable or near-impermeable layers facilitating horizontal transport were first introduced by Dirk several years ago. He said there is another layer above the impermeable layer. When the tank farm was built a hole was dug, the tank was put in place, then the hole was filled. He said they have interrupted the soil layers. Al said there is a higher percolation under the tank farm than the average modeled from rainfall. Al said the reason contaminants are moving fast is that there may be five times as much water moving through the soil.
- Al had some concerns about closure. He said DOE would install barriers that are basically an umbrella above the tank. He said any water that hits this layer would be

transported back under the tank, which may make the issue worse than before barriers were installed. He said the Hanford barriers could be improved by boring holes every six to eight feet in order to interrupt water flowing at all levels, bypassing current vadose zone deposits. Al said they should avoid routing additional water under or into the tank farm. Jeff Lyon said he does not necessarily draw the same conclusion. Since the barriers are designed for evapotranspiration there should not be any runoff. Al said even if the barriers are absent, DOE should be trying to prevent contaminants from moving through the vadose zone. Any contaminant movement should avoid existing contamination. Jeff said DOE is doing something similar in the interim by not allowing contamination run off.

- Cathy McCague asked if there were possible advice elements from this discussion. Vince said he has thought about possible advice, but does not have any specific ideas. He said any advice would likely include more clarity from DOE.
- Jerry said Vince talked about the jet that could sustain or move parallel contamination transportation. Jerry said that he assumes the PA would indicate where material has encountered the leachate. He asked whether any constituents in the contaminants would adhere to the leachate or solid sand. Jerry said contamination occurs over years and it could be minute, having a dilution factor in the groundwater until the contamination reaches the Columbia River. He said they need to consider all movement of constituents through the soil. Jerry asked what the real risk is to the person down the river. He said they could be feeding the river for 20 years with some level of contamination, which may never exist in dangerous quantities.
- Jerry said the PA should ask several of the questions he is asking and provide a foundation to judge what is valid in the TC&WM EIS and what is not. He said he assumes there is not much of dilution process with technetium. Vince said a problem still exists that the source is too high. Jeff said there are high levels at C-Farm. Jerry said when most of the free liquids are pumped the only thing that will transport materials to the groundwater is rain and moisture. He said there are contributing factors that lead to a decision of whether waste can remain on site or not.
- Vince said when tanks leak or overflow, material enters the groundwater. The soil is not normal sand anymore because of the caustic material moving through that soil from the tanks to the groundwater, which changes the composition forever. He said they do not have untouched sand. The question is how contamination moves within that zone versus zones without previous chemical treatment. He said the agencies are aware of the issue, but have not analyzed it.
- Jerry said DOE is planning to finalize the TC&WM EIS and then conduct a PA, but he feels it should be the other way around because information developed in the PA would be necessary to include in the TC&WM EIS.
- Jeff Lyon said the TC&WM EIS considers some assumptions and outcomes, including the way closure is constructed and some regulations. He said the TC&WM EIS will bound and determine the impacts. DOE will use site-specific information. The construction of the TC&WM EIS will frame the decision.

- Jeff Luke said he does not see advice at this point. He sees a question moving forward and they should also move a statement forward. He asked if the PA, as currently configured, would address the needs of RCRA and DOE Order 435.1 and if it would be an all-inclusive PA for C-Farm. Chris said that was correct. Jeff said if the Board moves a question forward to DOE, they should also move forward a statement congratulating DOE on having the foresight to have a model that addresses all the regulatory requirements since this is not always the case. He added that Larry raised a good question that needs to be asked. Larry read that question from the handout he provided: “there is a question as to how the EIS delay and the C-Farm PA delay will impact the TPA milestone for closing C-Tank Farm in 2014 Tri-Party Agreement (TPA Milestone M-045-83 *Complete Closure of WMA C*) has the date for closure of WMA C as 6/30/2019.”
- Al suggested the Board could offer advice that they would like to see DOE and the contractors examine methods to attenuate the impact of horizontal water transport if the phenomena exist, regardless of what action will be taken. Jeff Luke said that sounded like technical advice, not programmatic advice. DOE did say they were looking at lateral flow in the modeling process of the PA so Jeff questioned the purpose of that advice.
- Al said the current models appear inadequate for examining contaminants being transported sideways from the tank farm. He said the advice point will recommend that the problem be fixed without advising how to do this.
- Larry suggested that Vince take Al’s recommendation back to the PA workshop for more discussion.
- Dick said they have known about the existence of various horizontal layers that disrupt the flow path of contaminants for a long time. He said the modelers have not been able to do anything useful with the information so far. In his opinion, they will not be able to do anything between now and December. Dick said the models are only as good as the available data and the applications are only useful to compare alternatives. He said the types of answers in the TC&WM EIS and PA may be incorrect, but they will not be sure how inaccurate they are and in which direction. He said they do not have the type of data needed to build a model that incorporates lateral flow. DOE would need a detailed survey of the underground areas, but that would be overly costly.
- Pam Larsen said the time for advice was premature. She said the Board has two very bright people representing them on the PA who facilitate information flow between the Board and DOE. She suggested defining the Board’s expectations of the TC&WM EIS and writing advice if they feel the TC&WM EIS has failed. Larry agreed with Pam. He said Vince and Dirk should move forward and continue updating TWC.

### **Garnet Cutting for Mobile Arm Retrieval System**

Larry introduced the next topic on the agenda: Garnet Cutting for Mobile Arm Retrieval System (MARS).

Dick provided an issue manager introduction on the topic and said at least a year ago TWC heard that DOE was considering using garnet for concrete cutting. At that point they raised a question about what would happen to the Waste Treatment Plant (WTP) if garnet entered the tanks. Bechtel and others did proceed to develop equipment and successfully made a cut on Tank C-107. Twenty six hundred pounds of garnet went into the system. Dick said they originally were considering using garnet on 22 tanks, but the number was now much smaller. Dick said the Board had enough time to consider how to perform that job again and perhaps look at alternative approach, such as boring with high-pressure water. Dick said he personally thinks if the MARS system works as well as he hopes it does, he would like to see it used in almost all the tanks because it cuts very cleanly and eliminates some problems associated with tank cutting.

Chris provided a presentation titled "Large Riser Installations at C Tank Farm and the Use of Garnet as a Cutting Media". Chris said on December 18 and 19 a large riser was cut into Tank C-107. He said DOE was very excited about the potential for MARS on retrieval, particularly for C-107. Chris said large risers are needed to access certain single shell tanks (SSTs) with advanced retrieval equipment. C-107 is the first tank to receive such a riser. Installing risers requires cutting technology.

Chris read through the key considerations of the cutting apparatus. He said they do not want this to be a research process and DOE takes the 2014 retrieval date seriously. DOE needs a technology that is commercially available with industry experience so they can use lessons learned outside of the Hanford Site. Cutting performance is also crucial to ensure there is a comprehensive method to complete the cutting. Chris also emphasized the importance of worker safety.

Chris said DOE evaluated and rated the performance on the three technologies identified for further evaluation. They considered the maturity/complexity of the technology, how much waste was generated, how safe the technology was, and what the cost and schedule would be. High pressure water jet cutting with an abrasive (garnet) was selected because it rated well in all categories.

Chris said the cutting was clean from a radiological perspective. There were three redundant cutting heads and only one was used during the cut. Chris said he spent a lot of time at the site during the process because having such a large hole cut into a waste tank is very important to DOE. He said they were amazed at how clean the dome was, both in terms of being radiologically clean and cut cleanly. He said there were no radiological events with personnel. Chris said he was concerned about where information was coming from that indicated there had been an incident during the job. He said he does not believe the facts are accurate because there were no radiological or industrial hygiene events.

Chris said they removed the dome and planned to take a number of samples on the concrete and rebar. He said there was a TPA milestone for the sampling and analysis plan. Chris said other organizations were also interested in sampling the material.

Chris said they counted the amount of garnet remaining to determine how much garnet was used. He said they did use more garnet than originally estimated. The early estimate was 2,800 pounds of garnet, but they had approval from Ecology to use 3,100 pounds. However, they did not need

to use that entire amount. Chris said he did not know what engineering controls were supposed to have been bypassed that were mentioned at the February TWC meeting. Chris said Dominion Engineering, Inc evaluated the impact of garnet in the waste stream and impacts to WTP. They found that the addition of garnet would not have a major impact and there was already a large amount of abrasive material in the tanks.

Chris concluded his presentation by saying Ecology has approved cutting three more tanks. DOE will be cutting C-105 next. Chris said, from his perspective, garnet cutting is the best way to cut a dome for radiological control. He said DOE is currently considering the next tanks to cut and they may develop a different process. Chris said they have not made any decisions past C-Farm.

#### *Regulator Perspective*

- Nancy Uziembo, Ecology, said she is pleased with the operation and impressed with the amount of time spent practicing the cut. She said Ecology approved the use of garnet because it was the fastest and safest technique. She said MARS was an important component. Nancy said it was a well done job.
- Dan returned to how the process was done. He said to his knowledge, none of the personnel incurred exposure from radiation or from the garnet. He said DOE was receptive to Ecology's concern about erosion. Dan said Ecology was eager for a non-abrasive technique to cut the tanks. He said the amount of garnet erosion was speculative and determining a probabilistic evaluation would be difficult. Dan added that WTP would be running for 40 years so they need to ensure that anything entering the tanks will not degrade the performance of that system.

#### *Committee Discussion*

- Pam said she spoke with a ceramic metallurgist about the garnet question. She was told that other materials in the tanks, such as plutonium oxide are a greater issue than garnet. She added that it is best to avoid putting additional material in the tanks if it can be avoided. Pam said she is concerned about how the issue of whether workers were exposed during the garnet cutting had been brought up at the February TWC meeting.
- Larry said he wanted to clarify comments made about the possible exposure issue that occurred during the garnet cutting. He said there was not necessarily a white paper document, but there was some documentation provided to Rob Davis that was written up in terms of the garnet cutting activities. That document referenced the amount of garnet used and stated it exceeded the amount of garnet stated in the engineering controls. He said Rob's concern was whether the amount of garnet used exceeded engineering controls and if there should have been a stop work. Larry said he would obtain a copy of that document for Chris.
- Chris said that Pamela McCann received information from Keith Smith that there was an exposure. He said that he did not have any information about exposure to personnel that occurred during the cutting evolution. He stressed the importance of ensuring they had factual information. Chris added that the group of people he works with are outstanding.



- Cathy noted that part of the Board's process is to hear all information. The Board is a place for concerns to be aired. She said Pamela will follow up with Keith about the information he heard regarding the exposure.
- Matt Loudan, Washington River Protective Services (WRPS), asked if compressed stresses were related to the dome itself. He said domes like to be under compression. He said they conducted a structural analysis under a Pacific Northwest National Laboratory (PNNL) contract and commissioned an independent review. They looked at the actual cut surface itself and the rebar to determine the stresses and saw adequate margins.
- Al said the calculations indicate erosion is not a concern. He asked if the pilot plant was Plexiglas or steel. Chris said it was steel. He said there were additional wear plates within selected vessels in the treatment plant that needed to be put in.
- Al said they observed specific wear points. He asked if the calculation corresponds to problem areas. Chris said it did. Dan said the original calculations for garnet erosion prepared by DOE did not look right. The agency repeated the calculation. He said at the same time there was a continuing study of pulse jet mixers that examined the difference in pressure and waste loading along with other contributing factors. He said the studies had not been finished, but they seemed to indicate a sufficient margin in the erosion calculations for nominal wear.
- Dick said overall, it appeared the job went well and the process has been well-researched. He said the only concern is the long-term potential for system damage from garnet. He said over time DOE would find new cutting techniques. Having a large aperture for a large riser will provide a real benefit for cleaning and emptying the tanks within a reasonable timeframe. He said TWC should continue monitoring progress.

### **Committee of the Whole on Tank Closure Debrief**

Larry introduce next agenda topic: Committee of the Whole (COTW) on Tank Closure Debrief. He provided a handout of the transcribed flip chart notes from the January COTW meeting.

Jeff Luke, IM for the topic, said he wanted to draw the committee's attention to what he perceives as a major disconnect between what he observed at the Committee of the Whole (COTW) meeting and the requirements for DOE and Ecology under the TPA. He said DOE and Ecology have a connection problem in TPA milestone M-4583 requiring complete closure of WMA-C (C-Farm) by June 30, 2019. He said Ecology will need to issue a permit to DOE within 12 months of DOE submitting the application to Ecology. To meet the milestone the permit would be due to Ecology on September 30, 2015. Jeff said he has heard it can take up to two years to develop a permit, which would mean DOE needs to begin preparing their permit in 2013. This would give DOE less than three years to perform all the work necessary to close the tank farms. Jeff said he has heard from many people that given the time and other restrictions set by the TPA, the only way to complete the work by 2019 is through landfill closure.

Jeff said he thought the COTW was not thinking along those terms. He said the COTW is interested in exploring certain activities that, in his mind, would proceed far beyond 2019. He

said it would be impossible for DOE to close by 2019 if the Board explored these sounding board concepts. Jeff said there is a disconnect by the TPA drivers for Ecology and DOE. He said they are trying to uphold the milestones and concepts held by the Board, but they need to reconcile the concepts. Jeff said they could consider holding another COTW meeting if TWC thought it was worthwhile.

#### *Agency Debrief*

- Chris said he did not intend to respond to the comments other than to say that there is a consent decree and associated TPA milestones. He said DOE is working to live up to the expectations for both retrieval and closure. Chris provided copies of a high level sketch for what needs to happen in order to meet the 2019 deadline. The sketch covers items other than just tank retrieval.
- Jeff Lyon said he wanted to point out that the PA schedule has a short turn-around time and that the schedules are actually accelerated over milestones. He said Jeff Luke is making the point he has been attempting to make with the committee and decision-makers, which is how to address people who are concerned about the work. He said they need a way to communicate with senior management if they were considering clean closure. Jeff said they cannot meet the TPA milestone as it currently exists and close the tanks. He said there is a TPA process to consider what will happen if the tanks are not closed. There would need to be some risk assessment to understand what the tanks should look like when closed. They need to spend time talking about these issues internally and obtain the correct permit.

#### *Committee Discussion*

- Jeff Luke said the schedule is not only tight, but it can only be filled by tank closure to meet the deadlines. He suggested that the Board say something if they do not support this.
- Pam said she does not think it is time for advice. She suggested waiting for more information and for the TC&WM EIS to be available. She said either they would have to do landfill closure for C-Farm or possibly amend the TPA to allow additional time.
- Maynard said if there was agreement, and he does not think there is among the Board, that landfill closure is acceptable, then they might want to deal with that issue fairly soon. The other issue is whether to extend the deadline to allow other considerations. He said a question for the Board would be how much information they need. Maynard said they kept losing time on the TC&WM EIS and soon they would not have any choice but to go along with the TPA milestone.
- Jeff Luke said he does not think everyone understands the assumptions behind the TPA milestones. He has heard many times that the PA is predisposed to landfill closure. He is not sure whether the Board and others are aware that the TPA milestone for C-Farm is landfill closure.
- Jeff said according to the schedule, they are working on the first tier of the closure plan now. He said groundwater contamination is occurring today and will only continue

getting worse while they wait to act. He said all of the options they would classify under the TC&WM EIS are unacceptable depending on where monitoring occurs. Jeff said they can make a change in how they spend money and time, but they cannot make a change to groundwater contamination and that can be made worse by delaying decisions. It can also be made better by making early decisions. He said there are some assumptions they have no control over. He said clean closure would cost four to six times more than the amount of funding available and will take a very long time.

- Vince said the conversation ties into some advice. He said the TWC could draft advice to clarify the visibility of DOE's EIS schedule to meet milestones. They could also hold another COTW.
- Maynard said they should have another workshop fairly soon to flush the issue out more. He said Jeff mentioned that items he was looking for were not addressed. Maynard said they could determine whether they need some advice and ensure people at the workshop clearly understand the assumptions of a landfill basis. Vince said they should have draft advice at the next meeting.
- Dick asked if the PA considers alternatives for cleanup. Jeff Lyon said the TC&WM EIS does that. The PA is designed to assess the impacts of contamination so it does not have a clean closure option. Dick said the PA and TC&WM EIS seem to be closely linked. He said the possible remediation methods available need to be considered somewhere. He asked if clean closure was addressed in any of the calculations and modeling. Jeff said that was being done in the TC&WM EIS. He said when Ecology gets the permit application, DOE must demonstrate they cannot clean close and want to landfill close. He said there will be a number of inputs into that.
- Susan Eberlein, WRPS, said the PA will look at the level of risks from removing one tank or from conducting certain remedial actions. He said it provides detail on the actions that might be taken.
- Pamela McCann, DOE-ORP, said aside from technical and policy issues, when conducting a COTW, they have to look at the surrounding cost and available funds. They want to be prudent around timing, such as having the meeting around committee week. She said they should be very crisp about what the committee needs from the workshop.
- Pam said they were a year away from this next meeting since they are just guessing right now without more information from the PA and TC&WM EIS.
- Jeff Lyon said DOE is currently developing submittals for the State. He said if all the committee is concerned about knowing is the milestones and what the work schedule is, they should be happy with the work results. Jeff said the TC&WM EIS will be out in November if it remains on schedule. He said a lot of the information the Board wants is already available. Jeff said if they wait a year for the TC&WM EIS they will see the same draft already available with some nuances.

## **System Plan Rev 6**

Harold Heacock said the planning process for tank farms had been underway for a number of years at DOE-ORP. The Board issued advice in February to the agencies on the System Plan and opportunities for the Board to provide input. He said the System Plan does not directly address the vitrification plant, although the plan does address necessary elements to move waste into the plant and procedures for after waste leaves the plant. In February, the agency approved assumptions for System Plan Rev 6 based on improvements to those assumptions. Ecology is starting development of the assumptions for System Plan Rev 7.

Harold said the Board was invited to comment on the assumptions in System Plan Rev 6. He said based on the schedule, Board comments on Rev 6 would provide input on Rev 7 if received by July of this year. He said the Board needs to develop advice by the June Board meeting. This advice would only reflect the assumptions for the System Plan Rev 6 and not the entire document.

Cathy said TWC should inform the IMs on what to examine in terms of concerns and considerations for Rev 6 assumptions. The IMs will then bring the topic back to committee to develop advice.

Harold asked everyone who is interested in the topic to review the assumptions package. Harold said he and Dirk would provide a schedule for the committee with deadlines for input.

#### *Committee Discussion*

- Dan said that although the advice would be available in June, he advocates offering input as soon as ideas start coalescing. Dan said they will be more likely to use comments on assumptions that are provided early. He said the DOE 2016 vision is considered reality and that it is important for the Board to examine.
- Jeff Luke clarified Dan's statement that comments received by June would not be considered for the System Plan Rev 6 iteration. Dan said that they may not be considered. He understands that formal advice does take time to develop. He would be interested to hear about any possible advice points and Board discussion as soon as possible so he can forward that information to the people working on the System Plan. Cathy said Board members can submit comments as individuals, but they cannot speak for the Board and cannot submit comments as Board consensus without Board approval. Dan said the ability to influence the System Plan decreases as time goes by because they are continually refining the assumptions so by July they will essentially be set.
- Maynard said there is value for the agencies in hearing Board discussions. He cautioned against being held up by the bureaucracy. Maynard also said they need to recognize that the official word must come as advice from the entire Board. He said they should not hold back on their opinions and thoughts during discussions.
- Cathy suggested holding an IM meeting before the April committee meeting and after the members have read the assumptions. Harold agreed. He said they received the assumptions a few weeks prior and they would start developing comments. Cathy said she will re-send the assumptions to the committee.

- Dan said he is concerned because he feels the TWC is going down the same path where information will come from multiple sources and be lost. He suggested information come through a focus point, either Harold or Cathy, or that it go through another consistent process to prevent any loss of comments and questions. Jeff said establishing that type of process is not part of the Board's process. He said people can provide as many comments they would like as individuals or as a representative of their group, but they need to make it clear that they are not speaking on behalf of the Board or any committee to avoid any confusion.
- Harold said they could compile all comments into a single package and bring that to the June Board meeting. Jeff said that may be problematic since he would not necessarily agree with everything in the package. Larry said these would just be discussion points and not recommendations. They would hold an open discussion with committee members and the agencies similar to any other IM issue process. Jeff said this process was different in that they would be providing advice without committee consensus. Cathy said the process would be like other IM meetings where issue managers bring forward concerns of committee members for discussion with the agency representatives.
- Harold said they will need to review all comments for inclusion into a single cohesive document that may lead to draft advice. He said they will have to resolve any differences in committee meetings or IM meetings.
- Larry said he does not want to stop communication, especially since once the Board finishes with one System Plan Rev the agencies are already two ahead.
- Cathy said next steps are to have an IM meeting on key assumptions for Rev 6 and to report to the committee in April to begin developing advice.

### **Committee Business**

The committee re-elected Dirk to serve as TWC chair and Larry to serve as vice-chair for another year.

The committee reviewed their upcoming workplan. For next month, the committee will request a status update on the technology roadmap, committee discussion on the next steps for tank closure planning and a debrief of the issue manager meeting on the System Plan. Pamela suggested also discussing the 2020 vision, which will be a part of the budget workshop next week.

Cathy, Pamela, Larry, Dirk and Ginger decided to have a call the following week. Cathy will revise the 6-month work plan and the meeting topics table for committee leadership review.

## **Handouts**

Numeric Codes and Models Workshop for WMA-C Performance Assessment. January 25-26-27, 2011.

Numeric Codes and Models Workshop for WMA-C Performance Assessment. January 25-26-27, 2011. Ecology comments.

Large Riser Installations at C Tank Farm and the Use of Garnet as a Cutting Media. March 9, 2011. Chris Kemp, DOE-Office of River Protection.

Committee of the Whole Meeting Tank Closure Planning – Transcribed Flip Chart Notes. January 6, 2011.

## **Attendees**

### **HAB Members and Alternates**

Allyn Boldt	Pam Larsen	Jerry Peltier
Harold Heacock	Susan Leckband	Maynard Plahuta
Meme Samkow (phone)	Jeff Luke	Dick Smith
Rebecca Holland	Liz Mattson (phone)	
Steve Hudson (phone)	Vince Panesko	

### **Others**

Chris Kemp, DOE-ORP	Rebecca Gerhart, EPA (phone)	Nicole Addington, EnviroIssues
Pamela McCann, DOE-ORP	Jeff Lyon, Ecology	Cathy McCague, EnviroIssues
Joni Norton, DOE-ORP	Dan McDonald, Ecology	Kitty Bryan, MSA
Jeff VanDerPol, DOE-ORP	Ginger Wireman, Ecology	Reed Kalcor, MSA
	Nancy Uziembo, Ecology	Susan Eberlein, WRPS
		Matt Loudan, WRPS
		Keith Quigley, WRPS
		Michele Gerber, URS Corp

## Attachment 1: Transcribed Flip Chart Notes

---

### **Tank Closure Planning**

1. Tight schedule and landfill closure
  - a. Two main issues
  - b. Need more information from TC&WM EIS or need to amend TPA milestone
2. Is landfill closure a Board value?
3. Need to understand assumptions behind TPA milestones
  - a. When can Board provide input?
  - b. When should it be involved in the process?

Page 1

---

4. Performance Assessment process runs very closely with tank closure process
  - a. Need to develop advice
  - b. Need to understand two processes and their interconnectedness
5. Jeff Lyon, Ecology to provide issue managers (Jeff Luke, Dirk Dunning and Larry Lockrem) with list of issues unanswered for the Board (from the last COTW meeting)
  - a. This will help frame the agenda for next COTW meeting
6. Identify COTW needs and outcomes for next COTW
  - a. Have an issue manager call before next committee meeting

Page 2

---