



FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
River & Plateau/Health, Safety & Environmental Protection
May 15, 2019
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

Jan Catrell, River and Plateau (RAP) Chair, welcomed committee members and introductions were made. The January 2019 combined RAP/HSEP meeting minutes¹ were approved by consensus.

Announcements

Lindsay Strasser, Hanford Advisory Board (HAB/Board) facilitator reminded members, Agency liaisons and contractors to sign in prior to leaving the meeting.

Tom Galioto, Chair of the Budgets & Contracts committee shared information regarding the upcoming public budget meeting. Tom encouraged members to attend the 6:00 p.m. evening event located at the Richland Public Library.

Nina Menard and Debra Alexander, Washington State Department of Ecology (Ecology) provided members with a handout and brief overview of the proposed draft changes to the Tri-Party Agency (TPA) Agreement and milestone changes. The document provided to attendees was intended to assist Ecology in explaining the process to coordinate Resource Conservation and Recovery Act (RCRA) closures with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions. Ecology has been working with the Environmental Protection Agency (EPA) and the U.S. Department of Energy Richland Operations Office (DOE-RL) to outline TPA Agreement and milestone changes. Some changes included are being referred to as coordinated closure. For a unit to be eligible for coordinated closure, it cannot be currently operating. Ecology created “binning tables” to show units that change through the normal RCRA regulations. There are several things that need to be in place to allow RCRA closure activities to work in conjunction with CERCLA closure activities. Additional information and detail on proposed changes will be provided at the June HAB meeting.

324 Building Update

Jan Catrell RAP Chair introduced Ben Vannah, DOE-RL and the 324 Building Update. Key points from Ben’s presentation² include:

- Structural design is currently being wrapped up at the 324 Building facility.
- Structural modifications to the 324 Building facility include the pillars and piles placed below the facility to hold its weight.
- There is a lot of activity happening at the mockup facility. The mockup facility is a full-scale replica of B Cell. There was a recent grout removal demonstration completed at the mockup facility. Equipment was tested in the grout removal process and operated as anticipated.

¹ [January 8, 2019 RAP/HSEP Meeting Summary](#)

² [300-296 Remote Excavation](#)

- Remote excavation refers to cutting a hole in the floor and removing the highly-contaminated soil down to six to eight feet. Remote excavating to this depth will allow for the removal of the most highly-contaminated soil to be completed safely.
- The first step of putting the piles below the facility to support the weight of the building is to drill a Pilot hole. A micro pile will then be put in place by adding a steel rod and filling with grout to provide structural stability.
- Crews will be using a 4,000-pound pilot hole drill rig to drill into B Cell. The pilot hole drill rig will be placed in an adjacent room to B Cell. Trained crews have successfully completed a drilling demonstration wearing full personnel protective equipment (PPE).
- Crews have been trained on how to operate in a radiological environment. In addition, crews are being trained to wear two pairs of PPE and power air purifying respirators.
- In order to ensure workers are in safe conditions, the crews will be wearing lapel air monitors to check the air samples while work is being done. In addition, there will be air-sample monitors and grab air samplers in place.
- There was a pause called during a drilling event. Any time workers are interacting with the drill rig, there is potential for contamination transfer. Drilling began on March 13, 2019 when workers got down about three feet and 4 RAD was detected on the drill bit. With several more drill holes to go, management called a pause to identify opportunities to minimize contamination.
- A pause was also called on the 324 Building when Strontium contamination was identified. Contamination was found on a worker's personal clothing. CH2M Hill Plateau Remediation Company (CHPRC) management called a Stop Work to double check the processes in place. The contamination happened in a contamination area and controls in place were found to work as expected. A full-body survey was completed and no body contamination was found.
- Grout demolition at the mockup facility was a success. Successful demolition gives DOE-RL the confidence that work will be completed as planned at the 324 Building.
- Geoprobes are in place to identify any activity of migration of contamination from the waste site to the groundwater. Monthly monitoring has taken place since the geoprobes were put in place in 2011. No changes or migration has been detected.
- Due to the proximity of the waste site to the Columbia River, the 324 Building is a high-priority project for DOE-RL. DOE-RL intends to continue to make safe and deliberate progress on the cleanup of the 324 Building.

Agency Perspective

Ben Simes provided EPA's perspective on the 324 Building. Ben feels that creating a mockup facility to work through the difficulties and challenges of the 324 Building was a great idea. By building the mockup facility and completing prototype pilot testing, it will reduce possible future releases that the Site might have. Ben communicated that DOE-RL and EPA share the same goals of the safety of the

workforce and the community. At this time, groundwater is not an issue in this area and EPA would like to keep it that way. EPA is happy a well was installed. EPA is working with DOE-RL to determine what will be sampled in the well and the frequency in which it will be sampled. Safety continues to be extremely important at the 324 Building. However, EPA would like to see forward progress at the Site. The current TPA milestone for soil removal is September 30, 2019. Ben does not anticipate this milestone will be met. EPA, Ecology and DOE-RL will need to discuss the anticipated missed milestone over the next few months.

Committee Member Questions (Q), Responses (R), and Comments (C):

Note: This section reflects individual questions, comments, and Agency responses.

Q: "How many pilot holes have you drilled so far?"

R: "Inside the facility, this is the first one."

Q: "Recognizing your graphic cross-section is not to scale, it looks like your Pilot holes are going to be approaching the groundwater level. Are you anticipating any water getting extracted from those holes? Is your system setup to handle moisture that way?"

R: "Our Pilot holes are going down to 30 feet below the facility. Groundwater is at 40 feet so there is a 10-foot buffer. We purposely did not go all the way to groundwater with that concern. There will be some water application during drilling with up to 25 gallons of water usage. An analysis was done to tell us how much water we are able to put in this area per day without affecting groundwater. It was determined it would take six to nine years of constant water application at the rate we are going to affect groundwater. In that case, they were evaluating at 400 gallons of water per day. Over this operation, it would be a maximum of 25 gallons so it would not affect groundwater."

C: "Thank you for the presentation but I feel like I need to correct a couple things that you said. If in fact it happened the way it's being told, the worker being inside of CA and exited is not correct. I think part of the reason the Stop Work was done is because a worker was in an RBA where there should not be any contamination and contamination was found on their clothing."

R: "You are correct. The worker was in the RBA and reaching across into the CA for equipment."

Q: "In order to lift a stop work, you have to have some things in place. Are there different limits used now for release because of the Strontium that was found?"

R: "When you have a formal Stop Work, we conduct a review where we went over the facts. We went over what happened, how do we think it happened, and what do we need to change? Due to the elevated Strontium levels, five-times stricter requirements were implemented. We are checking to five-times stricter levels of contamination on the workers and the equipment."

Q: "I think the issue here is the pure Strontium that wasn't anticipated. The release limits have to all be changed because we encountered pure Strontium correct?"

R: "Correct."

Next Steps: August was identified as the appropriate time for the next 324 Building progress update.

618-10 Revegetation

Jan Catrell, RAP Chair introduced Michael Kruzic, Project Manager for CHPRC and the topic of 618-10 Revegetation. Key points from Michael's presentation³ include:

- The 618-10 revegetation effort was completed as anticipated. Overall, everyone is satisfied with the progress that has been made.
- The 618-10 revegetation work was completed prior to the heavy winter.
- Demobilization at 618-10 was completed in the Spring 2018 timeframe. This left a lot of time for tumbleweeds to grow.
- Monitoring of the 618-10 jobsite was done weekly. Mission Support Alliance (MSA) was brought in to complete vegetation removal.
- Depending on the types of seeds used, multiple passes were completed.
- In summer of 2017 and spring of 2018, a contractor was brought in to collect shrub and legume seeds. Those seeds were then taken to a nursery for propagation. Seeds collected were grown into shrubs that were planted at the 618-10 site. Leftover seeds were used in the broadcast seeder. Larger seeds that did not work well in the broadcast seeder were broadcasted by hand.
- The planting phase was the most hands on and rigorous activity. Workers were onsite daily digging holes and planting roughly 76,000 shrubs. There were roughly 600 shrubs planted per acre.
- The revegetation effort is measured in years and not weeks and months. At the end of the project, the expectation is for 10-15% coverage with five to six feet spacing between the shrubs.

Agency Perspective

Ben Simes provided EPA's perspective on 618-10 revegetation. Ben feels that DOE and CHPRC did a great job. Old berms and construction material were removed while completing the revegetation effort restoring the land to how it should be. Ben shared that he can't wait to see the project in the next couple of years.

Committee Member Questions (Q), Responses (R), and Comments (C):

Note: This section reflects individual questions, comments, and Agency responses.

Q: "Thank you for your presentation. It looks amazing and I cannot believe the transformation when I drive by it now. I know a lot of the Conex boxes have been moved to other locations. I am wondering

³ [Revegetation of the 618-10 Burial Ground and Adjacent Waste Sites](#)

about the light plants that were all along the road there. Do you know where those ended up and what the future plan is for those?”

R: “Those were removed outside my project so I am not quite sure. I believe it was MSA that did some of that work. I don’t have a good answer to that because it was done before I came on board.”

Q: “What seeds were planted? How did you keep the cheatgrass out?”

R: “We had a lot of different seeds. We had about 31 different types of legumes, shrubs and grasses. I have a list that you can take a look at if you would like. Keeping the cheatgrass out is a tough job. The main thing we did before we got started was to take out any existing growth. We got started in November and finished in January so there wasn’t a lot of new growth at that time. We did put in some sterile winter wheat in the ground to try to inhibit some of that weed growth this spring. We aren’t quite sure how effective it is at this point.”

Q: “How much of what you planted was Native? Were the Tribes consulted about this?”

R: “We consulted with the Tribes when we came up with the revegetation plan to address what types of seeds would be planted. There was concern about having coyote tobacco so that was spread across the entire Site. In terms of the weed control, we have to let nature take its course once we have everything in the ground.”

Q: “What was your budget for this? What is the expected cost for monitoring over the next decade?”

R: “I don’t think I can speak to the long-term monitoring because that’s not in my scope. That part of the project belongs to MSA. In terms of our work, the estimate actually came in lower than we expected. We based our estimates on work throughout the Site where it’s a bit more challenging with the harder soil and limited locations. I think we are about \$1.2 million dollars. There is a lot of work that goes into it. It was a two-year effort and lot of it was contractor costs, nursery costs, and grass seed costs.”

Q: “You used contract planters, right?”

R: “Yes, we brought in contractors to do the physical work.”

Q: “About how many people did that employ?”

R: “I think they had anywhere between five and ten laborers out there.”

Next Steps: At this time, there is no follow-up requested by the RAP committee on the 618-10 Revegetation project.

RAP Committee Business

Jan Catrell, RAP Chair introduced the topic of Committee Business. Committee business included the following:

3 Month Work Plan

The RAP committee members discussed updates to the RAP's 3-month work plan. Additional requested updates for August include the following:

- 324 Building Update
- TPA Milestone Update

RAP Chair & Vice-Chair Election

An election for Chair and Vice-Chair of the RAP committee was held at the May meeting. Jan Catrell was re-elected to serve as RAP committee Chair. Tom Sicilia, Oregon Department of Energy was nominated and elected to serve as Vice-Chair.

RAP Review of Hanford Advisory Board Work Plan

Jan Catrell, RAP Chair introduced the topic of the Hanford Advisory Board Work Plan Review.

Members took the opportunity to have an open dialogue regarding topics they would like to see added to the FY2020 HAB work plan. Items recommended by RAP members to add to the FY2020 work plan include the following:

- 100 K Feasibility Study
 - Technical Implacability
- High-Risk Pipelines
 - What is potentially left behind?
 - How are they binned?
 - Characterization
 - Potential Exhumation
 - Integrated with Composite Analysis
 - Integrated with Waste Management Area C
- Groundwater
 - Yearly Report
 - Reinjection

- Water lines & Potential Impacts of Leaks

Hanford Site-Wide Traffic Safety Committee Discussion

Rebecca Holland, HSEP Chair introduced the topic of Hanford Site-Wide Traffic Safety, Paul Pak, DOE-RL, Mark Cope, Hanford Fire, Mark Whitten, HAMTC, and Steve Snyder, MSA. Rebecca shared that traffic safety is a topic the HSEP committee has followed for a very long time. Key points from the Hanford Site-Wide Traffic Safety presentation⁴ include:

- MSA was commissioned by DOE to embark on the Hanford Site-Wide Traffic Safety initiative. MSA will work with other contractors to identify future opportunities to improve the work environment in regard to traffic safety.
- Traffic safety is taken very seriously at DOE. DOE's goal is to get employees both to and from work safely each and every day.
- DOE would like to reduce the traffic-related accidents on the Hanford Site. Actions employees should refrain from while driving include:
 - Eating
 - Drinking
 - Speeding
 - Texting
- The Traffic Safety Initiative focus areas include:
 - Education
 - Enforcement
 - Engineering
- DOE is in the process of adding "376-SAFE" to all of the government-owned vehicles. 376-SAFE was established as a mechanism to report traffic-safety issues on the Hanford Site.
- A mobile camera monitoring system was recently installed. This prototype is a video-surveillance system that can be used to monitor speed. This system also has the capability to take videos of vehicle behavior.
- An engineering study and cost estimate will be required prior to a decision to add additional turnouts on Route 4 South. This is currently unfunded scope.

⁴ [Hanford Traffic Safety](#)

- The addition of light plants from Stevens Drive to the 300 Area is funded. The plan is for the light plants to be installed prior to November 2019.
- There are several safety concerns regarding SR 240/SR 225/Route 10 intersection. This is currently unfunded scope that requires involvement from Washington State Department of Transportation (WSDOT) and DOE.
- WSDOT should consider adding a turn lane on westbound SR 240 to allow SR 225 motorists the ability to know the intentions of westbound traffic on SR 240.

Committee Member Questions (Q), Responses (R), and Comments (C):

Note: This section reflects individual questions, comments, and Agency responses.

Q: “Could we stagger the shifts of Hanford employees even by 30 minutes? I feel like it would make a huge difference.”

R: “We have suggested that. I am not representing the company because I am a union guy. However, we have suggested that and the answer we got back was if contractors are needed to support other contractors and they are staggered, the schedule will be thrown off. DOE does not want that. With the overlap and support of each other, DOE wants us all on the same schedule. In my opinion, this is not something they want to entertain.”

Q: “Have there been conversations about slowing down the traffic or installing lights?”

R: “Yes there has been and they have not been very positive. Stop lights back up traffic. If you slow traffic, there will be no gaps.”

C: “One thing is clear here. We need to do something now or we are going to lose lives.”

C: “This just screams roundabout to me.”

Q: “Have you looked at the old abandoned road and engineering costs? Have you looked at putting in an overpass to the Wye barricade? That might be really interesting as it will take care of the coming and the going. I don’t know if the overpass has been considered at all but I think it’s something that would be taking a worth and looking at.”

R: “I agree. We have discussed it at committee but move on to something else as we think the bridge will cost a lot of money.”

C: “More lanes usually just means more traffic. This is evident in cities like Atlanta and Los Angeles.”

C: “We were at the EM Site-Specific Advisory Board meeting in August last week. They did bring up an issue on transportation. Some of that discussion was also had in New Mexico with the oil industry. One of the things we talked about was who would fund it. The part I encourage you to think about while thinking about advice is to think about what is in DOE’s control. If that is we have a set of needs we want to identify and if we have concerns that have been brought up, think about what is in DOE’s control. Identify those needs and go start those conversations with the other groups outside of Hanford. It is a bigger issue. That road runs by LIGO and several other cities are involved as well.”

Next Steps: A Hanford Site-Wide Traffic Safety Issue Manager Team was formed. Rebecca Holland will work as the Lead Issue Manager with Richard Bloom, Paige Knight, and Mike Korenko to bring draft advice to the HSEP committee in August for review and approval to move forward to the September HAB meeting.

HSEP Committee Business

Rebecca Holland, HSEP Chair introduced the topic of Committee Business. Committee business included the following:

3 Month Work Plan

The HSEP committee members discussed updates to the HSEP's 3-month work plan. Updates to quarter four include the following:

- Review of FY20 HAB Work Plan
- Traffic Safety
 - Review & Approve Draft Advice
- Plutonium Finishing Plant Update (Combined with RAP)
- Simplified Waste Primer Approval

HSEP Chair & Vice-Chair Election

An election for Chair and Vice-Chair of the HSEP committee was held at the May meeting. Rebecca Holland was re-elected to serve as HSEP committee Chair. Richard Bloom was re-elected to serve as HSEP committee Vice-Chair.

HSEP Review of Hanford Advisory Board Work Plan

Rebecca Holland, HSEP Chair introduced the topic of the Hanford Advisory Board Work Plan Review.

Members took the opportunity to have an open dialogue regarding topics they would like to see added to the FY2020 HAB work plan. Items recommended by HSEP members to add to the FY2020 work plan include the following:

- Worker Health & Safety
 - Respiratory Distress Identification
- Emergency Preparedness

- Wild Fire Season

Open Forum

Rebecca Holland, HSEP Chair introduced the topic of Open Forum. She explained to HSEP members that the open forum provides an opportunity for members to discuss topics that may not be on the agenda or on the HAB’s work plan. Members utilized the time allotted to discuss Hanford-related items of interest.

Attachments

Attachment 1: 300-296 Remote Excavation

Attachment 2: Revegetation of the 618-10 Burial Ground and Adjacent Waste Sites

Attachment 3: Hanford Traffic Safety

Attendees

Board Members and Alternates:

Jan Catrell, Member	Rebecca Holland, Member	Richard Bloom, Alternate
Paige Knight, Member	Dan Solitz, Alternate	Chuck Torelli, Member
David Bolingbroke, Member	Pam Larsen, Member	Emmett Moore, Members
Gene Van Liew, Member	Gerry Pollet, Member	Kate Griffith, Alternate
Tom Galioto, Member	Shelley Cimon, Member	Mike Korenko, Alternate
Margery Swint, Alternate	Tom Sicilia, Alternate (Phone)	Vince Panesko, Alternate (Phone)

Others:

Lindsay Strasser, ProSidian	Sherri Schatz, ProSidian	JoLynn Garcia, DOE-ORP
Jim Lynch, DOE	Ben Vannah, DOE-RL	Dana Gribble, MSA
Nina Menard, Ecology	Theresa Howell, Ecology	Ginger Wireman, Ecology
Mark French, DOE	Dave Einan, EPA	Michael Kruzic, CHPRC
Tom Rodgers, DOH	Paul Pak, DOE-RL	Debra Alexander, Ecology
Mostafa Kamal, DOE	Mark Heeter, DOE-RL	Annette Carey, Tri-City Herald
Mark Whitten	Dee Gray (Phone)	Emy Laija, EPA (Phone)
Jennifer Colborn, MSA (Phone)	Ben Simes, EPA (Phone)	