

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE MEETING
January 9, 2007
Richland, WA**

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This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Welcome and Introductions

Jerry Peltier, River and Plateau Committee (RAP) Chair, welcomed the committee and introductions were made.

Changes to the November RAP meeting summary were incorporated, and the summary was approved.

Update on Railcars in the 100 F Area

Mark Buckmaster, Washington Closure Hanford (WCH), briefed the committee on the retrieval and disposal of a single railcar found during remediation work in the in the 188-F6 burial ground in the 100 F Area. Based on a review of historical documents, the railcar was used to dispose of animal carcasses from early experiments to test the effects of radiation on livestock. At the height of work at Hanford, the animal farm housed up to 1,000 animals. Animal carcasses were placed in the railcar for incineration. During waste sampling, WCH expected most of the waste to be ash, but found instead that many carcasses were in various states of decay due to their being wrapped in plastic. The waste site contained 40,000 tons of contaminated material, which was retrieved and taken to the Environmental Restoration Disposal Facility (ERDF). The railcar has been completely disposed of and the site is clean. Final cleanup will be complete in late summer or early fall.

Committee Discussion

- *How contaminated was the waste material?* Mark said WCH researched thousands of documents to determine what material was disposed of in the burial ground. Of the material retrieved, manure waste had significant contamination.
- *Did WCH sample the ground where animals were kept?* Mark said WCH has a sampling and analysis plan to guide cleanup to a rural residential level.
- *Is there any indication the tank containing the railcar leaked? Were there any trace fuel oils?* Mark said the tank did not appear to have leaked. WCH is taking samples to make sure there are no fuel oils. Currently, WCH does not see any residual contamination.
- *Did WCH perform a corrosion assessment on the vessel itself?* Mark said the vessel was not assessed for corrosion. Rob Davis believes WCH needs to assess corrosion. Mark said the tank vessel mostly contained solid waste and very little liquid waste, which would typically cause corrosion.
- *What is the status of the associated strontium garden waste site?* Mark said the strontium garden was remediated roughly five years ago. Experiments were done to determine the level of plant uptake of strontium. The strontium garden waste site has been back-filled and closed out.

River Corridor Draft Integration Strategy Document

Donna Morgans provided an issue manager overview of the River Corridor Draft Integration Strategy Document written by WCH for the Department of Energy-Richland Operations Office (DOE-RL). Draft B of the document was released in November 2006, and contained a disclaimer describing it as a contractual document for River Corridor cleanup. The document describes how the River Corridor baseline will be accelerated, and proposes a process for integrating groundwater operable units. The document does not endorse any pathway approved by the regulatory agencies. Neither EPA nor Ecology requested to review or provide comments on the document, and have indicated the document will not be used as a foundation for further discussion with DOE.

Donna focused her review of the document on four sections (sections 4-7):

Section 4: Project Organization Baseline

This section describes the River Corridor Closure Contract scope, contract requirements, and issues with the baseline schedule associated with the groundwater operable units and the Columbia River. Final actions and site deletion provides the schedule for how groundwater operable units could be aligned to achieve closure. The scope includes two baseline risk assessments; one for the 100 and 300 Areas, and one for areas between reactors limited to riparian zone and near-shore areas. The scope also includes a remedial investigation report, which WCH proposes to have written by the middle of 2008.

Section 5: WCH Performance Plan Strategy

This section identifies five scope drivers for accelerating cleanup to achieve closure by 2012, including:

- 1) Establish final cleanup infrastructure
- 2) Source site cleanup
- 3) Orphan site evaluation
- 4) Operable unit completion and protectiveness evaluation
- 5) River Corridor Closure Contract scope completion

This section indicates that all waste sites cleaned up through 2008 will be included in the Remedial Investigation report, while those sites cleaned up after 2008 will be captured in a different manner. The Remedial Investigation report will be roughly equivalent to a construction action report or closure report. The document indicates waste sites will be cleaned up in accordance with interim action Records of Decision (RODs). According to Donna's analysis, the document does not address a Feasibility Study, and relies on unstated assumptions that future land use decisions will include institutional controls (ICs). WCH is proposing to conduct a pilot closure test to ensure the closure process works properly and gives the Tri-Party Agreement (TPA) regulatory agencies (the Environmental Protection Agency [EPA] and the Washington State Department of Ecology) the opportunity to provide feedback.

Section 6: Potential Alternatives to the Strategy

This section identifies alternatives for grouping groundwater operable units for the proposed plan.

Section 7: Issues and Challenges

This section includes issues and challenges related to the integration of source area, vadose zone, and groundwater cleanup. Global issues are published in a memorandum of understanding regarding groundwater and vadose zone integration and schedule alignment. This section also includes some technical issues regarding incorporating the Columbia River in the integration strategy.

Donna said she does not believe the document is an integrated strategy document, but rather a WCH proposed path forward for integrating the River Corridor baseline. She emphasized that the document contains many unstated assumptions that need to be stated explicitly and cleanup levels need to be protective of human and environmental health. She said the Board should encourage DOE to move forward with an integrated strategy.

John Sands, DOE-RL, said this is an important document for DOE because it serves as WCH's description of its strategy for defining its process and path forward for River Corridor cleanup. He added that the document has brought the TPA agencies to the table, and demonstrates how the contractor understands its responsibilities. As the TPA agencies discuss final RODs, he would welcome Board input on groupings.

Regulator Perspective

- Dennis Faulk, EPA, said the regulatory agencies determine the integration strategy in consultation with DOE, so the document does not have much use. Therefore, he does not believe additional money should be spent on producing it. Dennis emphasized there will not be any final proposed plans until the River Corridor Risk Assessment is complete. He noted that the Board has produced advice on this issue. He recommended that the committee receive a presentation on the process for addressing orphan waste sites in order to understand the range of issues involved in developing an integration strategy.

Committee Discussion

- *What are the red flags regarding the document?* Dennis indicated that some information from the document may be used in discussions between DOE and the regulatory agencies. The regulatory agencies do not have a preferred process for integrating groundwater operable units. The TPA agencies workgroup will produce alternative operable unit groupings, hold public meetings, and include public comment.
- Susan Leckband expressed concern that the document does not provide a complete, big picture understanding of all waste sites, which creates a potential for unaccounted- for waste sites during waste site categorization. She is also concerned about the document's lack of discussion regarding institutional controls (ICs) and long-term stewardship.
- Rob said the document lacks adequate characterization and presumes to define River Corridor closure. WCH has a responsibility to monitor and track its cleanup, and cannot simply walk away from the site once cleanup is complete. Considering there has been almost 100% scope growth with the BC Area, Dennis explained that it will be difficult to achieve the 2012 milestone.
- John Sands asked committee members to consider groundwater operable unit groupings, and provide DOE-RL with any ideas on how to group final RODs.
- *How is DOE-RL revising the River Corridor cleanup scope to account for the decision to retain several major facilities in the 300 Area? Does retaining some major facilities result in significant savings?* John Sands said that type of analysis is not captured by this document. Dennis added that he believes there is a separate strategy to address the decision to leave some facilities in the 300 Area.
- *When will specifics be known about what needs to be done to achieve completion by 2012? What document will present these conclusions?* Dennis said TPA agency negotiations are about six months away from identifying these needs and issuing a milestone package to formalize a path forward.
- Several committee members expressed concerns about the cleanup assumptions made in the River Corridor Risk Assessment and Draft Integration Document. Dib Goswami, Ecology, noted that several Board members attended the end states workshops for the 100 N Area and 300 Area, which clearly presented cleanup assumptions. He urged committee members to recognize those assumptions.

200-ZP-1 and 200-PW-1 Feasibility Studies

David Miller, Argonne Lab; Arlene Tortoso, DOE-RL; Mark Byrnes, Fluor Hanford (FH); Ann Shaddock, FH; and Virginia Rohay, FH, presented the operable unit integration strategy for the 200-ZP-1 and 200-PW-1 Feasibility Studies. 200-ZP-1 Operable Unit is a groundwater operable unit, and 200-PW-1 is a vadose zone operable unit. These operable units are being integrated because discharge locations are sources of contamination, and actions taken in the vadose zone should be integrated with groundwater cleanup activities. DOE-RL held a stakeholder workshop for 200-ZP-1, and is interested in receiving Board input early in the process. Stakeholder meetings enable discussion of the technical approach and progress being made on the feasibility studies. Additional stakeholder information sessions will be scheduled in February. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial investigation reports for both operable units are far along. To address contaminant plumes and develop targeted, integrated actions, it is important to identify contaminant sources and pathways. Consistent working teams and project management teams will be maintained across FH technical integration.

Key integration elements include:

- Performing schedule alignment
- Aligning oversight
- Maintaining project managers
- Maintaining feasibility study team working on processes
- Coordinating stakeholder outreach and input

Regulator Perspectives

- Dennis Faulk said this operable unit is the most comprehensively studied site, which will result in the most comprehensive cleanup decision. Cleanup will cost a lot of money, and EPA is looking to DOE to devote sufficient funding for remediation technologies. This is the operable unit with the bulk of pre-1970 TRU waste, which will force the discussion of retrieving and disposing of pre-1970 TRU waste.
- Dib Goswami said there are no technologies to remediate the deep vadose zone. There are deep vadose zone issues across the site, and DOE needs to provide more funding for new technologies to address this contamination.

Committee Discussion

- *Are the 200-ZP-1 and 200-PW-1 feasibility studies being integrated with the work CH2M Hill Hanford Group (CHG) is doing in the vicinity?* Dave said the contractors hold monthly meetings to ensure integration of their work activities.
- *What specific cleanup decisions do the feasibility studies address?* Dave said the feasibility studies employ the nine CERCLA criteria geared toward protecting human health and the environment. For risk-driving contaminants, FH is determining how to

contain and reduce contamination. Ongoing interim actions have largely been effective; however, characterization of vadose zone contamination is necessary to guide deployment of intensive contamination reducing remedial activities. In addition, it is important to identify measures of success for remedial activities. FH is systematically reviewing HAB advice in the process.

- *Is there better technology to address contamination, or is updating the existing vapor extraction technology adequate?* Dennis said new extraction technologies can remove far more vapor than the current vapor extraction technology.
- *Does it make sense to combine operable units to consolidate them?* Dennis said the operable units would likely be covered under one ROD. He expressed concern that DOE and EPA will get into a discussion of how to address TRU waste, which will result in a groundwater decision but not a vadose zone decision.
- *Are there issues making integration difficult?* Dave said there are bureaucratic and management structures that impede integration, including fundamental and structural disconnects between groundwater and vadose zone activities. Vadose zone activities are based on contaminant sources; however, sources move from the vadose zone into the groundwater.

Update on Project Status under Continuing Resolution

Greg Jones, DOE-RL, provided an update on the financial picture for project status. He explained that DOE works with three different budgets at a time: current year, budget year, and planning year.

DOE is operating under continuing resolution until February 15, which means DOE can continue to fund the baseline at the current level until February 15. The President's Hanford budget request for Fiscal Year 2007 (FY07) is the same as the bill passed by the House of Representatives; however, the Senate bill was not passed. Congress is trying to issue an omnibus appropriation, meaning they will likely take the funding passed in the House bill, which will fund the DOE-RL baseline. DOE-RL requested \$972 million for all RL activities. As far as the project workload is concerned, DOE-RL plans to fund River Corridor cleanup at the contract level. DOE-RL will share additional information with the regulators and public as it becomes available.

The President's Fiscal Year 2008 (FY08) budget will be issued on February 5. Specific budget figures are embargoed until then. Fiscal Year 2009 (FY09) budget planning is underway and is due March 15, which is a month earlier than in the past. DOE-RL is currently developing a public process that will enable timely input for the March 15 deadline.

Regulator Perspectives

- Dennis said Hanford cleanup is ultimately in a budget-constrained situation, requiring prioritization of remediation activities. There is not much to be done on the FY07 and FY08 budgets. There is a laundry list of remediation activities, but no

compliance issues until final RODs are issued. There will be significant ramp-up for groundwater remediation over the next couple of years. EPA used to have a DOE baseline from which to determine whether project funding was adequate, but this has not been available during the past few years.

Committee Discussion

- *Were any over-target budget items included in the FY07 budget request?* Greg said DOE-RL included all that were required for compliance.
- Jerry Peltier commented that there are a lot of cleanup activities waiting for risk assessment decisions, which will not be made until after the budget is approved. Greg said budget assumptions have to be made based on the anticipated outcomes. Any permutations have to be dealt with as they arise.
- Pam Brown said that at an intergovernmental meeting at the end of November 2006, Mark Fry, DOE-Headquarters (DOE-HQ) indicated that DOE-Office of Environmental Management (DOE-EM) is committed to increased public involvement in the 2007 budget process. She noted that there will only be more public involvement if DOE-EM authorizes the field sites to share more budget information. Karen Lutz, DOE-RL, said that because of the way DOE-RL has involved the Board and public in the Hanford budget development process, there are some efforts underway to standardize guidance for all Site Specific Advisory Boards (SSABs). She noted that the Public Involvement and Communications Committee is working with the agencies to provide input on public budget outreach efforts.
- *Will there be another continuing resolution or an omnibus appropriation when the current continuing resolution expires on February 15?* Greg said DOE-RL is hoping to set a year-long continuing resolution, so project funding will be known.

Committee Work on Groundwater Values Flow Chart

Jerry presented the most recent iteration of the groundwater values product, which he, Shelley Cimon, Pam, and Rob put together. The draft product includes a table listing Board groundwater values and typical actions and expectations associated with those values. He hopes the committee will finalize a draft product for Board consideration at the April Board meeting. Rob added that the impetus for this product was the Central Plateau cleanup values flow chart. He noted that the purpose of this product is to develop steps to drive groundwater cleanup based on past Board advice and values.

Jerry said the working group had difficulty determining how best to depict the decision path for groundwater cleanup. He said he will sit down with Bob Bryce at PNNL to have him review the draft product and get some ideas about how to effectively display the decision path.

Committee Discussion

- *What is the objective of the groundwater values product?* Jerry said the foundation for developing the groundwater values product is the success of the Central Plateau cleanup values flow chart. If the groundwater values product is meant to be advice, Harold said the committee needs to work on developing the Board's groundwater values.
- Dennis indicated that one way a groundwater values decision product would be beneficial for the TPA agencies is to provide a path forward for actions where the main cleanup objective (i.e., highest and best use) cannot be achieved. He said the decisions are different than the Central Plateau cleanup values flow chart, but the decision process is similar. He said agencies also want some input on acceptable timeframes.
- Maynard Plahuta said the expectations should describe what the Board believes final cleanup should look like, rather than describe how groundwater cleanup should be done.
- Jerry said the goal is to have the draft product finished by the April Board meeting, but the committee can decide whether the product is far enough along at its March meeting. Susan Leckband cautioned the committee not to push this product forward for the April Board meeting without adequate discussion and development. Susan suggested introducing the draft product at the February Board meeting to obtain Board support to move forward. Todd Martin agreed the Board should be briefed on the product early on, since it will be difficult to obtain Board consensus without walking the Board through the entire product development process.

Committee Business

Possible topics for the next committee meeting:

- Committee update on the Plutonium Finishing Plant (PFP)
- Orphan waste sites process overview
- History of Board's work on institutional controls (ICs)
- 300 Area progress (scope and strategy decisions, and impact of decision to leave facilities in place)
- Bring information on ICs (Donna Morgans)
- Groundwater integration (Karen Lutz)
- Groundwater values product
- Update on DOE-HQ perspective on groundwater and vadose zone contamination, especially their public involvement expectations.
- Below or sub grade PFP Engineering Evaluation / Cost Analysis (EE/CA)
- M-15 characterization process.
- K Basins cleanup update
- Interaction between committee and Natural Resource Trustees

- U.S. Fish and Wildlife Service EIS

The committee decided a February meeting is necessary, but a February committee conference call is not.

Action Items / Commitments

- Harold, Jerry, and Greg will work on a response to DOE on CERCLA Five-Year Review. Their goal is to have a draft for Board consideration at the February Board meeting.
- Jerri Main and Shelley agreed to be issue managers for the 2100-ZP-1 and 200-PW-1 Feasibility Studies.
- Rob will send out a new draft of the groundwater values for committee review.

Handouts

NOTE: Copies of meeting handouts can be obtained through the Hanford Advisory Board Administrator at (509) 942-1906, or tholm@enviroissues.com

- Integrating the 200-PW-1/3/6 and 200-ZP-1 Feasibility Studies, DOE-RL, 1/9/2007.
- Outline of Integrated Strategy for Achieving Final Cleanup Decisions in the River Corridor Presentation, Donna Morgans, Hanford Advisory Board, 1/9/2007.
- River and Plateau Committee FY 2007 Work Planning Table, 1/9/2007.
- Ground Water Decision Path, Shelley Cimon, Rob Davis, Pam Larsen, and Jerry Peltier, River and Plateau Committee issue managers, 1/9/2007.

Attendees

HAB Members and Alternates

Shelley Cimon	Gail Laws	Maynard Plahuta
Rob Davis	Susan Leckband	Mike Priddy
Greg deBruler	Jerri Main	Wade Riggsbee
Ken Gasper	Todd Martin	Dick Smith
Harold Heacock	Donna Morgans	Keith Smith
Susan Kreid	Bob Parazin	John Stanfill
Pam Larsen	Jerry Peltier	Steve White

Others

Karen Lutz, DOE-RL	Rick Bond, Ecology	David Miller, Argonne
Greg Jones, DOE-RL	Dib Goswami, Ecology	Karen Hale, CHG
John Sands, DOE-RL	Mandy Jones, Ecology	Rico Cruz, CTUIR
Arlene Tortoso, DOE-RL	Jennifer Ollero, Ecology	Ted Repasky, CTUIR
	Cheryl Whalen, Ecology	Lynn Lefkoff, EnviroIssues
		Jason Mulvihill-Kuntz, EnviroIssues
	Dennis Faulk, EPA	Mark Byrnes, FH

		Ann Shaddock, FH
		Virginia Rohay, FH
		Janice Williams, FH
		Barb Wise, FH
		Annette Cary, TCH
		Lynette Bennett, WCH
		Mike Buckmaster, WCH
		Jeff Lerch, WCH
		Jay McConnaughey, YN