FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
BUDGETS & CONTRACTS / HEALTH, SAFETY & ENVIRONMENTAL PROTECTION COMMITTEE
October 3, 2018
Richland, WA

Topics in this Meeting Summary

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

Health, Safety & Environmental Protection Committee Opening

Rebecca Holland, Hanford Atomic Metal Trades Council (HAMTC) and Chair of the Health, Safety & Environmental Protection Committee (HSEP), welcomed committee members and introductions were made.

Announcements

Lindsay Strasser, HAB Facilitator provided informational announcements.

The April combined Budgets and Contracts Committee (BCC) and Health, Safety, and Environmental Protection meeting minutes were approved by consensus.

Beryllium Program Update

Rebecca Holland, HSEP Chair introduced the topic of the Beryllium Program update. Rebecca noted that the HSEP committee has been following the Beryllium Program for a very long and the group was happy to have the opportunity to have a briefing on current activities of the Beryllium Program. Presenters for this topic included:

Stan Branch, U.S. Department of Energy Richland Operations

Tonya Bean, CH2M Hill Plateau Remediation Company

Ryan Greenough, Washington River Protection Solutions

Colby Smith, Washington River Protection Solutions

Darrell Riffe, Mission Support Alliance

Key ideas presented in today's presentation[1] included:

- Tonya Bean provided members an overview of the CHPRC Be Facility Assessment and Be Wipe Samples. She took the time to walk members through the numbers as provided on the slides in the presentation.
- Stan Branch communicated samples were taken from buildings, Conex boxes, additional structures, and outdoor areas. Conex boxes move around from company to company and are kept track of via a database system.
- CHPRC is continuing to do breathing zone samples on workers. There are several breathing zone samples done at PFP.
- Ryan Greenough provided an overview of the WRPS Be Facility Assessment, Be Wipe Samples, and bulk and breathing zone samples. He summarized the facility type, status and number of

[1] Chronic Beryllium Disease Prevention Program (CBDPP)

facilities. Ryan noted that WRPS does not have any demolished beryllium controlled facilities. The one beryllium controlled Conex box as noted has been disposed of.

- Colby Smith reviewed WRPS lessons learned. Colby stated that WRPS had issues with some intrusive work. He noted that the issues help him look at the work activities to determine the need for implementation of controls, and how to label and post areas for beryllium. Chronic Beryllium Disease Prevention Program (CBDPP) does provide further explanation of intrusive work and how work is done at tank farms.

- Colby Smith provided members an overview of the lessons learned on the technical evaluations correlating beryllium concentrations to radioactivity. He noted that one lesson learned was implementing on a small-scale would have been more efficient than full scale.

- Darrell Riffe provided members a brief review of the MSA Be Facility Assessment, be wipe samples and bulk and breathing zone samples. Darrell noted that MSA provides central services and infrastructure for the Hanford site. Darrell recognized the 10 beryllium controlled facilities as noted on the presentation. He communicated that this number includes sealed reactors.

- Dr. Sandy Rock delivered an overview of the HPMC Be Medical Surveillance Program. He communicated that the Beryllium Voluntary Program is accessible to any current Hanford employees. A Beryllium Voluntary Program individual would go through the same process as a Beryllium Program worker. Beryllium workers are required to have the testing done.

Committee Member Questions (Q), Responses (R), and Comments (C):
Note: This section reflects individual questions, comments, and agency responses.

Q: "What does beryllium controlled mean?"

R: "A beryllium controlled facility is one where there is either known beryllium or beryllium pipeline duct work."

Q: "Are those facilities continued to be used?"

R: "An example would be PFP. This building is in the process of being demolished. There is no internal use for the building. Another example would be the 324 building. There is prep work being done for future demolition."

Q: "I am challenged by Conex boxes. Are those modular? Are they shipping containers?"

R: "Conex boxes are portable, large shipping containers."

Q: "Are they housing generators or are they housing stuff?"

R: "They could be empty or it could be equipment."

Q: "Are they tracked individually?"

R: "Yes, they are tracked individually."

Q: "What does EDE stand for?"

R: "Electrical distribution equipment."

Q: "Did I hear correctly that you are working with the EIOCPA?"

R: "The EICOPA offers the program after people leave the site and are no longer working here. Essentially, the testing is the same."

Q: "Are you joint with them at all?"

R: "We are not really joint. However, we let people know that it is available."

Worker Safety/SCBA Update

Rebecca Holland, HSEP Chair introduced the topic of the Tank Farms Respiratory Equipment Management Program. Ken Way, Industrial Hygiene Manager with Washington River Protection Solutions provided members with a presentation.

Key points from Ken's Presentation[2] included:

- Ken stated there have been events and there have been exposures which have led to employees to have a feeling of not being safe. The implementation of cartridge testing has validated the effectiveness of the respiratory equipment. WRPS' vision is to implement a strategy that both protects and is actively embraced by all workers.
- Ken noted that tank farms is a very unique environment. There are up to a couple thousand chemicals. These chemicals were described as being very detectable. A list of chemicals with significant concentrations have also been identified. To be on this list, the composition must be at or above 10% of the occupational exposure in the source.
- An overview was provided on not only the types of issues but the number of issues reported. Ken communicated that every issue reported is investigated.
- Ken stated that 156,000 items of equipment were issued in 2017. In 2018 to date, 226,629 pieces of equipment have been issued. This number reflects greater than 25,000 pieces of equipment per month.
- A slide was provided reviewing back and spinal injuries at WRPS. Ken noted that there was an uptake of injuries in 2015 partly due to SCBA implementation at single-shell tank farms. An uptake in injuries can also be seen when SCBAs were implemented throughout tank farms.

[2] Tank farms Respiratory Equipment Management Program

- WRPS has implemented stretching type of program. This program was designed for those individuals having to wear the SCBA device. Success of the program can be seen by the decrease in injuries reported.

Committee Member Questions (Q), Responses (R), and Comments (C):
Note: This section reflects individual questions, comments, and agency responses.

Q: "How much of this stream flow of 226,629 pieces of equipment is disposed of as opposed to cleaned and sent back onsite?"

R: "In our current process with SCBAs there is very little package disposal. If there is broken equipment, it is taken out of inventory and repaired when possible."

Q: "27 years ago we were called the flagship of cleanup. It looks to me that we are the tail end because Rocky Flats had a lot more beryllium than we did and they get it cleaned up. Do we consult with any of the people that have had these same problems on helping us solve our problems? Or do we start from scratch. Are our chemicals made entirely different from every place else? They had problem and I am sure we have problems. How are the others doing their safety? Do they exchange information? Did any other tank farms get cleaned up any other place on any of the reservations?"

C: "These are really different tanks."

Q: "This site will not be cleaned up for another 50 years. We need robots out there. They don't have noses and backs. You wouldn't smell anything or have back problems. How many years is it going to be before someone develops robots to do that work?"

R: "That is really interesting. We are working on those issues right now. For example, instead of having an employee walk out into tank farms in gear to do readings, we have a device. These instrumented devices are able to go out and take readings. They are also able to do camera inspections. There are robots that enter into annulus of double-shell tanks. We are working on some of that. However, there is a lot of physical person power associated with the work that we are doing. I know we do collaborate with other sites. While the chemicals are the same chemicals, we do have a lot more of them in different mixtures. It is a little bit more complex."

Q: "One question that I have about cartridges is that I know these cartridges are rated to work in certain conditions. There is high temperature and low temperature. There is high humidity. Is that something that was looked at when you evaluate your cartridges? Are those factors that you considered?"

R: "The answer is yes. When we were testing, temperature was documented. As we roll these out, we are looking at doing a hazard analysis."

C: "I recommend HSEP have time for open forum. I get concerned when there is not time for committee planning."

Next Steps

With so much energy on the above topics, Rebecca Holland requested a November HSEP meeting.

Tank Waste Committee Opening

Bob Suyama, Benton County and Chair of the Tank Waste Committee (TWC) welcomed committee members and introductions were made.

Announcements

Lindsay Strasser, HAB facilitator reminded members, Agency liaisons and contractors to sign in prior to leaving the meeting.

The August TWC meeting minutes were approved by consensus.

Process Integration & Soils

Jeff Burright, Oregon Department of Energy introduced the topic of Process Integration and Soils. Jeff thanked everyone for their attendance. He noted that the reason why folks are here is due to the number of questions about the bigger picture the group had while developing the HAB advice. The group is interested in hearing DOE's perspective on the bigger picture. Jeff communicated that the goal of today's discussion is to learn, and be provided with as many perspectives as possible from around the table.

Jeff welcomed Chris Kemp, Department of Energy Office of River Protection to the Tank Waste Committee meeting.

Key points from today's topic opening[3][4] include:

- Chris emphasized that this is a Draft WIR Evaluation to support the WIR Determination. WIR stands for waste incidental to reprocessing. The Draft WIR states that residual waste that is left in tanks and ancillary structures are incidental to reprocessing and is not considered high-level waste. This information is out there for public review.
- The Draft WIR was issued on June 1, 2018.
- The Department of Energy is looking for public comment on the Draft WIR Evaluation. The public comment period for the Draft WIR ends on November 7, 2018.
- A lengthy public meeting was held on June 18, 2018. A lot of material was provided to the public. A synopsis of that public meeting will be done October 16, 2018 in Portland, OR. Another public meeting will be held on October 18, 2018 from 6:30 p.m. – 9:00 p.m. at the University of Washington Horticultural Center.
- A concurrent Nuclear Regulation Committee (NRC) review is being done on the Draft WIR Evaluation. In addition, the NRC is reviewing the performance assessment. In this case, a

[3] Waste Management Area C Performance Assessment

[4] Draft Waste Incidental to Reprocessing Evaluation Timeline

performance assessment is not a 435.1 assessment. The NRC is holding a clarifying type of comment period with DOE.

- There is a corrective measures implementation plan for chemicals or hazardous chemicals in the soil. Both have CERCLA proposed plans for radionuclides in the soil. There will be a CERCLA Record of Decision for the radionuclides in the soil. This will be coordinated with a corrective measures plan.

- DOE-ORP does not have the lane or responsibility on the Hanford site for groundwater.

Committee Member Questions (Q), Responses (R), and Comments (C):
Note: This section reflects individual questions, comments, and agency responses.

C (Ecology): "EPA does not address either one of those CERCLA decisions documents. There is also no agreement with Ecology to have the two CERCLA documents mentioned. They are not part of the TPA and there is no agreement of those documents."

Q: "What does that mean? Does that mean they can't do that if you say they can't do that?"

R (Ecology): "No, it hasn't been discussed."

Q: "Isn't it a fact that RCRA was delegated to the State and CERCLA was not so DOE still has to follow both?"

R (Ecology): "Right. But, the TPA proposed a different path."

C (Ecology): "I think what DOE is presenting today is an ORP proposal that hasn't been vetted with Ecology. Appendix I, which Chris referred to has EPA in a consulting role on CERCLA without making a CERCLA decision. I think that is fair to say. Chris is really presenting something that ORP has presented a couple times over the year as a proposal to Ecology but has never been negotiated and agreed on."

C: "That chart is critical. You have a perception of what is happening at Hanford. The rest of the table did not see that. We are scrambling and struggling to get to where you are. That chart would help us understand. When you have not been part of the process that has led to that chart for the last 3-5 years, you don't understand what is going on. We only saw a piece of the pie. We did not see the whole pie. We were really uninformed. This is helping get us up to speed. What I am trying to convey to you is how important it is to share with other people."

Q: "Can either you or someone at Ecology clarify what the primary differences are between the diagram provided and what is in TPA Appendix I? I am unclear as to what difference we are talking about here."

R (Ecology): "As I mentioned earlier going back to intent. If you go back to the original TPA 1989, it was really a get along agreement. It was two separate agreements. There is a RCRA agreement with Ecology and a CERCLA agreement with EPA. The intent was whichever agency is the lead regulatory agency, they would try to achieve the regulatory requirements of the other agency. Appendix I actually uses the

word intent. The intent is that agencies will get along with each other. The primary difference is that in Appendix I CERCLA is looked as a consulting regulation."

C (Ecology): "One of the issues is that the TPA provides for the lead agency to do work for a unit. This unit has radionuclides, high-level waste, and chemical in all portions of the media. By agreement, we wrote the TPA Appendix I on how we were going to do it. For the soils in particular, we asked that EPA consult with us. It is written in the language that they would do it. The intent was to get their input. We have talked to EPA a number of times and they have been comfortable so far with us overseeing the closure of tank farms for the radionuclides and the chemicals. What Chris is eluding to is a CERCLA process that formally documents decisions. That wasn't the intent of Appendix I."

Q: "I keep reading these documents and it talks about volumes. I am more interested in the concentrations. What is the content? It is not in here. I did have a phone conversation a couple weeks ago with ORP and they said it is about 500,000 curies left in C Farms. I don't know if that is an accurate representation? Where does that figure come from? What is the breakdown? Why is there such a focus on the volume and not what is being left behind?"

R (DOE): "Several questions in there. After each tank retrieval, there is sampling done. This is after the retrieval certification is submitted. The sampling is done in several spots in each retrieved tank. The retrieval data report (RDR) sampling is approved by Ecology through a process. There is analytical data. Section 4 of the Draft WIR Evaluation about the radionuclides. If you really wanted to get into detail, each tank has a RDR. To summarize where to go, section 4 of the Draft WIR Evaluation for the radionuclide discussion. If you want to go into detail, there is a separate detailed data report for each of the tanks."

Q: "Why is this information not being provided to the Hanford Advisory Board and the public?"

R (DOE): "The reports are public. The RDR reports are published under TPA Milestone M-45-86. There is one for each of those tanks."

Q: "How much plutonium is in C Farm?"

C: "170 curies."

R (ORP): "You asked me a question and I am not going to answer that today but I will get you the answer. I want to ensure that I am factual."

Q: "If you adopt this WIR, when are you going to grout the tanks?"

R (ORP): "When the closure plan authorization and RCRA approval is complete."

C: "There are some members of the public that want you to get this job done. We have been at it for 40 years."

Q: "Since we are talking about the composite analysis, can you clarify which part of the process requires the composite analysis?"

R (ORP): “Composite Analysis as part of DOE Order 435.1 evaluates the cumulative impacts of sources that remain after site closure and could interact with low-level waste disposal.”

C: “The composite analysis topic is so big that we need to schedule that into future meetings.”

C: “The goal of some of us is to grout the tanks. Grouting the tanks is not going to impact what is already in the soil because it is already in the soil. To me the process is black and white. If you meet the requirements, you grout the tanks and get it done.”

Q: “How does DOE respond to concerns raised about soils at WMA-C and whether a WIR has been/will be performed for leaked waste in soil?”

R (DOE): “This is DOE’s position. The soils have been impacted from the tank waste which contain hazardous/dangerous chemicals. The soils that have been impacted with hazardous chemicals from C-Farm will meet the CERCLA process. That is coming from right out of the DOE Order.”

R (Ecology): “Chris, what I think you should be talking about is soils that have been impacted by mixed waste. I think it’s misleading to distinguish the radionuclides. There are three separate decisions that need to be made here. DOE needs to make a disposal decision for radionuclides. Ecology needs to make a closure decision for the tanks and contaminated soil. Ecology also needs to make a decision for the contaminated groundwater. In Appendix I, Ecology has said they will do through the CERCLA process. There are different analyses for those different decisions. For the disposal or radionuclides, that decision is the PA. For closure decision, the analysis is the closure plan and there are many other items that go with it. For the CERCLA cleanup decision for groundwater, the decision is the RIFS.”

Q: “Can you describe the plans regarding an interim asphalt cap vs. a final closure cap?

R (ORP): “All the tank farms will be getting asphalt caps. There is a TPA milestone.”

C (Ecology): “As far as I know, there have been no decisions made regarding the closure of C Farm."

R (ORP): “It is going to get an interim cap after retrieval.”

C (Ecology): “The way Ecology perceives the process is that we make closure decisions based on closure plans. When you read our draft, you will see whether or not we agree with placing an asphalt cap or having a larger, more robust RCRA requirement. One of the issues that is unresolved, is that we had a panel come a few years ago. The recommendation was that C Farm should be the first to be closed and should be used as a demonstration project. We used to call it the demonstration project. One of the recommendations was to build a full cap so we could start observing the performance of a cap at Hanford after closure. We will present a closure plan in 2-3 years. I agree that DOE would like to put an asphalt cap on C-Farm. I am not sure what the design of that cap would be. DOE is proposing a retrieval schedule that may or may not end in 75 years or so. When we start making our decisions today, we are making decisions that will help us make decisions over the next 75-100 years.”

C (ORP): “Jeff is right. Thanks Jeff for that comment.”

Open Forum/Committee Business

Bob Suyama introduced the combined agenda item of open forum and committee business. He explained to TWC members that the open forum provides an opportunity for members to discuss topics that may not be on the agenda. Bob provided an overview of agenda items he had noted for a proposed November TWC meeting. Those items were provided to Agency liaisons to take back for further input. In addition, an Issue Manager Team call was scheduled for Tuesday, October 9, 2018 at 9:00 a.m. to review the System Plan Assumptions white paper. The Issue Manager Team will review the Board input received at the September HAB meeting and incorporate recommendations into the document. Further committee review is expected to occur at the November committee meeting.

During open forum, Vince Panesko provided a list of items he would like the TWC to review in FY2019. TWC members reviewed the list of recommendations and noted items of interest for consideration.

Attachments

Attachment 1: Chronic Beryllium Disease Prevention Program (CBDPP)

Attachment 2: Tank Farms Respiratory Equipment Management Program

Attachment 3: Waste Management Area C Performance Assessment

Attachment 4: Draft Waste Incidental to Reprocessing Evaluation Timeline

Attendees

Board Members and Alternates:

Susan Leckband, Member	Rebecca Holland, Member	Margery Swint, Alternate
Tom Carpenter, Alternate	Helen Wheatley, Alternate	Shelley Cimon, Member
Richard Bloom, Alternate	Mike Korenko, Alternate	Steve Wiegman, Member
Bob Suyama, Member	Emmett Moore, Member	Pam Larsen, Member
Dan Solitz, Alternate (Phone)	Liz Mattson, Member (Phone)	

Others:

Kris Holmes, DOE-RL	Joseph Samuels, MSA	Dana Cowley-Gribble, MSA
Colby Smith, WRPS	Ken Way, WRPS	Ryan Greenough, WRPS
Jack Donnelly, WRPS	Mark McKenna, WRPS	James Lynch, DOE-ORP
Ginger Wireman, Ecology	Dr. Sandy Rock, HPMC	Tonya Bean, CHPRC

Lindsay Strasser, ProSidian	Sherri Schatz, ProSidian	Echo Dahl, Northwind supporting DOE-ORP
Larry Yearsley, DOE-RL	Theresa Howell, Ecology	Chris Kemp, DOE-ORP
Cheryl Whalen, Ecology	Keith Quigley	Doug DeFord, WRPS
Jim Alzheimer	James Hanren, DOE-RL	Jeff Lyon, Ecology
Terese Meyer, WRPS	Marcel Bergeron, WRPS	Joe Sondag, DOE-ORP
Dieter Bohrmann, Northwind supporting DOE-ORP	Mustafa Kumal, DOE-RL	John Price, Ecology
Maria Skoska, Ecology	Beth Rochette, Ecology	Dib Goswow, Ecology
Paul Prutard , WRPS	Darrell, Riffe, MSA	Geoff Tyree, DOE-RL (Phone)