

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE**

*April 26, 2016
Richland, WA*

Topics in this Meeting Summary

Opening..... 1
Update on Plutonium Finishing Plant 1
Leadership Workshop Preparation, FY 2017 Priorities 6
Environmental Restoration Disposal Facility Framing..... 9
Committee Business..... 10
Attachments 12
Attendees 13

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.

Opening

Pam Larsen, River and Plateau Committee (RAP) chair, welcomed the committee and introductions were made. Committee members adopted the March 2016 RAP meeting summary.

Announcements

Steve Hudson, Hanford Advisory Board (HAB or Board) chair, announced that Dave Borack, federal designated officer with the U.S. Department of Energy (DOE) Headquarters, will be attending the upcoming HAB Leadership Workshop. The leadership workshop will be held on May 3-4 at the Ben Franklin Transit Center in Richland, Washington.

Update on Plutonium Finishing Plant

Pam Larsen introduced an update on the Plutonium Finishing Plant (PFP or 234-5Z). She noted that the demolition process at PFP is challenging due to a variety of uncertainties workers encounter and that RAP members were interested in learning about the status of the project.

Agency Presentation

Tom Teynor, U.S. Department of Energy – Richland Operations Office (DOE-RL), provided the RAP committee with status updates on the closure project at PFP, and associated facilities. Key points from Tom's presentation¹ include:

- Updates at the Plutonium Reclamation Facility (236-Z or PRF) include:
 - Removed all pencil tanks, ventilation ducting, and filter boxes
 - Removed 15 pans
 - Removed all waste in areas that received grout treatment
 - Applied fixative
 - Prepared for gallery glove box removal
 - Next steps for continuing the closure of PRF include:
 - Maintain adequate ventilation for workers while cleanup progresses
 - Power wash the walls
 - Continue to push waste from the gallery glove box into the canyon
 - Continue to decontaminate the canyon and flooring
 - Apply fixative on the floor after decontamination
- Updates at the Plutonium Finishing Plant include:
 - Removed glove boxes/hoods from ventilation
 - Completed reduction of in-situ glove box size
 - Sealed room with protective plastic
 - Applied fixative to room after decontamination
 - Next steps for continuing the closure of PFP include:
 - Remove the ventilation duct
- Updates at the Ventilation Building/Stack (291-Z) include:
 - Continued removal of the E4 ventilation duct. To date, over 62% of piping has been removed.

Attachment 1: Plutonium Finishing Plant (PFP) Closure Project (DOE-RL presentation, 4/26/16)

- Next steps for continuing the closure of the Ventilation Building/Stack include:
 - Remove glove boxes, pencil tanks, and exhaust systems
 - Continue to remove the piping within the E4 ventilation duct
- Updates at the McCluskey Room (242-Z or Americium Recovery Facility) include:
 - Removed five glove boxes
 - Removed piping
 - Next steps for continuing the closure of the McCluskey Room include:
 - Perform material inspection of tanks and apply fixative
 - Prepare to remove chemical tanks during demolition
 - Tanks are slated to go to the Waste Isolation Pilot Plant (WIPP)
 - Remove soft waste, pipes, and ducting
 - Paint the room and lock in residual contamination
 - Decontaminate flooring
- Throughout the four facilities, 100% of the pencil tanks have been removed, 98% of the processing equipment has been removed or is ready for removal during demolition, and 15% of the buildings have been demolished.
- During closure processes, several vortex cooler units were inadvertently released, some of which were found to be contaminated. Fourteen of them were found locally and recovered. The facilities in which the units were found were surveyed for the spread of contamination.

Tom addressed several components to keep workers safe while they work in radioactive environments at facilities within PFP, including:

- Larger area for workers to undress in order to remove suit carefully to prevent spread of contamination and to avoid suit punctures
- Workers wear additional clothing under their suits to prevent skin contamination
- Fixative is placed on suits to prevent skin and clothing contamination
- Suits are air conditioned
- Staff on-site in case of emergency
- Efficient ventilation is provided and escape bottles are present in the event that a worker loses air

- Workers wear finger rings that provide daily dosimeter readings

The upcoming demolition sequence and duration of the facilities at PFP include:

1. PRF – 10 weeks
2. McCluskey Room – 2 weeks
3. PFP – 17 weeks
4. Ventilation Building/Stack – 9 weeks

Tom noted that the final remediation of remaining sites includes buried piping and will be conducted as part of 200-WA-1, 200-IS-1, and 200-PW-1/3/6 and 200-CW-5 operable units.

Tom's presentation included two time-lapse videos demonstrating the cleanup and closure processes performed inside the [PFP room](#) and the [McCluskey room](#).

Agency Perspective

Stephanie Schleif, Washington State Department of Ecology (Ecology) project manager for PFP, provided perspective on this topic through responses to committee members' questions.

Committee Questions and Responses²

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

Q. Did the equipment that was removed from PFP go to the Environmental Restoration Disposal Facility (ERDF)?

R. [DOE-RL] The removed equipment contained transuranic (TRU) waste, therefore it will be sent to WIPP.

Q. What is the structure underneath the pans that were removed? Was there detection of leaked contaminants?

R. [DOE-RL] A sampling and analysis plan was developed to detect the spread of any contaminants. Thus far, leaked contaminants have not been detected and there is no indication of groundwater contamination. There was soil under the slabs in the PRF facility. Drains in the McCluskey room will be sampled within the next month. We are in the process of developing a sampling characterization plan for future use, including samples within the soil column.

Q. Does the sampling characterization occur once the facility has been determined "closed"?

R. [DOE-RL] The sampling and characterization plan is not currently funded due to budget constraints. A protective cap will be placed on PRF and McCluskey room slabs.

Attachment 2: Transcribed Flipchart Notes

C. It is concerning to place a cap on the slab when it hasn't been characterized.

Q. Was there slant well-drilling near PFP, historically?

R. There was slant well-drilling near the 216-Z-9 trench.

Q. What type of materials were detected in the pipes?

R. [DOE-RL] In some of the pipelines, there is low-level contamination. In other pipelines, there is more solid material such as sand-like or crystalline material. In one duct, there was crystalline material detected, which was sampled and sent to a local lab. It doesn't appear to be plutonium.

Q. How did workers access PFP since the McCluskey room was sealed for many years??

R. [DOE-RL] There are outer doors that are accessible.

Q. What is the volume of waste that is labeled to go to WIPP?

R. [DOE-RL] There are new waste acceptance criteria being developed for WIPP. The new criteria are expected to be released in July 2016. The approximate volume of waste that will be sent to WIPP is significant.

Q. Were the contaminated vortex cooler units released to be reused?

R. [DOE-RL] The units were sent to local fire departments. They were sent there to be refurbished, but contamination was detected when fire fighters pulled the hose from the vortex cooler.

Q. What will the transition of regulatory responsibility look like between Ecology and the Environmental Protection Agency (EPA)?

R. [DOE-RL] DOE-RL is currently developing a surveillance and maintenance plan. The targeted milestone is set for June 2016. The maintenance plan is under review by DOE and regulatory agencies will have the opportunity to provide comments. It is the document to be used for the transition from Project Baseline Summary (PBS) 11 to PBS 40.

R. [Ecology] Ecology will be the lead regulatory agency. Most waste sites are going into 200-WA-1, but those involved in the project need to sit down and discuss which waste sites are going into which document.

Q. What is the process if new sites are identified?

R. [Ecology] DOE-RL staff are planning to revise 242-Z and 236-Z slabs. Ecology feels that there is adequate budget and expertise in order to perform the characterization of those slabs, and possibly removal, with the existing crews working on PFP.

R. [DOE-RL] DOE-RL is in discussion with Ecology and the EPA to determine what changes, if any, may be necessary to the milestone. The major milestone is expected to be complete at the end of September 2016. There are delays in the milestone due to encountering more hazards than initially anticipated. The workforce has been resilient and the goal is to perform safe demolition and compliance of the PFP facility.

Q. Is there adequate budget to carry out this milestone?

R. [DOE-RL] There is full funding and support to complete this milestone to slab-on-grade, even if delays occur. The slab-on-grade work is expected to be completed and hopefully there is enough budget to move forward with the slab removal.

Q. What is the expected timeline of storing the TRU waste before it can be shipped to WIPP? At the Environmental Management Site-Specific Advisory Board (EM SSAB) meeting, it was discussed that TRU waste may sit on the Hanford Site for 10-20 years. It is concerning in what form the TRU waste will be stored in and where it will be stored on the Hanford Site.

R. [DOE-RL] The TRU waste that is removed from PFP facilities are placed in containers with a 20-year shelf life. The materials will be packaged and sent to the Central Waste Complex. A treatment plan for the J-Pan waste is currently underway. Concrete and other low-level waste from PFP will be sent to ERDF.

C. There are not enough panels at WIPP to continue collecting the needs of waste from the Hanford Site. It would be informative to learn about the pipes and tunnel space underneath PFP. What does the term “closure” mean for PFP? What will happen if the waste cannot be removed from the Hanford Site? What will future remediation consist of if WIPP is not a near-term option to transfer waste from the Hanford Site?

R. [DOE-RL] These are valid concerns. The tunnels are accessible underneath PFP but, based on the sequencing of the demolition plan, it is the last section that crews can work on.

The RAP committee thanked Tom and Stephanie for their perspectives. RAP members expressed interest in Tom sharing the presentation with the HAB at the June Board meeting.

Leadership Workshop Preparation, FY 2017 Priorities

Environmental Management Site-Specific Advisory Board (EM SSAB)

Steve Hudson, HAB chair, informed the RAP committee of several key points from the EM SSAB meeting that took place on April 19-21 in Oak Ridge, Tennessee. Steve noted that DOE Headquarters will be requesting briefings from site-specific advisory boards, focusing on three key areas including:

1. Recommendations for Environmental Management strategic planning and communication regarding future Site cleanup
2. Statement on the priorities and values for the transition to a new presidential administration

3. Best practices for transitioning from a nuclear waste facility to community reuse or reindustrialization

Steve noted that the product pertaining to the priorities and values for the transition to a new presidential administration is a time-sensitive document and is due to the EM SSAB by August 2016. He also mentioned that DOE Headquarters is adjusting how documents are published and how information is shared.

Committee Questions and Responses²

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

Q. Will materials be circulated amongst HAB members before sent to DOE Headquarters?

R. The materials that are sent to DOE Headquarters will have already received Board consensus. Prior to sending the materials to DOE Headquarters, the materials can be shared again with the Board.

Q. Will this request from the EM SSAB meeting require additional work by the Board?

R. Only the chair and vice chair of the site-specific advisory boards are charged with fulfilling this request from DOE Headquarters. The HAB chair and vice chair will not task the Board with additional work. Additionally, the HAB chair and vice chair will submit only past materials that received Board approval.

Q. During the EM SSAB meeting, did other Sites express concern about a Consortium for Risk Evaluation with Stakeholder Participation (CRESP), where external sources prioritize the cleanup at the Site?

R. That topic was not discussed at the EM SSAB meeting.

C. It is concerning that materials submitted by other site-specific chairs and vice chairs may be combined with the materials sent from the HAB chair and vice chair.

R. The HAB chair and vice chair can include a statement in the materials about maintaining individuality of the Sites.

Fiscal Year (FY) 2017 Priorities

The RAP committee discussed preliminary topics for the Board's FY 2017 work plan. These topics and associated discussion points include:

- 100-N proposed plan
- Central Plateau inner area guidelines

Attachment 2: Transcribed Flipchart Notes

- Finalization and implementation
 - Consistent updates
- Groundwater
 - Monitor progress on pump-and-treat systems
- Infrastructure updates
 - Infrastructure involving roads, water, sewer, energy, and fire
 - Joint topic with the Health, Safety, and Environmental Protection committee
- Solid Waste Operations Complex / Rev 9 updates
- PFP end states updates
- River Corridor projects
 - 324 update
 - 618-10 VPU progress and disposition
 - 618-11 VPU status
 - Transition of contractors
- 300 Area uranium sequestration treatability test
- 200 Area / Central Plateau groundwater
 - UP-1 uranium
 - 200-BP-5
 - 200-PO-1
 - Other waste streams
- Deep vadose zone
 - 43 sites identified
 - Expansion of plan

Pam Larsen, RAP committee chair, and Jan Catrell, RAP committee vice chair, committed to present these topics as priorities for the FY 2017 work plan at the upcoming Leadership Workshop.

Environmental Restoration Disposal Facility Framing

Liz Mattson, issue manager, provided an updated list of questions³ pertaining to various aspects of the Environmental Restoration Disposal Facility (ERDF). The questions presented to the RAP committee were compiled from previous discussions at RAP committee meetings in February and March 2016, as well as feedback received from Board members at the April 2016 Board meeting. Liz suggested that the RAP committee determine the subsequent steps for the product and expressed interest in receiving feedback from agencies. Liz noted that the framework for the final product has not yet been determined.

Agency Perspective

Kris Holmes, DOE-RL, noted that the RAP committee received a briefing on the vertical expansion of ERDF during the February 2016 RAP committee meeting. Kris stated that Mark French, subject matter expert of ERDF, provided answers to many of the questions and that there is not additional information to share at this time.

Committee Questions and Responses²

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

C. The amount of questions is much larger than the RAP committee initially compiled.

R. The questions represent interests that were expressed from all of the Board members regarding the vertical expansion of ERDF and the associated impacts. Ten questions were added from what was distributed to the HAB at the April 2016 Board meeting.

Q. Were there several questions that came up frequently in order to condense the list?

R. There were a few repetitive questions, but many Board members asked specific questions. That is one reason why several questions were categorized because they were similar in nature but contained specific details.

C. Some of the questions in this product have already been answered by DOE and the agencies. This is not where the emphasis of ERDF needs to be. This product is not a priority compared to other topics on the current work plan.

R. The HAB should not expect others to perform research or re-circulate older documents and presentations that may contain answers to these questions. The goal is to make information accessible, interesting, and relevant to people, including the general public. ERDF is a topic that can be utilized to generate greater interest in the cleanup of Hanford.

Attachment 2: Transcribed flipchart notes

Attachment 3: ERDF Questions (Issue Manager Liz Mattson, 4/26/16)

C. There are several new members who will join the HAB later this year. We should not assume that new members will know or seek out information regarding ERDF. A solution could be to make a specific list of questions that pertain to the current status of ERDF and the vertical expansion, and then create another product that discusses the broad components and end states of ERDF.

C. Several questions could be framed from a broader perspective, which may help to answer other questions that Board members asked regarding ERDF.

C. The volume of questions indicates that there is interest from the Board concerning ERDF but it does not justify spending additional time on this product, when many of these questions have been addressed by DOE.

R. This product does not emphasize that DOE should prioritize this topic in the work plan. ERDF is a gateway topic to generate more interest in the cleanup of Hanford. It is worrisome for the RAP committee to select particular questions from this list for DOE to give another presentation on because it will not address all of the questions raised by Board members. There was interest from Board members and agency representatives at the April 2016 Board meeting to continue working on this product.

C. This product may be more suited for the Public Involvement Committee. There are other priorities for the RAP committee to focus on.

C. ERDF is a positive component in the cleanup progress at Hanford. This product will be helpful and serve a useful purpose in order to help orient new Board members with ERDF and the types of issues that surround the facility. Perhaps the Board does not ask DOE to answer these questions directly, but instead the questions will serve as a product that is directed at HAB membership.

Steve and Liz will condense the volume of questions and identify a framework that includes a primary set of questions regarding ERDF, as well as a proposal for how to address remaining questions.

Committee Business

RAP 3-Month Work Plan²⁴

The RAP committee will not hold an in-person committee meeting in May 2016. The RAP committee will hold a phone call on May 17, 2016 at 1:30 pm to discuss agenda topics for a potential June committee meeting.

The RAP committee will plan to hold a committee meeting in June 2016 that will tentatively include the following topics:

- Update on 100 D/H

Attachment 2: Transcribed flipchart notes

Attachment 4: RAP 3-Month Work Plan

- Updates on the Solid Waste Operations Complex and Rev 9 permit modifications
- Update on groundwater 300-FF-5 uranium treatability test
- Receive an agency presentation by Jon Peschong (DOE-RL) regarding an update on 200-PW 1/3/6
- Update on the approach to framing the ERDF questions

In August 2016, the RAP committee will tentatively plan to meet and discuss an update on the 100 Area retrieval process, regarding K-Basin sludge, an update on the augering and extraction methods of 618-10 VPUs, and an update on ERDF.

Attachments

Attachment 1: Plutonium Finishing Plant (PFP) Closure Project (DOE-RL presentation, 4/26/16)

Attachment 2: Transcribed flipchart notes

Attachment 3: ERDF Questions (Issue manager Liz Mattson, 4/26/16)

Attachment 4: RAP 3-Month Work Plan

Attendees

Board members and alternates:

Jan Catrell	Alex Klementiev	Bob Suyama
Shelley Cimon	Pam Larsen	Helen Wheatley (phone)
Dale Engstrom	Susan Leckband	
Steve Hudson	Liz Mattson (phone)	

Others:

Kristen Holmes, DOE-RL	Stephanie Schleif, Ecology	Theresa Bergman, CHPRC
Kyle Rankin, DOE-RL		Bruce Ford, CHPRC
Tom Teynor, DOE-RL		Destry Henderson, CHPRC
		Samantha Herman, EnviroIssues
		Ryan Orth, EnviroIssues
		Jen Colburn, MSA
		Alyssa Dyck, MSA
		Shintaro Ito, PNNL
		Kelsey Shank, SN3
		Annette Cary, Tri-City Herald
		Katherine Bittinger, WSU
		Jillian Gardner-Andrews, WSU
		Robert Franklin, WSU