

**FINAL MEETING SUMMARY**

**HANFORD ADVISORY BOARD  
RIVER AND PLATEAU COMMITTEE**

*March 10, 2015  
Richland, WA*

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*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. The committee adopted the December 2014 RAP meeting summary.

**Central Plateau Inner Area Guidelines**

*Introduction*

Dale Engstrom, RAP vice chair and Central Plateau Inner Area Guidelines issue manager, noted that the conversation on the Inner Area cleanup principles<sup>1</sup> has been ongoing since November 2014, following a U.S. Department of Energy – Richland Operations Office (DOE-RL) presentation to the Hanford Advisory Board (HAB or Board). Dale recognized that many HAB members felt that the cleanup principles, as presented, were lacking in specificity and content. Dale stated that in the months since the principles were first presented to the HAB, subsequent Tri-Party Agreement (TPA) agency presentations

<sup>1</sup> In the course of developing advice, the committee agreed on the alternative term, “guidelines,” rather than “principles”. For purposes of this summary, these terms are used interchangeably.

and issue manager conversations informed a piece of draft advice. RAP committee members were provided with the draft for purposes of review and discussion. The draft advice was tentatively scheduled for presentation to the Board at the upcoming April 2015 meeting. Dale closed his introduction by identifying that the Central Plateau Inner Area Cleanup represents a significant turning point in Hanford cleanup, as focus is beginning to move away from the River Corridor. Dale reminded committee members that the guiding principles for Central Plateau cleanup need to be carefully, thoroughly, and deliberately considered to ensure that the next phase of Hanford Site cleanup is comprehensive and successful.

#### *Committee Discussion and Advice Development*

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

The committee reviewed the draft advice\*\* onscreen. Members suggested additions and edits to draft text to clarify and develop the intention of certain advice points.

#### **Background:**

C. For purposes of clarity, the advice background should not make a distinction between existing and future cleanup activities. Also, the word “principles” should be replaced with “guidelines,” as that is a more accurate reflection of what the U.S Department of Energy’s (DOE) principles actually are.

*R. The word “filter” is also a stronger word than “lens” for purposes of this advice. In practice, a lens will sharpen something, while a filter will remove something.*

Q. Will DOE’s principles be formally written into regulations? Should the advice background or advice points note that the principles should be codified and legally enforceable?

*R. It would be good if the principles were legally binding; however, the advice should not note this now as the HAB has not yet seen the final version of the cleanup principles.*

C. Why does the draft advice note the example of single-shell tanks? Tanks are included in the Tank Closure and Waste Management Environmental Impact Statement. Should the advice only address those Central Plateau topics that do not yet have a plan?

*R. The U.S. Environmental Protection Agency (EPA) had noted that this advice relates to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and that the tank farms should not be included in this advice.*

*R. It is important that the advice points be as inclusive as possible. The HAB has the opportunity to look into the cleanup principles early, and the advice needs to clearly recognize any holes in the principles and refer to past HAB advice to illustrate and inform advice points.*

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\* **Attachment 1:** Draft HAB Advice on Central Plateau Inner Area Guidelines, Rev. 0 (March 3, 2015)

\* **Attachment 2:** Appendix: Draft HAB Advice on Central Plateau Inner Area Guidelines, Rev. 0 (March 3, 2015)

*R. As the committee reviews the advice background and the advice points, RAP members should keep the desired end-state of the Central Plateau in mind. That vision will help to guide advice points and ensure that the advice is holistic.*

C. The advice background should steer away from listing examples as much as possible. In this case, it could make the advice less effective by being unintentionally exclusionary of existing or unknown cleanup issues. The advice needs to work to capture the breadth of uncertainty that still surrounds cleanup on the Central Plateau.

**Draft Advice Point 1:**

C. It is important for DOE to run additional Scenarios aside from Industrial Use. The agency needs to demonstrate cleanup impact on individuals aside from industrial workers. Additional scenarios will also help to inform regulators. EPA and the Washington State Department of Ecology (Ecology) will be better able to respond to the proposed cleanup principles if DOE presents them with information garnered from additional Scenarios.

C. Draft advice point 1 may be too developed in its current form. The first sentence is the advice; the rest of the bullet is background. It is important that advice points be succinct and convey the Board's messages very clearly.

*R. It is important to note both the advice and the rationale in the advice point. If the HAB is requesting that DOE run additional scenarios, it is important to note the reasoning behind it.*

C. Should this bullet also advise DOE to run an Unrestricted Use Scenario along with the noted Tribal and Intruder Use Scenarios?

*R. As the Central Plateau Inner Area is classified as an industrial zone, DOE cannot run an Unrestricted Use Scenario.*

C. DOE is trying to make a judgement on the extent of tribal treaty rights in the Hanford area; however, DOE does not have the authority to do this. Until treaty rights are legally defined at some point in the future, DOE could say that treaty rights do not apply in the Central Plateau Inner Area. There is need to have certain baseline information to define treaty rights, and a Tribal Scenario would work to provide some of this information.

*R. This advice is trying to steer away from being too technical. This issue may not fit into the first draft advice point; however, the appendix could help to further clarify and develop the need for a Tribal Scenario.*

**Draft Advice Point 2:**

Q. What does "analogous sites approach" mean?

*R. An analogous sites approach would mean that waste characterization could occur at one site in the Central Plateau and that adapted principles from that site could be cleanly adapted to similar sites. More background on this practice is incorporated into the draft appendix, and it*

*illuminates why issue managers do not recommend this approach. There is too much uncertainty and ambiguity from one site to another for an analogous sites approach to be practical in the Inner Area.*

**Draft Advice Point 3:**

Q. The default Model Toxics Control Act dig depth is 15 feet, which is deeper than the rooting zone of most plants. However, the Hanford Site exists in a sagebrush steppe environment. Sage is particularly well-known for its long taproot and its ability to lift water from many meters below the surface. In the long-term, sagebrush will mobilize contaminants from below the 15 foot depth and bring them to ground level.

C. Draft advice point 3 notes that 15 foot Point of Compliance (POC) depth may not be adequate in some regards. What the advice really needs to convey is that the HAB does not advocate for any set depth. Cleanup throughout the Central Plateau Inner Area needs to characterize waste sites appropriately and then select a POC that is appropriate for the waste that is present in that area.

*C. Recognizing a POC depth of 15 feet in the advice may be limiting, as there may be certain areas where cleanup should extend further than that.*

*C. In HAB Advice #226, the Board recognized that cleanup should extend below 15 feet if contamination exists at a further depth.*

*C. It would be appropriate to start at the bottom of the fill and measure downward to arrive at a POC. Stating a depth is not helpful in this advice.*

C. DOE has a regulatory right to propose a POC depth of 10 feet. The agency does not have to build a case to make a change.

*C. The Board believes that DOE does need to build a case for this change in POC if the agency would like public support for Inner Area Cleanup. The advice can recognize that DOE has not adequately built a case to make the change in POC depth.*

C. To clarify the meaning of this advice point, all detail after the initial statement should be transferred to the appendix.

**Draft Advice Point 4:**

C. DOE is proposing setting POC monitoring sites away from individual waste sites and instead situating them along the boundaries of the Inner Area. The Board has always held that a POC should never be established away from a waste site. However, this strategy of establishing POCs at the Inner Area boundary may help to capture lateral movement of waste more effectively.

*R. Conversely, this strategy could have negative consequences. Contamination that has migrated to the Inner Area boundary will have travelled a long distance. POCs at individual waste sites may inform early detection and effective mitigating procedures that halt the movement of contamination away from waste sites.*

C. In the proposed DOE cleanup principles, the POC for groundwater would be at the border of the Inner Area. The POC would change the drinking water quality of groundwater within the Inner Area, not just groundwater that has migrated out of the Inner Area.

Q. Are there enough wells in the Inner Area that contamination can be discovered before it migrates all the way to the boundary?

*R. That is unclear. DOE has not yet demonstrated that this is true.*

C. This draft advice point should reference HAB Advice #229. Also, in HAB Advice #145, the Board speaks to the need for a trigger level.

C. A consideration for the issue of POC placement in the Inner Area is that that it is not uncommon for contaminants to move laterally through soils. If POCs are only placed directly under waste sites, there is the potential for missing this sideways migration. The final advice may want to note that the HAB recommends boundary POCs, as well as POCs at individual waste sites.

#### **Draft Advice Point 5:**

C. Draft advice point 5 would be a good opportunity to bring in the idea of engineered structures. Language noting this could be cleanly added to the end of the point.

#### **Draft Advice Point 6:**

C. Draft advice point 6 is very long. It should be condensed to simply note that Central Plateau Inner Area cleanup guidelines should recognize the potential for climate change. To clarify the advice point, everything but the actual advice should be removed or moved to the appendix.

*R. Noting climate change is not the most important piece of this advice point. It is most vital to recognize that DOE should conduct sensitivity analysis on the Central Plateau.*

C. Current models for precipitation in the Central Plateau Inner Area assume 8 inches of precipitation in perpetuity. This is not a good way to run the model, especially since a changing climate may double or triple actual precipitation in the future.

C. This advice needs to encourage DOE to discover the precipitation threshold that would facilitate movement of contamination from the vadose zone to groundwater. This strategy—running the model backwards to find the amount of precipitation required to mobilize vadose zone contamination—is a much stronger way of informing cleanup plans.

#### **Draft Advice Point 8:**

C. This advice point would be an opportunity to reference HAB Advice #230, within which the Board encouraged DOE to consider continued human presence on the Hanford Site.

Q. Should this or an additional advice point recognize that the public and other stakeholders should be engaged to envision potential future uses of the Inner Area aside from industrial?

*R. Engaging stakeholders and envisioning the future of the Inner Area is a strong idea; however, adding this to the current advice point would be confusing. It would be most illustrative to note this in the advice background. The idea of stakeholder participation is also presented in draft advice point 12.*

**Draft Advice Point 9:**

C. Draft advice point 9 notes “future contamination of the groundwater.” It is important that the Board recognize that the groundwater within the Inner Area is already contaminated. The Board’s primary concern at this point is that cleanup of that groundwater proceed in a way that addresses existing contamination and protects human health and the environment.

*R. To clarify, the draft advice point aims to recognize that remediating groundwater in the Central Plateau is impossible until cleanup addresses contamination in the deep vadose zone.*

Q. Rather than recommending that remediation should be carried out until groundwater meets drinking water standards, would it be more advantageous for the advice point to state that cleanup should ensure “no future contamination” of the groundwater?

*R. [Ecology] “No future contamination” is potentially problematic language, as it denotes that zero contamination should remain.*

*R. Rather than use the words “meet drinking water standards,” the advice point could state that contaminants should be removed to “below drinking water standards.”*

*R. The advice point should not note a limit or a threshold for groundwater contamination. The key message for the advice point is that cleanup should address contamination that is present in the deep vadose zone to ensure that contaminants in the vadose zone do not contribute to further contamination of groundwater. Adding a metric for groundwater remediation does not serve this point.*

**Draft Advice Point 10:**

C. Many members of the Board are against the idea of designating the entire 10 square mile Inner Area as an Industrial Use zone. In HAB Advice #132, the Board noted that it does not support the use of buffer zones. In addition, in both HAB Advice #132 and HAB Advice #226, the Board recognized that areas identified for waste management and the containment of residual contamination should be as small as technically possible.

Q. Does RAP object to the Industrial Use designation of the entire Central Plateau Inner Area?

*R. This conversation has occurred at other meetings, and there appears to be a general acceptance within the Board that designating the Inner Area as Industrial Use is acceptable.*

*R. The Board has noted a general acceptance of Industrial Use designation within the Inner Area; however, the HAB has also noted that this Industrial Use footprint should be as small as*

*technically possible. The Board may have a different opinion if DOE planned to designate the entire Inner Area as Industrial Use, including those areas that are not existing waste sites.*

*R. The Industrial Use designation is acceptable; however, those areas that are not currently contaminated need to be preserved. Any areas that have higher ecological value or the potential for higher ecological value should not be degraded. To illustrate this idea: the Nez Perce Tribe has recently been working with the U.S. Forest Service (USFS) on water quality issues. In this scenario, there are some streams in the identified area that that are pristine. The Nez Perce Tribe is stating that if the water quality goal is only to meet set water quality standards, there is a potential to degrade some streams since the standard conditions are lower than pristine.*

C. Draft advice point 10 should be separated into two advice points to ensure clarity. The advice needs to distinctly recommend that DOE both set up ecological receptors in the Inner Area and also identify and protect undisturbed areas of sagebrush-steppe.

Q. What are the committee's thoughts on buffer zones? Does the final advice need to weigh-in on this issue further?

*R. In some cases, buffer zones are an excellent idea. They help to draw a boundary between contaminated sites and those that are not contaminated. They serve a strong practical purpose.*

*R. In HAB Advice #132, the Board states that it does not support buffer zones. If buffer zones are used within the Central Plateau, they may potentially allow contamination to spread outside of the Inner Area boundary. Buffer zones may also incorporate more lands under the Industrial Use designation. DOE has never provided a final plan for the extent of the Industrial Use designation.*

*R. [EPA] Buffer zones are complex from a regulatory standpoint. CERCLA is not directly impacted by buffer zones.*

C. To keep the advice point language simple, the Board could simply advise DOE to “protect contiguous areas.”

#### **Draft Advice Point 12:**

C. This draft advice point is illustrative of the overall advice message, and it should be moved so that it is the first advice point. The language neatly captures the idea of incorporating outreach efforts with the public into the process of finalizing Inner Area cleanup guidelines, as well.

#### **Additional Discussion:**

C. The current draft of the advice does not address landfills. The committee could consider adding an additional advice point on this topic.

C. The current draft of the advice does not address transuranic (TRU) waste. It is very important topic, and DOE's presented cleanup principles do not address TRU waste at all.

C. Could the advice recognize TRU waste in the background?

*R. DOE does not have to respond to any information that is not included within the advice, and it is important that the Board be provided an answer on this topic.*

*R. The advice could simply note that the Board has always advocated for the removal of TRU waste from the Hanford Site.*

C. The appendix adds important detail to the advice points; however, it is very important that the Board carefully consider strategies for ensuring that the agencies actually read and consider the appendix as well as the advice. There is the fear that the information and the additional detail will not be as impactful as language included within the actual advice points.

Issue managers for the Central Plateau Inner Area Cleanup Guidelines advice agreed to incorporate the noted edits and send an updated version of the draft advice to committee members for final review. Dale noted that the committee would then approve the draft advice via email, as the April Board Meeting would occur before the RAP committee had the opportunity to reconvene.

### **2014/15 Budget and RL Cleanup, Lifecycle Cost Analysis (joint topic w/ BCC)**

#### *Introduction*

Jerry Peltier, Budgets and Contracts Committee (BCC) chair, recognized that the BCC authors two major pieces of advice every year: one concerning the budget and one concerning the Hanford Lifecycle Scope, Schedule, and Cost Report (Lifecycle Report) \*. Jerry expanded upon the purpose of the Lifecycle Report, noting that a TPA milestone mandates the document and that the Lifecycle Report itself looks at the overall schedule and cost of TPA-mandated Hanford cleanup. Jerry also noted that the Lifecycle Report reflects the cleanup schedule as it is mapped out in the TPA; therefore, if no changes are made to the framework documents, no schedule or financial changes are incorporated into the Lifecycle Report. Jerry noted that this is potentially problematic, as Hanford Cleanup has been underfunded by nearly \$1 billion. Jerry was hopeful that the Board would have the opportunity to provide input on any TPA milestone changes or updates that may result from ongoing budget shortfalls.

#### *Agency Presentations*

Steve Korenkiewicz, DOE-RL, began his briefing by noting that DOE recently released the fifth iteration of the Lifecycle Report. Steve noted that, in the absence of any TPA milestone changes, the Lifecycle Report is updated each year with the cleanup work that has been conducted or completed. Steve stated that DOE takes feedback on the report very seriously, and he recognized that, in general, regulators are very happy with the current process of releasing the Lifecycle Report, while the HAB and the State of Oregon (Oregon) have both noted that DOE should only release updates of the Lifecycle Report following major changes to TPA milestones. Oregon and the HAB have also recommended adding in additional “what if” analysis.

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\* **Attachment 4:** 2015 Hanford Lifecycle Scope, Schedule and Cost Report Background

Key points from Steve's presentation\* include:

- The creation of the Lifecycle Report is dictated by TPA milestone M-036-01, and the document presents the cost of compliance. Projections and estimates included within the Lifecycle Report often fall on the conservative side. Plans and assumptions are made for remediation efforts, and then these assumptions are estimated and incorporated into the report. The cost data that is included in the Lifecycle Report for years 2-5 is Project Baseline Summary (PBS) level 3, while cost data for the remaining lifecycle of cleanup is at PBS level 2.
- Mission Support Alliance Portfolio Management is the lead contractor for the Lifecycle Report.
- The Lifecycle Report compiles all regulatory decisions, and DOE incorporates Records of Decision that have been made, as well as those that have yet to be finalized.
- In the past, the Lifecycle Report has incorporated alternatives analysis of future cleanup decisions. However, in order to streamline the 2015 report, no alternatives analysis was incorporated. It is unclear whether or not this strategy will continue into 2016.
- The 2015 Lifecycle Report incorporates source data from the U.S. Department of Energy—Office of River Protection (DOE-ORP)—System Plan Rev.4, the Budget Formulation Fiscal Year (FY) 2015-20, the Environmental Management Liability FY 21—Lifecycle, the Final Reactor Disposition costs (2054-2068), and Long-Term Stewardship costs (2060-2090).
- Updates and changes incorporated into the 2015 Lifecycle Report include:
  - A summary of cost changes by PBS between FY2014 and FY2015.
  - A clarification that ORP costs will include contingency to reflect the probability of a delay in the opening of a national repository and the resulting on-site storage of immobilized high-level waste (IHLW).
  - A reduction in report size and an improved overall data confidence methodology and process.
- The 2015 Lifecycle Report was released on March 24, 2015. For the first time, remaining cleanup costs for DOE-RL through 2090 (including long-term stewardship) are less than those of DOE-ORP. The estimate for the remaining total cost of Hanford cleanup is \$110.2 billion.
- The Lifecycle Report is open for public feedback until April 30, 2015.

Mark Heeter, DOE-RL, provided the committee with additional information on DOE-RL FY 14/15 Funding Marks\*. Mark noted the following funding changes between the FY 2015 President's Budget and the FY 2015 Omnibus Allocation:

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\* **Attachment 5:** 2015 Hanford Lifecycle Scope, Schedule and Cost Report (DOE-RL presentation)

\* **Attachment 6:** Richland Operations Office FY 14/15 Funding Marks

- A decrease of approximately \$31 million for RL-0011, NM Stabilization and Disposition – PFP.
- An increase of approximately \$20 million for the RL-0012,15-D-401 Containerized Sludge Line Item. These funds will support retrieval efforts in the K-Basin.
- An increase of approximately \$68 million for RL-0030, Soil and Water Remediation – Groundwater Vadose Zone. These funds support pump and treat efforts and ROD allocation.
- An increase of approximately \$45 million for RL-0041, Nuclear Facility D&D – River Corridor Closure Project. DOE will strategically transfer a significant amount of these funds into the next FY. This will allow DOE to smooth-out workflow into FY 2016 and will help to mitigate inefficiency.
- An increase of approximately \$5 million for RL-0100, Richland Community and Regulatory Support. The HAB receives its funding from this PBS.

#### *Committee Questions and Responses*

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

C. There are many changes to the TPA framework documents that are currently in progress. Potential changes to the Consent Decree are one example. However, until the framework document parameters are officially changed, the Lifecycle Report will not incorporate them into the lifecycle cost of cleanup. There are many things that may significantly alter the Lifecycle Report in coming years.

Q. Is the table on p. 9 of DOE-RL's Lifecycle Scope, Schedule, and Cost Report presentation just for FY 2014 and FY 2015?

*R. [DOE-RL] The table on p. 9 of the presentation demonstrates the net difference in cleanup cost between 2014 and 2015 for the entire lifecycle of Hanford cleanup extending to 2090.*

Q. Is there currently any way to go through and compare the projected costs from this year to those in 2090?

*R. [DOE-RL] No.*

Q. The Board has been told many times over the past year that DOE is paying closer attention to infrastructure and maintenance following New Mexico's Waste Isolation Pilot Plant (WIPP) accident. However, in the provided presentation, infrastructure and service costs go down between FY 2014 and FY 2015. Could you please elaborate on this further?

*R. [DOE-RL] The costs that were noted in the presentation are not by year, they are lifecycle estimates. The 2015 Lifecycle Report included updated algorithms that were based on stronger assumptions. That is why the cost decreased between the 2014 and 2015 Lifecycle Report.*

Q. Long-term stewardship (LTS) at Hanford is another concern of the Board. There is a significant drop cost between 2014 and 2015 within that project work scope, as well. Could you help the committee to understand that decrease?

*R. [DOE-RL] LTS begins in 2060. There is a significant amount of uncertainty at that range. In the 2015 Lifecycle Report, DOE refined several estimates. The more experienced the agency becomes, the tighter the lifecycle cost estimates become. This tightening explains the decrease in Hanford Site LTS cost.*

*C. The Board has been told over and over again that Legacy Management is not LTS. However, DOE-RL's presentation appears to use the terms interchangeably. Future Lifecycle Report and budget presentations should work to clearly distinguish between these two programs.*

Q. DOE-RL's presentation noted that Ecology requested that the 2015 Lifecycle Report incorporate the uncertainty surrounding a national repository and the resulting on-site storage of IHLW. Had past Lifecycle Reports not already incorporated those assumptions?

*R. [DOE-RL] There was concern about the national repository and the resulting impacts if it did not open as scheduled. Ecology requested that DOE-RL more clearly demonstrate this information in the report.*

Q. The overall difference between the estimated 2014 lifecycle cost and the 2015 lifecycle cost is noted as \$0.9 billion. However, last year the number was closer to \$113 billion remaining. Could DOE-RL explain the difference?

*R. [DOE-RL] The difference of \$0.9 billion is the result of refined estimates. In addition to this refinement, DOE also spent nearly \$2 billion on cleanup last year. These two numbers together add up to the \$113.2 billion noted in the 2014 Lifecycle Report.*

Q. Has DOE-RL ever compared past Lifecycle Report estimates to those included in the current Lifecycle Report? It would be interesting to see how well the assumptions incorporated into the Lifecycle Report hold up as cleanup progresses.

Q. If the budget for any DOE-RL number is under appropriated significantly, what happens to the estimates included within the Lifecycle Report? Is the cost and schedule for a project extended outward? Where would this extended timeframe be reflected in the Lifecycle Report?

*R. [DOE-RL] DOE is looking to have these kinds of tough discussions in the future. In all likelihood, the numbers included in the Lifecycle Report would need to be re-estimated.*

Q. For K-Basin, what is the work that is being planned for this year?

*R. [DOE-RL] DOE will be working to finish procurement and installation efforts. The agency is currently engaged in internal planning.*

Q. Compliance case budgeting only notes what is established in the TPA framework documents. There are many facets of cleanup that are not yet incorporated into these documents, such as the Central Plateau

Inner Area cleanup principles. How can the Board be sure that DOE budget projections are taking this uncertainty into account?

*R. Safeguard and securities are not included in the milestone debate. There should be some contingency that will allow for unforeseen scenarios to be incorporated into budget discussions.*

*R. Much of the specific work referenced in DOE-RL's budget presentation is not directly contributing to a specific TPA milestone. The Lifecycle Report presents the complete scope of work, and all of the compliant matters within the TPA are included within.*

In closing, Kris Skopeck, DOE-RL, noted that DOE's 2015 budget workshop is planned for April 28th.

Jerry encouraged HAB members to attend the upcoming workshop, and he requested that Board members send BCC leadership a list of thoughts and concerns following the meeting. Jerry noted that the concerns of Board members will then be combined into an advice draft that the BCC will convene to discuss in May 2015. BCC anticipates that budget advice will move forward at the June 2015 Board meeting.

## **Plutonium Finishing Plant Status**

### *Introduction*

Pam Larsen introduced a Hanford Communities video on [Remediation and Demolition Efforts at Hanford's Plutonium Finishing Plant](#) (PFP). The video noted the history of PFP operations and highlighted some of difficulties associated with PFP demolition.

### *Agency Presentation*

Tom Teynor, DOE-RL, provided the committee with an update on the status of PFP demolition efforts. Tom noted the following main points in his presentation\*:

- As of January 31, 2015, there were 23 remaining gloveboxes (of the initial 238) and 23 remaining pencil tank sections (of the initial 196). Ninety percent of large processing equipment has been removed and 63 of 81 facilities at the PFP complex have been demolished and removed. Work at the PFP is highly complicated, and workers consistently perform the job efficiently, safely, and effectively.
- As of February 2015, removal of the W-2 glovebox in the Americium Recovery Room is approximately 90% complete. Internal components have been removed, and workers are in the process of removing the shell; this work should be completed by the end of March 2015.
- There are a series of tanks in B-Room that are classified as TRU waste; but they do not exceed the 200 gram limit. These tanks will be pulled out, put into appropriate containers, and then sent away to the Central Waste Complex (CWC) for eventual shipment to WIPP.

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\* **Attachment 7:** Plutonium Finishing Plant Progress Update (DOE-RL presentation)

- Certain gloveboxes at the facility are too large to remove in a single piece. Some of these will likely go to Perma-Fix Northwest (Perma-Fix) for size reduction, while others will be size-reduced in place. Components have been removed from some of these pieces to reduce the gram loading. These pieces will be packaged, stored at CWC, and eventually shipped to WIPP.
- There are currently seven gloveboxes that are awaiting shipment; these will be shipped within FY 2015. Currently, DOE-RL is awaiting shipment documents. These gloveboxes will be going either to Perma-Fix or to the CWC (depending on size).
- Pencil tank removal has been going very smoothly, and work may be completed as early as the beginning of April 2015.
- The critical path for PFP demolition still goes through the Plutonium Recovery Facility, where demolition work must still address the gloveboxes, the galleries, and the canyon floor. Plans currently call for putting grout over the canyon floor and a scaling of walls to get the ground as clean as possible. Next, workers will look for any hot spots along the walls and try to reduce them as much as possible.
- The path forward to a slab-on-grade condition involves a very extensive decontamination of the PFP canyon floor and finishing pencil tank section removal.

#### *Regulator Perspective*

Rick Bond, Ecology, noted that in June 2014, demolition and closure efforts at the PFP were approximately six months behind; however, all work is now back on schedule. Efforts at the PFP are expected to be completed by September 2016, and Ecology is very pleased with the ongoing work. Rick noted that Ecology and DOE are currently working together to clarify what a completely cleaned-up and finalized PFP site looks like, and he noted that upcoming milestones note that all buildings need to be cleaned out before demolition of the structures can occur.

#### *Committee Questions and Responses*

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

Q. Where are PFP materials stored while awaiting shipment to WIPP?

*R. [DOE-RL] Materials awaiting shipment to WIPP are stored in the CWC. WIPP will have to conduct the final certifications, but the DOE keeps meticulous records of what materials will go into each of the containers. It is very important that the agency follow WIPP disposal requirements.*

Q. What is the volume of material from PFP that will eventually be sent to WIPP? When does DOE-RL anticipate that WIPP will begin accepting shipments again?

*R. [DOE-RL] DOE-RL's primary concern with materials slated for shipment to WIPP is to keep robust and accurate records. DOE-RL anticipates that WIPP will begin accepting limited amounts of waste in 2016 and be back to full-acceptance levels by 2018. WIPP has set an ambitious schedule for waste acceptance, and it is important for PFP efforts that WIPP acceptance commence as soon as possible.*

Q. Where in the WIPP acceptance queue is Hanford Site waste?

*R. [DOE-RL] DOE-RL is unsure of that, at the moment. WIPP has some waste for disposal that is already on-site. The facility is also generating more waste as it is cleaning up the storage mines.*

Q. Is 200 grams the cutoff weight for WIPP acceptance?

*R. [DOE-RL] 200 grams is the local vendor's size reduction limit.*

Q. Is there residual plutonium in the Plutonium Recovery Facility?

*R. [DOE-RL] Yes. Therefore, all materials from the Facility are bagged and very carefully handled so that no release occurs. There is continuous air monitoring occurring, and all work is executed with a high degree of sensitivity to worker safety.*

Q. Could you expand upon any spills that have occurred in the Plutonium Recovery Facility?

*R. [DOE-RL] The canyon floor is composed of metal pans. Sometimes, plutonium becomes fixed in this metal. Our approach to addressing removal of these pans is very conservative, but our primary concern is moving ahead with work as safely as possible.*

Pam thanked Tom for the informative presentation, and she commended Ecology's Rick Bond on his impactful career with Ecology and his support of the HAB. The committee noted that the topic of PFP demolition and remediation should be revisited in approximately six months. DOE-RL noted that additional information and an animation illustrating ongoing work should be ready to present to RAP within that timeframe.

### **Committee Business (joint w/ BCC)**

#### *Committee Leadership Selection*

Following the Budget presentation, the BCC reviewed the nominees for 2015-2016 BCC leadership and confirmed Jerry Peltier and Ed Revell for the roles of committee chair and vice chair, respectively.

RAP reviewed the nominees for 2015-2016 RAP leadership and confirmed Pam Larsen and Gary Garnant for the roles of committee chair and vice chair, respectively.

Changes in committee leadership for both RAP and BCC will become effective in April 2015.

*RAP 3-Month Work Plan\*\**

The RAP committee requested an in-person meeting in April that will tentatively include the following topics:

- Receive a briefing on 324 Building waste mockup and design
- Receive a progress update on River Corridor cleanup
- Follow up on the 618-10 VPU cleanup
- Receive a status update on the 300 Area ROD (acronym) implementation
- Brainstorm topics and prepare for the 2015 HAB Leadership Workshop

In May, RAP plans to meet to tentatively discuss the DV-1 and WA-1 Work Plans, Draft A, receive a briefing on upcoming DOE contract updates, and receive an update on the status of K-Basin Sludge.

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\* **Attachment 3:** Transcribed Flipchart notes

\* **Attachment 8:** RAP Committee 3-Month Work Plan

## **Attachments**

**Attachment 1:** Draft HAB Advice on Central Plateau Inner Area Guidelines, Rev. 0 (March 3, 2015)

**Attachment 2:** Appendix: Draft HAB Advice on Central Plateau Inner Area Guidelines, Rev. 0 (March 3, 2015)

**Attachment 3:** Transcribed Flipchart notes

**Attachment 4:** 2015 Hanford Lifecycle Scope, Schedule and Cost Report Background

**Attachment 5:** 2015 Hanford Lifecycle Scope, Schedule and Cost Report (DOE-RL presentation)

**Attachment 6:** Richland Operations Office FY 14/15 Funding Marks

**Attachment 7:** Plutonium Finishing Plant Progress Update (DOE-RL presentation)

**Attachment 8:** RAP Committee 3-Month Work Plan

## Attendees

Board members and alternates:

Jan Catrell	Pam Larsen	Ed Revell
Shelley Cimon	Susan Leckband	Dan Serres
Dale Engstrom	Jonathan Matthews	Art Tackett
Gary Garnant	Liz Mattson (phone)	Gene Van Liew
John Howieson	Jerry Peltier	Jean Vanni
Steve Hudson	Maynard Plahuta	Bob Suyama

Others:

Mark Coronado, DOE-RL	Emy Laija, EPA	Bruce Ford, CHPRC
Jim Hanson, DOE-RL	Rick Bond, Ecology	Sonya Johnson, CHPRC
Mark Heeter, DOE-RL	Madeleine Brown, Ecology	Kurt Workman, CHPRC
Stephen Korenkiewicz, DOE-RL	John Price, Ecology	Alex Nazarali, CTUIR
John Sands, DOE-RL	Robin Varljen, Ecology	Ryan Orth, EnviroIssues
Kris Skopeck, DOE-RL	Tom Rodgers, WDOH	Brett Watson, EnviroIssues
Alex Teimouri, DOE-RL		Don Bouche, Public
Tom Teynor, DOE-RL		Pedro de la Torre III, RPI (phone)
		Annette Cary, Tri-City Herald