

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE**

December 8, 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. Committee members adopted the September 2015 RAP meeting summary.

Announcements

Kristen Holmes, U.S. Department of Energy—Richland Operations Office (DOE-RL), provided committee members with an update on Vertical Pipe Unit (VPU) remediation efforts at the 618-10 site. She noted that, as of the beginning of December 2015, Washington Closure Hanford had completed hammering overcasings around all 28 VPUs and had augered and sampled approximately ten of those. Dennis Faulk, U.S. Environmental Protection Agency (EPA), added that the auguring would continue into 2016.

Update on 100-D/H Proposed Plan

Regulator Presentation

Nina Menard, Washington Department of Ecology (Ecology), provided the committee with background information on and the status of the Proposed Plan to address final cleanup actions for the 100-D/H Area, including detail on the preferred remedy for treatment. Key points from Nina's presentation¹ included:

- The 100-D/H Area hosted three reactors. The size of the cleanup area is approximately eight miles, and primary groundwater contaminants include hexavalent chromium, nitrate, and strontium-90.
- Currently, the 100-D/H Area incorporates 280 remediated waste sites and two pump-and-treat operations.
- In the 100-D/H Area, treatment of contaminants is proposed primarily via:
 - Remove, treat, and dispose (RTD) strategies, where contaminated soil and debris are excavated, transported to the Environmental Restoration Disposal Facility (ERDF), and treated as needed prior to disposal at ERDF.
 - Pump-and-treat, where contaminated groundwater is extracted from the aquifer using wells and then transferred to a facility for treatment. Following treatment, groundwater is returned to the aquifer.
 - Monitored Natural Attenuation (MNA) strategies, where natural chemical, physical, or biological processes reduce contaminants via dispersion, dilution, attachment, or decay.
 - Groundwater monitoring, where contaminant plumes in groundwater are measured to determine the performance of pump-and-treat, attenuation rates, and remedy protectiveness.
 - Institutional controls (IC), where administrative or legal controls limit the use of lands to prevent unacceptable human and/or environmental exposure to contaminants.
- Primary strategies for treating chromium contamination involve pump-and-treat operations. "Big digs" in the 100-D/H Area have worked to excavate contaminated soil ten feet into the aquifer; DOE-RL anticipates that these efforts reduced the need for future pump-and-treat in these locations by approximately 36 years.
- Primary strategies for treating rad contamination in the 100-D/H Area (primarily strontium-90) are ICs that ensure effective MNA.
- Four alternatives are included in the Proposed Plan (summarized in the attached presentation). The preferred alternative is estimated to cost approximately \$347 million and would achieve

Attachment 1: 100-D/H Proposed Plan Update for HAB

cleanup levels for chromium, nitrate, and strontium-90 in twelve years, six years, and forty-four years, respectively.

- Tri-Party Agreement (TPA) agencies anticipate that all interim waste sites in the 100-D/H Area will be remediated by March 2016.
- EPA and Ecology are working to conduct final legal review of the 100-D/H Proposed Plan and to resolve comments with DOE-RL in the coming months.

Nina closed her presentation by noting that the TPA agencies have tentatively set a public comment period for the 100-D/H Proposed Plan to begin in February 2016. TPA agencies are currently working with stakeholders to gather input to assist in the public meeting planning process.

Regulator Perspective

Dennis Faulk, EPA, noted that DOE-RL has largely cleaned up contaminated soil sites in the 100-D/H Area as part of the interim action, and he highlighted that the Proposed Plan works to address groundwater contamination primarily via pump-and-treat efforts. Dennis underscored that the 100-D/H Area is interesting in that, while cleanup of the site falls under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EPA assigned lead regulatory oversight responsibility to Ecology under the Hanford Federal Facility Agreement and Consent Order. Dennis underscored that EPA retains regulatory authority for approving the selected remedies.

*Committee Questions and Responses*²

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

C. The Yakama Nation will plan to request a consultation with EPA and Ecology on the 100-D/H Proposed Plan to follow up on comments that were not addressed following the Remedial Investigation/Feasibility Study (RI/FS).

Q. The preferred alternative notes that remediation of strontium-90 will take approximately forty-four years. What is the rationale for allowing strontium-90 cleanup to go on for so long?

R. [Ecology] Strontium-90 strongly adheres to soil and is not easily removed by pump-and-treat efforts. Radioactive decay of strontium-90 is the primary remediation strategy; therefore, strontium-90's lengthy half-life determines the amount of time needed for remediation. There are low levels of strontium-90 in both the 100-D and the 100-H Areas, and plumes in both locations are located in the uplands. The tendency for strontium-90 to adhere to soils means that there is low risk that the plumes will migrate far during the forty-four years needed for MNA. Other areas of the Hanford Site are exploring the idea of permeable reactive barriers to capture and bind strontium-90 contamination; however, the plumes of strontium-90 in 100-D/H are not of a high enough concentration nor close enough to the Columbia River for TPA agencies to recommend

Attachment 2: Transcribed flipchart notes

these types of barriers as the preferred remediation remedy. DOE-RL already removed strontium-90 from soils in the 100-D/H Area to the cleanup level; the proposed remedy only examines strontium-90 in groundwater.

Q. Cooling water used in historic operations of the reactors was treated with chromium. Where did this water go after it was sent to the cooling ponds? Was it dumped along the shoreline, or did it move back into the river?

R. [DOE-RL] The retention basins at 100-D/H received the cooling water, and then it was piped into the Columbia River. Therefore, unless chromium-treated cooling water was spilled, it ended up in the Columbia River.

R. [EPA] In cases of fuel failures, which were common, chromium-treated cooling water was redirected to retention basins or cribs. This is why there are so many discrete waste sites that require cleanup today.

Q. What is the cleanup level for hexavalent chromium?

R. [Ecology] Hexavalent chromium levels in Washington are set at 48 parts per billion (ppb). Aquatic criteria for hexavalent chromium are set at 10 ppb. Wells at the 100-D/H Area have shown concentrations as high as 350 ppb; the big digs that DOE-RL implemented were extremely successful in addressing these high levels of contamination.

C. For the upcoming public comment period, it would be helpful if there was a clearly worded presentation available online that demonstrated where the contamination came from and the remedies that have already been applied. In this format, TPA agencies could include information that is more detailed than what could be presented at a public meeting. This would provide important background to people planning to attend and provide comment. The public will also need to understand the work that the 100-D/H Proposed Plan discusses, as well as how the Proposed Plan impacts and relates to decisions that have already been made, and work that has already been done.

Q. Could TPA agencies highlight key differences between Alternative Three and Alternative Four in the 100-D/H Proposed Plan?

R. [Ecology] In Alternative Three, DOE-RL would be more aggressive in cleaning up groundwater by incorporating more wells and a faster remediation timetable. In Alternative Four, DOE-RL would incorporate fewer wells and remediation would take longer for hexavalent chromium, nitrate, and strontium-90 plumes. Alternative Four is the more expensive option due, in large part, to the additional resources needed to run pump-and-treat operations for a longer period of time.

Q. The time noted for the remediation of strontium-90 in Alternative Three is less than that noted in Alternative Four. What influences this difference in timing if strontium-90 is not captured by pump-and-treat and radioactive decay is the primary remediation strategy in both alternatives?

R. [Ecology] In Alternative Three, aggressive pump-and-treat moves more water around as it removes hexavalent chromium. Water moves very low concentrations of strontium-90 as it passes through pump-and-treat; this movement of some strontium-90 allows regulatory criteria for groundwater to be met on a faster timetable than if strontium-90 remediation is accomplished by radioactive decay alone.

Q. Does this mean that the strontium-90 that is drawn into pump-and-treat is only diluted, not captured via ion-exchange resin in the pump-and-treat process?

C. This is accurate. Small amounts of strontium-90 are drawn up with hexavalent chromium; however, the ion-exchange resin does not capture strontium-90.

R. [DOE-RL] Strontium-90 contamination occurs in limited areas compared to hexavalent chromium. Very few groundwater wells pick up strontium-90 contamination.

Q. Would pump-and-treat operations be active regardless of the treatment of hexavalent chromium contamination in the 100-D/H/ Area, or are the pump-and-treat costs identified in the alternatives specific to 100-D/H Area waste sites?

R. [EPA] The pump-and-treat operations accounted for in the budgets are specific and dedicated to these waste sites. The cost estimates for future pump-and-treat efforts in 100-D/H Area appear to err on the high end.

R. [Ecology] There are already pump-and-treat operations in 100-D/H Area, and a significant amount of money has already been spent on these. However, DOE-RL will need to expand, operate, and maintain the two existing pump-and-treat facilities, and DOE-RL will need to install new wells. The cost estimates included in the alternatives analysis reflect these needs.

C. The Board needs to continue to discuss this matter, and Board members need to examine past advice and other sources of information as they determine what follow up is necessary. There are contaminants, such as technetium-99, that are present in the 100-D/H Area and that the Proposed Plan does not address. In addition, the Proposed Plan notes remedies that will be in place for hundreds of years. These will be difficult to efficiently maintain for this extended period.

Q. The Proposed Plan only appears to address hexavalent chromium, nitrate, and strontium-90. Are there other contaminants in the 100-D/H Area that will need to be remediated? In HAB Advice #278, the Board advised that DOE-RL should remove all contaminants of potential concern.

R. [EPA] There were somewhere between 50-70 contaminants of potential concern in the 100-D/H Area; however, these were present in soil and they have already been remediated by interim actions. Deep contamination at some waste sites has not been addressed, as remediating deep contamination does not fit the current cleanup model for the Hanford Site.

R. [DOE-RL] There is one plume of technetium-99 in the 100-D/H Area. The reason that this contamination is not addressed in the Proposed Plan is because the plume sits beneath a reactor.

Therefore, cleanup of this technetium-99 plume will be associated with the remediation of the reactor.

Q. Pump-and-treat operations use an ion-exchange resin. Where does the contractor take this resin once it is loaded with contaminants?

R. [Ecology] Contractors used to send the resin off-site every three weeks to be regenerated. The interim action identified a new resin that lasts for approximately four years. This new resin converts hexavalent chromium to trivalent chromium, a stable form, that is then disposed of in ERDF. These resins are safe to dispose of without further treatment.

Q. How long will the public comment for the Proposed Plan be?

R. [EPA] The comment period will likely begin in February. It will last for 30-days, and there may be a 30-day extension if there is public interest.

C. Potential HAB Advice on the Proposed Plan will likely be very similar to HAB Advice #273. Advice points should focus on incorporating policy recommendations reflective of noted HAB values and on sound public engagement strategies.

R. [Ecology] The HAB's Public Involvement and Communication Committee (PIC) can serve as a forum for discussing the timeline of the upcoming public comment period. There are PIC calls scheduled for December 2015 and January 2016, as well as a PIC meeting scheduled for February 2016.

Q. How can issue managers begin writing advice if they do not have a current copy of the Proposed Plan?

R. [Ecology] The 100-D/H Proposed Plan that Oregon and the tribes have is older; however, information will largely be the same except for estimated costs for alternatives. Updated financial information is provided in the presentation.

Committee members thanked Nina for her time and for the information. Issue managers planned to review HAB Advice #273, look into available drafts of the 100-D/H Proposed Plan, and begin to write advice in preparation for the January 2016 RAP meeting. Following committee discussion, issue managers will work to update draft advice in anticipation of full-Board review in February 2016.

WA-1 Remedial Investigation/Feasibility Study Work Plan

Dale Engstrom, issue manager, noted that the discussion of the Western Area (WA)-1 Operable Unit RI/FS Work Plan was occurring early in the process development. He noted that a status update from DOE-RL and committee discussion would allow the Board to begin conceptualizing potential Board advice or actions relating to cleanup of 200 Area waste sites within the WA-1 Operable Unit.

Dale noted that all waste sites within the 200 West Area are included within the WA-1 Work Plan, with the exclusion of tank farms, canyon buildings, (most) pipelines, and burial grounds. Dale closed his

introduction by noting that the Central Plateau Framework document includes several 200 East Area sites along with those in the in the 200 West Area; therefore, the cribs and trenches within the BC Operable Unit are often considered in conjunction with 200 WA-1.

Agency Presentation

John Sands, DOE-RL, noted that DOE-RL had completed the draft Work Plan for the WA-1 RI/FS and had received comments on the draft from EPA, the lead regulator for the Operable Unit, in late November 2015. John noted that EPA requested several updates, including the addition of several waste sites and pipelines and a clarification of some sampling and characterization strategies. John noted that DOE-RL was hopeful that Rev 0 of the WA-1 RI/FS Work Plan could be approved by February 2016.

John noted that the WA-1 Operable Unit incorporates an eclectic mix of approximately 180 waste sites near the canyon buildings within the 200 Area. John noted that the canyons have many pipelines and trenches around them, and each pipeline and trench is associated with many waste sites. John recognized that DOE-RL would likely incorporate additional waste sites within the 200 West Area into the WA-1 Work Plan as they are discovered.

Regulator Perspectives

Dennis Faulk, EPA, stated that EPA reviewers felt that the draft WA-1 Work Plan did not adequately cover characterization of waste sites within the Operable Unit. Dennis noted that:

- WA-1 includes many waste sites that are extremely diverse, which makes the WA-1 Work Plan different from other Hanford Site Work Plans.
- DOE-RL is unwilling to state in the WA-1 Work Plan that the ten square mile inner area will be shrunk. EPA believes that, by the way that contamination lays, remediation will result in an Unrestricted Use cleanup.
- DOE-RL is proposing to do an alternative point of compliance for dig depth and for groundwater. EPA believes that an alternatives analysis needs to be completed for each Work Plan that DOE-RL would like to explore alternative points of compliance within.
- EPA allowed DOE-RL three extra months to include sites around the Plutonium Finishing Plant (PFP). EPA is hopeful that these waste sites are relatively small.
- The draft WA-1 Work Plan was missing key sampling and analysis detail. EPA is hopeful that the updated Work Plan will incorporate clear placeholders with proposed milestones in place to develop sampling plans.
- In general, cleanup work in the Central Plateau will differ from work in the River Corridor. There are many more waste sites, and approximately ten times as much characterization work will need to occur. As such, cleanup remedies will be more varied than only RTD, and there are several deep vadose zone units that will need to be treated.

*Committee Questions and Responses*²

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

C. [EPA] DOE-RL has agreed to run a tribal use scenario in the Central Plateau cleanup work plans, in accordance with advice provided by the HAB.

Q. Does DOE-RL believe that Rev 0 of the WA-1 Work Plan will be completed and address all of EPA's comments by early 2016?

R. [EPA] For EPA to approve Rev 0 of the WA-1 Work Plan, DOE-RL will need to address EPA's comments on the draft and incorporate PFP waste sites. DOE-RL currently plans to complete these changes by early 2016.

Q. How long does characterization take on the Central Plateau?

R. [EPA] The actual characterization for all Central Plateau Operable Units is approximately ten years.

Q. Will DOE-RL remove or treat any waste while sampling, characterization, and planning efforts are ongoing?

R. [EPA] There is already a decision on PW-1/3/6 Operable Units. EPA anticipates that cleanup work at those sites will begin in the early 2020s, with movement of transuranic (TRU) waste to New Mexico's Waste Isolation Pilot Plant (WIPP) expected to begin shortly after. Generally, the process of issuing a Record of Decision (ROD) for cleanup work takes approximately six years.

Q. Characterization of the Central Plateau waste sites will take a very long time. Will DOE-RL be able to make meaningful progress on moving waste out of the Central Plateau as characterization efforts are ongoing?

R. [EPA] Funding will be steady, but there will likely be a lull in Central Plateau cleanup while characterization is ongoing. As soon as PFP is completed, the next two projects that DOE-RL will likely begin looking into are the 618-11 Burial Grounds and the 324 Building. There will likely not be significant funds to continue work at the Central Plateau aside from characterization while cleanup at these sites is ongoing.

Q. Does EPA anticipate that there will be any unanticipated discovery of plutonium or other TRU waste as characterization at Central Plateau Operable Unites moves forward?

R. [EPA] No. EPA believe that historic knowledge is sound and that no unanticipated TRU waste will be discovered while characterizing Central Plateau waste sites, with the potential exception of those waste sites associated with PFP. PW-1/3/6 were unique on the Central Plateau in their incorporation of TRU wastes.

Attachment 2: Transcribed flipchart notes

Q. How are the TPA agencies working through DOE-RL's Central Plateau cleanup guidelines as they are being incorporated into draft cleanup Work Plans? From the Board's understanding, there is still no firm agreement between TPA agencies that the guidelines will move forward.

R. [EPA] The cleanup guidelines will not be finalized until the Work Plans are finalized and signed. Until the guidelines are memorialized in an approved Work Plan, they do not have formal agreement by the TPA agencies.

C. The Board provided feedback on the Central Plateau cleanup, and the agencies have not provided the Board with a response as to whether or not the Board's advice will be taken into account as these guidelines are clarified.

R. [EPA] DOE-RL is conducting a tribal use scenario solely based on the HAB's advice and input.

Q. What response is desired from the HAB at this point in the WA-1 Work Plan process?

R. [EPA] This is an opportunity to share information with the Board. At this early point, the agencies are not looking for any advice or recommendations.

Q. Would it make sense for HAB members to review HAB Advice #283, Central Plateau Inner Area Guidelines, in the context of the PW-1 Work Plan?

R. [EPA] It makes sense to revisit the advice and the TPA agency response and consider what advice points relate to upcoming activities and decisions. The first really important near-term piece of the HAB advice that pertains to the Work Plan involves the incorporation of a tribal use scenario. Again, DOE-RL has agreed to run this in addition to the industrial use scenario.

Q. When will public involvement for the PW-1/3/6 Work Plan be most beneficial?

R. [EPA] This could occur any time between now and when the cleanup begins. WIPP will likely begin accepting waste in the 2018 or 2019 timeframe; Hanford will follow Idaho in the waste shipment queue and it is likely that Hanford will begin shipping waste to WIPP by 2022. As Ecology noted, the TPA agencies agree that waste from PW-1/3/6 will not be retrieved for storage until WIPP begins accepting waste again. Therefore, cleanup at PW-1/3/6 sites will likely begin sometime in the early 2020s.

Committee members thanked John and Dennis for the information and perspectives at this early stage in the Central Plateau cleanup process. Dennis agreed to provide RAP members with the comments that EPA submitted to DOE-RL on both the draft WA-1 Work Plan and the PW-1/3/6 Work Plan (from EPA headquarters). RAP members planned to review EPA's comments, HAB Advice #283, and the PW-1/3/6 Work Plan in preparation for future committee discussion.

Proposed Changes to Tri-Party Agreement Central Plateau Cleanup Milestone Series M-015, M-016, M-017, M-037, M-086, and M-094

Shelley Cimon reminded RAP members that the TPA agencies provided the Board with a briefing in November 2016 on the proposed changes included within the Central Plateau milestone series change package. This change package incorporated updates to milestone series M-015, M-016, M-017, M-037, M-086, and M-094 and concerns the cleanup schedule for waste sites within the Central Plateau area. Shelley noted that the Board was interested in submitting advice on the change package, and she encouraged issue managers and committee members to discuss potential background and advice points in preparation for further committee discussion in January 2016 Board review in February 2016.

Regulator Perspective

Dennis Faulk, EPA, noted three overarching messages that emerged from the regional public meetings hosted in November 2016: commenters (1) were unwilling to give up work in the 300 Area in exchange for a greater focus on the 200 Area, (2) wished to see more robust appropriations to facilitate enhanced cleanup work, and (3) disliked the “TBD” date noted as the due date for the M-016 milestone series.

Dennis stated that the reason behind DOE-RL and regulators’ decision to renegotiate Central Plateau milestones was that DOE-RL was unable to meet existing cleanup schedules due to annual shortfalls in budget appropriations. Dennis noted that missed cleanup milestones allow EPA to levy fines against DOE-RL up to \$10,000 per week, but he highlighted that the fine structure is unimpactful and that it takes money away from cleanup work. Dennis believed that having enforceable and realistic cleanup milestones was very important to the U.S. Department of Energy (DOE) and regulators alike.

*Committee Questions and Responses*²³⁴

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

Q. In the past, the Board has been very resistant to advise cleanup priorities or rank cleanup efforts. However, in the presentations provided at the November 2016 Board meeting and at the following regional public meetings, the primary driver for proposed milestone changes was that DOE-RL consistently receives lower appropriations than needed to complete cleanup on the current schedule. The HAB will have to consider whether advice on the change package should note cleanup priorities.

C. The Board has always provided advice encouraging cleanup of the Hanford Site as swiftly as possible and not prioritizing cleanup efforts, even if the advice was not likely to be accepted by TPA agencies. The Board should do the same for the proposed changes to Central Plateau cleanup.

Attachment 2: Transcribed flipchart notes

Attachment 3: Card Comments on the Change Packages

Attachment 4: Language changes and updates to Milestone Series M-015, M-016, M-037, M-085, M-094 (Hanford Challenge handout)

C. It would not be useful for to agencies if the HAB were to issue advice that was not reflective of the current appropriation shortfall that has struck all U.S. Department of Energy—Office of Environmental Management (DOE-EM) Sites. Realistically, the milestones governing Central Plateau cleanup need to be updated in order for them to be meaningful and functional.

Q. Is the loss of an enforceable schedule the primary driver for EPA and Ecology when it comes to renegotiating TPA milestones?

R. [EPA] The loss of milestones is not the only driver for regulators; however, this is a very important in the negotiation process. Many other U.S. Department of Energy (DOE) offices have rolling milestones, where the regulators create work plans for the Site based on available budgets. There are no enforceable milestones when cleanup is managed on a rolling basis. Local DOE offices have been very insistent that the current form of scheduled milestones works at Hanford, and EPA would certainly like to continue with this strategy as well.

C. Any advice that the Board issues needs to recommend that the “TBD” deadline for the M-016 milestone be removed. The lack of a date draws undesirable attention and focus. Is there a rough estimate for how long Central Plateau cleanup will take?

R. [Ecology] The “TBD” dates are incorporated at the request of Ecology.

R. [EPA] Realistically, the date for overall completion of Central Plateau cleanup work will likely be sometime in the early 2040’s. This estimate is based on the length of time that work in the River Corridor has taken, as well as the past examinations of remaining work.

C. TPA milestones are both meaningless and meaningful. They can be changed at any time; however, they can also be used to leverage cleanup. The Board can use this comment opportunity to reiterate HAB values and clarify HAB positions on strategies and timelines for completing cleanup.

C. At the regional public meetings, attendees appeared to be generally supportive of the need for milestone changes. There were no public comments directing the agencies to not change the milestone dates.

Q. Are there any troublesome issues that would confound Central Plateau cleanup?

R. [EPA] To effectively treat deep vadose zone contamination, DOE-RL may need to wait several more years for the right technology to be developed. If more funding were available now, DOE-RL could develop remediation technology with greater agility.

Q. The extended comment period for the milestone series change package will end in January 2016. Will HAB advice be accepted by TPA agencies if it is adopted at the February 2016 Board meeting, outside of the public comment period window?

C. [Ecology] There is a myth that the HAB and the public can only talk to DOE-RL and regulators during public comment periods. However, there are no policies in place that limit

interaction and engagement with the agencies. The CERCLA process encourages an interactive relationship with stakeholders.

C. [Facilitation Team] Agency representatives have repeated assurance that the Board's input would be taken into consideration despite the HAB's February 2016 Board meeting falling outside of the extended public comment period.

C. [EPA] The current milestone series change package is the first to be developed where regulators are not given any "gets" in return for delaying cleanup milestones. In essence, the milestone changes are the same program that TPA agencies developed ten years ago, the schedule is just pushed out further. The milestone updates are reflective of a more achievable cleanup schedule.

Committee members thanked TPA agency representatives for their input. Issue managers committed to using committee perspectives to create draft advice on the Central Plateau milestone series change package for discussion at the January 2016 RAP meeting. Committee members were hopeful that advice could move forward at the February 2016 Board meeting.

Discussion of Consortium for Risk Evaluation with Stakeholder Participation Hanford Site-Wide Risk Review Project Interim Progress Report

Pam Larsen stated that the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) had recently released the second draft of the group's interim Hanford Site-Wide Risk Report, and she reminded committee members that CRESP representatives recently provided briefings to Committee and Board members detailing the findings of the interim report and highlighting updates to the report's methodology. Pam believed that DOE headquarters was interested in continuing to fund the group's work, which would continue to review the remaining waste sites at Hanford and quantify risks present at each with the hope of prioritizing future cleanup efforts.

Pam believed that the Board should weigh-in on the continued funding of the CRESP Hanford Site-Wide Risk Review project with the opinion that no additional funding should be expended on completing the risk review of remaining waste sites. Pam solicited feedback and discussion on potential next steps from committee members with the hope of clarifying a path forward in preparation for the February 2016 Board meeting.

*Committee Questions and Responses*²

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

C. The CRESP Hanford Site-Wide Risk Review interim progress report incorporated a novel strategy for measuring and assessing risk. However, there are established, tested strategies for measuring risk that are ongoing at the Hanford Site. The information provided within the report cannot be used to effectively

Attachment 2: Transcribed flipchart notes

measure presented risks. Consistent strategies for measuring risk are very important, as it allows for comparisons.

C. It is important that the Board go on record to note that the initial study did not yield much new information. Continuing the review is not a useful exercise, and the funding could be better spent on cleanup efforts.

R. Oregon, Ecology, the Washington Department of Health, and the Tri-City Development Council have all authored letters that express similar ideas. Findings from internal DOE studies (such as the CRESP Hanford Site-Wide Risk Review) are not taken into account by regulators. Issue managers authoring the CRESP letter should begin by reviewing these letters sent by other stakeholder groups and agencies.

Q. If the Board were to also draft a letter, to whom would it be addressed?

R. The HAB would send the letter to DOE headquarters with a courtesy copy to Stacy Charboneau, DOE-RL Manager.

Committee members agreed to write a letter regarding the CRESP topic. Issue managers plan to discuss and clarify the letter's content with committee members at the January 2016 RAP meeting in anticipation for Board review in February 2016.

Committee Business

Committee members noted interest in adding topics to the HAB's FY 2016 Work Plan, including 618-10 and 618-11, the 324 Building, and the PW-1/3/6 remedial design/remedial actions.

Potential Topics for Discussion at April 2016 EM SSAB Chairs' Meeting

Committee members identified HAB topics of concern across DOE-EM sites for potential discussion at an open forum segment at the April 2016 EM SSAB chairs' meeting, including:

- The importance of continuing to explore and invest in new technologies for waste cleanup and treatment across DOE-EM Sites
- The CRESP Omnibus report and its potential implications on cleanup
- The nature of and challenges associated with interim storage stemming from delays in WIPP waste acceptance

RAP 3-Month Work Plan ²⁵

RAP will plan to hold a committee meeting in January 2016, and the meeting will tentatively include the following topics:

- Discuss and refine potential HAB advice on the 100-D/H Proposed Plan in anticipation for public comment period in early 2016
- Discuss and refine potential HAB advice on the Central Plateau milestone series change package
- Discuss EPA comments and DOE-RL responses to the PW-1/3/6 Work Plan
- Discuss and refine a potential HAB letter on the CRESP Hanford Site-Wide Risk Review Project

Attachment 2: Transcribed Flipchart notes

Attachment 5: RAP 3-Month Work Plan

Attachments

Attachment 1: 100-D/H Proposed Plan Update for HAB

Attachment 2: Transcribed flipchart notes

Attachment 3: Card Comments on the Change Packages

Attachment 4: Language changes and updates to Milestone Series M-015, M-016, M-037, M-085, M-094 (Hanford Challenge handout)

Attachment 5: RAP 3-Month Work Plan

Attendees

Board members and alternates:

Don Bouchey	John Howieson	Emmett Moore
Jan Catrell	Steve Hudson	Ken Niles (phone)
Shelley Cimon	Alex Klementiev	Bob Suyama
Dale Engstrom	Susan Leckband	Richard Smith
Gary Garnant	Pam Larsen	Jean Vanni
Becky Holland	Liz Mattson	Gene Van Liew

Others:

Kristen Holmes, DOR-RL	Dennis Faulk, EPA	Ron Brunke, CHPRC
John Sands, DOE-RL	Dieter Bohrmann, Ecology	Noah Cruz, CHPRC
	Alicia Boyd, Ecology	Ryan Orth, EnviroIssues
	Dib Goswami, Ecology	Brett Watson, EnviroIssues
	Nina Menard, Ecology	Rachel Baran, HoANW (phone)
	John Price, Ecology	Jen Copeland, MSA
	Tom Rodgers, WDOH	Kelsey Shank, SN3
		Katherine Bittinger, WSU