



River & Plateau Committee

Date: Tuesday, January 17, 2017

Time: 9:00 a.m. to 3:45 p.m.

Location: Richland Library, 955 Northgate Drive,
Richland WA

Call-in: Conference Call Instructions:

- Tri-City participants: 1-509-373-6464, enter conference code 843683#;
- Long distance participants: 1-866-645-0958, enter conference code 843683#

GoToMeeting: <https://www3.gotomeeting.com/join/390029886>; Meeting ID: 390-029-886

9:00 a.m. Opening – Jan Catrell, Chair

- Welcome and introductions
- Approval of the November committee meeting summary
- Announcements

9:10 a.m. PFP Update

Purpose: To receive an update from agency representatives on the status of PFP demolition

- Introduction: Pam Larsen, HAB Issue Manager (5 min)
- Agency update: Tom Teynor, DOE-RL¹ (10 min)
 - *Please provide an update on the progress of demolition at PFP*
- Regulatory perspective: Stephanie Schleif, Ecology²
- Committee discussion

9:30 a.m. Waste Encapsulation Storage Facility

- Introduction: Pam Larsen, HAB Issue Manager (5 min)
- Agency presentation: Julie Reddick, DOE-RL (30 min)
 - *What is the status of the ventilation upgrades in WESF which prevented capsule movement in the past?*
 - *How many dry storage casks are estimated to be required?*
 - *Are the capsules of high enough integrity to be moved without fracturing and contaminating the pool water?*
 - *Is there a requirement for a revised safety basis to cover the risks of the dry storage for a long time?*

¹ US Department of Energy, Richland Operations Office

² Washington State Department of Ecology

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- Are you planning to cut a section out of the degraded concrete wall for analysis? The data would be very valuable for the life extension analyses of the commercial nuclear reactors.
- What is the schedule for the WESF project?
- Regulator perspectives: Stephanie Schleif, Ecology; Emy Laija, EPA
- Committee discussion

10:30 a.m. BREAK

10:45 p.m. Committee Business

- Update the 3-Month Work Plan (30 min)
- Frame potential future meeting/call topics (15 min)

11:30 a.m. LUNCH

1:00 p.m. Central Plateau Plutonium and Americium Geochemistry

Purpose: To discuss technical information regarding the mobility of Pu and daughter products,

- Introduction: Dale Engstrom and Vince Panesko, HAB Issue Managers (10 min)
- Guest presentation: Andy Felmy, PNNL³ (30 min)
 - *Plutonium and Americium mobility*
 - *How are residual plutonium (Pu) and americium (Am) moved by water with various pH levels?*
 - *How does radiolysis change the solubility of the Pu and Am species?*
 - *How does the decay of Pu-241 to Am-241 change solubility?*
 - *How much Pu and Am are present in these sites?*
 - *If it moves (per the above discussion) will this contaminate groundwater away from this site above drinking water standards?*
 - *Will unacceptable levels of Pu and Am reach the Columbia River?*
 - *Lateral Pathways concept. Herb Parker in 1948 recognized that crib waste was moving as much as 300 feet laterally at Hanford; the RAP Committee has concerns about the placement of observation wells and detection of contaminant plumes away from the footprint of the cribs.*
 - *How certain can we be that the wells are giving useful information?*
 - *What evidence do we have that liquid discharges stay within or close to the footprint of the crib?*
 - *Given the stair-stepping effect, could most or all of the volume of one crib's disposal be directed laterally to an adjoining crib?*
- Committee discussion
 - *What are the next steps for this topic?*

³ Pacific Northwest National Laboratory

2:15 p.m. BREAK

2:30 p.m. SW-2 Burial Grounds

Purpose: To receive an update on SW-2 Burial Grounds

- Introduction: Shelley Cimon, HAB Issue Manager (5 min)
- Agency presentation: Phil Burke, CH2M Hill (20 min)
 - *What are the current concepts for closure of 200-SW-2? There is a 3-4 acre site that is rich in uranium within the SW-2 burial grounds. Does the plan follow the approach that was taken at the INL site, where a similar in size and content unit was remediated?*
 - *Can we expect to see strategic remediation/remediations within the SW-2 site that address the biggest risks to the public? (this list might include VPU areas, caisson areas, past practice ponds that have been covered over with unlined trenches filled with waste, and trenches with known contaminants high in rad)*
 - *What will control how much characterization and waste identification will be done throughout the 200-SW-2?*
 - *How much subsidence is there within the SW-2 OU? Is that a driver for a more comprehensive characterization effort?*
 - *How much data is available on past practices during the production years and what does that mean, if it is not sufficient, as a driver for a more comprehensive characterization effort? When do we know that we have enough information?*
 - *When we look at the maps that show plumes from the effluent cribs, where liquid waste was discharged into the soil, what volume of waste water went into these cribs and what is the nature and extent of the plumes under the SW-2 site? Are these plumes covered over by unlined, waste-filled trenches?*
 - *We know that there were old effluent ponds that were, to some degree, scraped before some SW-2 trenches were dug and waste placed above these old ponds. What do we know about that effort?*
 - *How well are the groundwater monitoring wells situated around the various parts of 200-SW-2 to detect water-borne contaminants coming from the burial grounds?*
 - *Please give an overview of discussions and agreements between DOE and Ecology, to date, on these 42 miles of trenches. What is Ecology's role in management of 200-SW-2?*
 - *Where are we in the RI/FS process, and when will the HAB and the Public have opportunities to comment?*
 - *Would DOE and Ecology consider hosting a workshop with subject matter experts, agency representatives, HAB Board members and the public regarding the SW-2 cleanup, including discussion of Data Quality Objectives process?*

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- Regulator perspectives: Elis Eberlein, Ecology
- Committee discussion

3:30 p.m. Committee Business, revisited

- Incorporate any additional information to the 3-Month Work Plan and/or potential future meeting/call topics (15 min)

3:45 p.m. Adjourn