

**FINAL MEETING SUMMARY**

**HANFORD ADVISORY BOARD**

**COMMITTEE OF THE WHOLE**

*May 12, 2010*

*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**

Susan Leckband, Hanford Advisory Board (HAB or Board) Chair, welcomed everyone and introductions were made. She opened by referencing past advice to show HAB values and reminded everyone that protecting the Columbia River, preventing groundwater contamination, cleanup of future use areas, transporting waste safely, local economic opportunities and public involvement are main HAB priorities.

Pam Larsen said these proposed change packages are the second Tri-Party Agreement (TPA) package this year and the delays were due to budget. Later, American Recovery and Reinvestment Act (ARRA) funding became available. She said as a result of this process, transuranic (TRU) waste is going to Idaho and certification needs to be done for shipment.

**Overview of the Proposed Changes**

Matt McCormick, Department of Energy – Richland Operations Office (DOE-RL), presented on the TPA agreement changes to Central Plateau cleanup work. He said the change packages are meant to accomplish some of the unfinished business on the plateau such as the Remedial Investigation/Feasibility Study (RI/FS). He said as a part of the M-091 change packages, the legacy TRU waste and mixed low-level waste accounts for a portion of the ARRA funding.

Matt went over the proposed changes for comprehensive Central Plateau cleanup. He said the decision units are based on geographic considerations. Milestones were added to

coordinate cleanup of canyons, adjacent waste sites and other Central Plateau facilities. He said there is enhanced focus on the deep vadose zone, and with new milestones for technology development and a deep vadose zone Operable Units (OUs). He said the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process was used to generate remedies. He said carrying out the Record of Decision (ROD) for the U Plant is included in the milestone package. He said the change package also sets out to improve coordination between CERCLA and Resource Conservation and Recovery Act (RCRA) corrective action documents.

Matt discussed the highlighted proposed changes. He said there is a new M-85 milestone series for the canyon facilities RI/FS process, associated waste sites and other Central Plateau facilities. He said 2024 is the retained completion date for remediation of non-tank farm and non-canyon soil waste site OUs. He said DOE added a major milestone to complete disposition of all Central Plateau facilities previously not in the TPA. He added that completion of the RI/FS documents for non-tank farm waste site OUs have been delayed until 2016.

Matt discussed the proposed changes affecting the deep vadose zone. He said there is increased emphasis on deep vadose zone contamination by establishing a deep vadose zone OU. The RI/FS work plan for deep vadose zone will include technology screening and recommendations for additional pilot and field testing, followed by a feasibility study and proposed plan. He said the new M-15 series milestones are to continue uranium and technetium remedy development.

Matt said a path forward has been established to make cleanup decisions for the Plutonium Uranium Extraction Plant (PUREX), B Plant, and Reduction-Oxidation Plant (REDOX) canyon buildings in accordance with CERCLA and the TPA. He said milestones have been added to M-16 series to implement the first canyon ROD by demolishing the U Plant canyon and constructing the barrier. He said DOE added major milestones to complete cleanup of all Central Plateau facilities.

Matt said DOE is looking to revise the TPA action plan to better coordinate RCRA corrective action and CERCLA decisions for past practice waste sites and clarify roles for preparing RODs. He said DOE is proposing a RCRA permit modification to support the TPA Corrective Action Decisions (CAD)-ROD process changes.

Matt presented pie charts that display the amount of proposed unit type changes for the Inner Area to give an idea of the reclassifications. He does not think these modifications change the quality of cleanup because all the hazardous materials are still addressed correctly.

Matt said there is another agreement in principle for the contamination under the tanks as a result of past leaks. He said the Environmental Protection Agency (EPA) and Washington State are being referred to on how to deal with this issue comprehensively.

### **Regulator perspective**

- Jane Hedges, Washington State Department of Ecology (Ecology), gave a background on the role of Ecology with regards to waste management OUs. She said units that manage Treatment, Storage, and Disposal (TSD) of hazardous waste are in the Hanford permit including units inactive after 1987. She said the TPA has a process for managing past practice units, as a result, these units were divided into CERCLA and RCRA past practice units. She said the hazardous units were RCRA and the radioactive units were CERCLA with the majority of the units being CERCLA interim RODs.
- Jane said corrective action is part of Federal RCRA and State Hazardous Waste Management (HWMA) permit requirements and there were only two Hanford CADs which were in the N Area.
- Jane described Ecology's CERCLA roles before CAD/RODs. She said EPA lead OUs, and Ecology consulted with DOE and EPA on State regulations. She said DOE and EPA approve the ROD and Ecology concurs. She said on Ecology lead OUs, Ecology writes the original ROD; DOE and EPA are then consulted for approval.
- Jane said the Ecology lead OUs with CAD/RODs would be used for the deep vadose zone OUs, "pre-1970" radioactive waste burial grounds, 200-East Area waste management units, pipelines and diversion box OUs. She said the Rocky Flats Plant has used a CAD/ROD system and it is a legal process.
- Jane said there is a school of thought that says the CERCLA process is less thorough. She said the CERCLA process may be different but the cleanup should be the same. She said the State regulations are met and the end result is the same level of cleanup.
- Jane said the TPA changes for CAD/ROD to allow concurrent State CAD and a Federal CERCLA ROD. She said these changes are for coordination of cleanup to ensure efficiency. It would not make sense to clean up old RCRA units and have to come back with CERCLA to ensure the units are clean. She said this would allow Ecology lead units to be concurrently disputed, if necessary. She added that Ecology's role does not change as a result of these modifications.
- Jane said there have been legal changes to initiative 297 and the State regulations do not include cleanup standards for radionuclides. The TPA changes set out to address this issue.
- Jane said the II.Y permit condition came out of a settlement agreement on a DOE appeal of corrective actions conditions. II.Y satisfies the Ecology permit corrective action by incorporating CERCLA requirements and schedules. She said the change was released for comment and the draft modification sets similar incorporation for Ecology lead OUs.
- Jane discussed public participation opportunities for CAD/RODs. She said there will be a feasibility study with technical evaluation supporting both the CAD and ROD. She said public comment will occur on combined CAD and CERCLA proposed plan. There would be a joint public meeting with a single response summary for public comment.
- Craig Cameron, EPA, said he would like to reiterate that the change package includes technical and administrative changes that affect the cleanup. He said the inclusion of

facilities and the geographic approach to make cleanup more efficient are examples of technical changes affecting cleanup. He said there are some delays in the RI/FS schedule; however, there is a focus on the deep vadose zone uranium and technetium which is important. Examples of administrative changes include who writes the initial draft ROD and the use of the CAD/ROD instrument. He said with administrative changes there is a clock on the RODs and EPA maintains authority on the remedy selection and will work to make sure human health and the environment are protected.

### **Committee Discussion**

- Susan said there are questions about the change package that have not been addressed. She read the questions from the agenda that she felt the presentation did not fully address: “How do the proposed changes relate to Hanford Site priorities? How do these proposals align with past HAB advice? How do these proposals align with past public comment?” Matt said the proposals do align with past HAB advice in that the Central Plateau decisions are done in a comprehensive manner and are all part of the overall priority list. He said DOE has incorporated HAB advice that is applicable to decisions being made. He stated that the change package is not making cleanup decisions. He said the deep vadose zone has incorporated advice with the use of a geographic approach, and presumptive remedies were not used based on HAB input. He said not all HAB advice applies at this point of the process because there have not been cleanup decisions yet.
- Susan asked if public comments and HAB comments were similar. Matt said for the most part yes, and DOE responded individually to these comments. He said based on responsibilities DOE was not able to integrate all public comment, but did provide a reason why.
- Gerry said not all comments have been integrated. He said at least 12 people submitted detailed comments about who writes RODs, these comments along with concerns in HAB advice were not addressed.
- Gerry said a RCRA and CERCLA action does not mean it is equivalent in Washington State. Matt said DOE receives State acceptance on decisions under CERCLA which apply Model Toxics Control Act (MTCA) requirements and have lowered limits. He said DOE does follow the more stringent requirements for hazardous materials. Gerry asked about the procedural rights of the public, and said under State law there are requirements for a State decision. He asked if these rights are being followed and where the process for decisions being moved out of State CERCLA to RCRA is spelled out. Jane said the State Environmental Policy Act (SEPA) will be used when a CAD/ROD is used. Gerry said unless it is stated that the SEPA procedures will be met, there will be public comment lost. He said if a decision is moved from the State to CERCLA it is not be subject to the State procedures and there is not language stating that these requirements will still be met. Jane said SEPA is being followed for taking public comment on the plan, which lines Hanford up with the State because corrective action goes into the MTCA process and the remedy can be appealed.

- Ken Gasper said one of the differences between CERCLA and RCRA is that CERCLA takes into account the cost of remedy and RCRA does not. Matt said the RI/FS process is equivalent for the RCRA corrective action for OUs. He said cost is considered, a feasibility study is done and cost is factored in for the remedy. Gerry said the difference is that under State law cost is not balanced, there is a second regulatory rule that has to be applied called permanence to the maximum state possible. Gerry said these are big differences. Jane said there is State acceptance and other sites are following the same protocol. She said MTCA has a practicality standard where technicality and cost are weighed. She said under CERCLA State acceptance is a critical role for the RODs at Hanford.

### **Central Plateau – Specific Issues**

#### *1. Are there potential waste site decisions that will be changed because of the operable unit reclassification?*

Jane said the TSDs stay under Ecology's permit process. Matt said there are not waste site cleanup decisions being made.

Gerry said this question is intended to ask which waste management units are changed. Craig said because EPA follows the CERCLA process and uses State acceptance EPA has had past practice OUs that have included some TSDs. He said that the original OU designations of CERCLA past practice or RCRA past practice often had more to do with who the lead regulatory agency was rather than an actual connection with RCRA units or TSDs. He said there are new Ecology led OUs that will be CERCLA past practice which is a change.

Gerry asked if CW1 is Ecology led. Craig said Ecology is the lead on any TSD. Craig then led the group through a set of interactive maps provided by DOE to illustrate the changes.

Matt said these details are laid out in Appendix C. Gerry said the information in Appendix C is hard to follow. Craig said that many of the current OUs are not geographically based, which makes it complicated to explain where all the waste sites are proposed to go in the new OUs.

Craig said the Outer Area waste sites are EPA and the East Area sites are going to Ecology, except for the BC Cribs and Trenches. Matt said Ecology is the lead for the deep vadose zone OU. Craig said Ecology is the lead agency for the burial ground OUs.

Gerry said SW-2 states that the Outer Area is regulated by EPA and now it is Ecology. Craig said it is an associated site that was clumped together with a site in the Outer Area and Ecology is still going to be the lead for SW-2.

Gerry said the units should be organized geographically. Craig said there could be maps showing where the OUs are in Appendix C. Craig said for 200-CB-1 OU (B Plant) Ecology has the lead, PUREX is Ecology led and REDOX is an EPA lead. Jane said the groundwater operable units are different. Craig explained that the groundwater plumes are connected and one was an EPA led unit and one was Ecology in both East and West areas; so the change is proposed to be 200-West is EPA and 200-East is Ecology.

2. *What are the expected impacts and effects to alternative evaluation and remediation decisions due to these proposed changes?*

There was consensus that this concern was addressed during the presentation.

3. *Do the proposals contain provisions to reclassify sites from RCRA to CERCLA and, if so, how are the agencies' responsibilities changed and what are the consequences (technical and public involvement perspectives)?*

Susan asked if there will be a reduction in technological capabilities or fewer opportunities for the public to be involved. Craig said EPA's legal staff would say no, and there are important decisions where public involvement could be improved upon. He said involvement in design work is important. Jane said there is a permit condition stating that the TPA process is how the public involvement process will be handled, however, there will be one less appeal opportunity.

Pam asked what kind of unit actions this public involvement process applies to. Jane said the process applies to cribs and the river corridor OUs. She said currently DOE makes the decisions for ROD appeals and the public involvement process has not changed. Gerry said the appeal process is part of the public involvement process. Pam asked if the appeal process is being used by the public. Gerry said even if there are no appeals it is useful for as an option for tribes and the public.

4. *How do the proposals impact the RCRA Permit?*

Jane asked if there are any questions after what was presented on the RCRA permit and there were no questions.

5. *Who writes the ROD?*

- *Do the TPA agencies review post-ROD decisions?*
- *Is there a public involvement component?*

Craig said lead agencies provide the remedial project manager and the National Contingency Plan (NCP) and executive order 12580 identifies the lead agency as DOE for RODs at DOE federal facilities. He said with DOE facilities the selection of remedial action is done jointly by DOE and EPA. If mutual agreement is not reached, EPA selects the remedy. He said the proposed TPA changes require DOE to submit a draft ROD prepared in accordance with EPA guidance and the NCP within 60 days of the close of the comment period. He said RODs cannot be issued without EPA approval.

Susan asked if Ecology writes the draft. Craig said the change is in who prepares the initial ROD, in the current TPA the lead regulatory agency prepares the ROD. He said depending on the regulatory agency project manager it might be DOE and the contractor who have done the bulk of writing a ROD. He said there is not much that is changing; the office of regional council has to approve the ROD.

Susan asked Ecology if there was a change regarding the approval and review of RODs. Jane said that will not change, Ecology sees the rough draft of the ROD and it is usually modified. Gerry said the detailed comments on the ROD need to be looked at. Craig said anything that is provided has to be seen by EPA who has written many RODs and knows what the policy people will respond with. He said DOE does not have this background; however, it still gets worked out. Pam said the issue comes down to trusting that regulators will review the RODs. Gerry said it comes down to trusting the review process, EPA and Ecology will have a time limit on adopting or extending the TPA review cycle. Craig said EPA will still have the review process and can make corrections before the ROD.

Pam asked if the regulators would talk to DOE when looking at remedy options. Jane said yes, for example, the regulators talked to DOE for the BC Area.

Briant Charboneau, DOE-RL, said each feasibility study and a proposed plan is transmitted between regulators and DOE. Matt said these documents will be provided.

*6. Do the proposals result in a new/increased/changed use of a combined CAD-ROD? If so, what are the expected effects of this change?*

There was no further discussion on this question.

### **Mixed Low-Level and Transuranic Mixed Waste – Specific Issues**

Jane Hedges said there are some things that are not as desirable in terms of the M-91 change package for Transuranic Mixed (TRUM) waste. She said during initial negotiations, groundwater cleanup and dates for getting contaminants out of the river were enhanced and DOE realized that the budget could not support all the activities. She said DOE directed ARRA funding toward the critical issue of removing TRU waste and mixed LAW from the site. She said the priority was to finish the river and shrink the Hanford footprint as reflected in the change packages.

Jane said DOE has shipping milestones for the first time at the Hanford site. She said when the waste goes to the Waste Isolation Pilot Plant (WIPP) it is outside the State arena and there is a concern on the date of shipping date. The shipment date is set at 2035 and Ecology understands there could be a schedule issue. She said the date has been changed to ship all TRUM waste off the Hanford site by 2035. She said DOE wanted to make sure not to spend money unwisely with the milestones, and as a result facility construction and acquisition was delayed from 2012 to 2018.

Jane said WIPP has to invite Richland and make sure schedule and licensing issues are addressed. She said Frank Marcinowski, DOE Headquarters, indicated at a meeting that it is a goal to shorten the WIPP process before it closes. She said the closure issue will be watched from the State level and the shipping milestones will be shifted accordingly.

Jane said the M-91 milestone organization was very confusing and DOE has made it clearer.

Jane presented the existing and proposed TPA waste management milestones. She said there was no end dates for waste management and now there are enforceable milestones. She said target milestones are allowable by TPA and give a measure of DOE's progress. She said the completion milestones are an advantage and are included in the budgets.

Jane said there are milestones for certain amounts of Remote Handled (RH) TRUM including treatment and shipment with the 2035 milestone. She said there were no prior milestones for the small container TRUM and the completed treatment milestone is 2018.

Jane discussed waste milestone trade-offs. She said Ecology can require DOE to designate retrieved waste. She said the current law does not require that the waste going to WIPP has to have Land Disposal Restrictions (LDR) for pre-treatment. She said DOE believes that taking the waste to WIPP is beneficial because treatment does not have to be done. She said WIPP is excepting certain waste without LDR; however it will be stored safely on site until it goes to WIPP.

### Committee Discussion

- Liz Mattson asked why the milestone is not 2030 if there is potential for the waste to be taken off site earlier. Matt said DOE looked at the overall cleanup to determine the shipment date. He said milestones are used as a backstop with the interest of finishing before 2035 and WIPP thought it was a reasonable goal. He said DOE looked at the amount of work and TRU waste and calculated the worst case scenario. Liz said what would happen if the 2030 deadline were not met; Matt said there would be a permit issue with New Mexico.
- Pam said the waste needs to be put into the walls at WIPP. Matt said the waste put into the walls at WIPP will be treated like contact handled waste which is a logistics problem.
- Gerry said the cells at WIPP are only open for a certain amount of time. Matt said it makes a huge difference on how the waste is put in WIPP. Keith Smith said it is useful to know what the configuration will be. Gerry said there is still more RH TRU than the WIPP capacity. Matt disagreed that there is not enough capacity in WIPP. Gerry said there is more potential TRU waste than there is capacity at WIPP and the final cell closes in 2030 which is the concern.
- Liz said there is an acknowledgment that TRU could potentially be removed before 2030 and she does not understand the reasoning why the shipment milestone is not 2030. Jane said last Monday, DOE Headquarters stated that they will try to improve the TRU program; however, this could mean that other sites get done next year and Hanford is still on the same timeline. She said the waste and construction schedule was looked at to see what will need to be taken out and 2035 was the calculated milestone.
- Maynard said it seems to be reasonable to say 2035 and be comfortable instead of having no basis for choosing a shipment milestone. DOE is still forced to face the issue to meet milestones and negotiate with New Mexico.

- Ken Niles, Oregon DOE, asked how retrieval of RH waste will be affected and or delayed. Matt said for the CERCLA action on burial grounds, the characterization showed that the radioactive waste is much lower than once thought, so there will not be as much RH waste as expected. He said the milestone for RH TRU has not been changed, the date is still 2018 and there are no delays. Ken asked if regulating agencies had concerns on meeting milestones for RH waste. Jane said there was an extension on one site but it is still within the 2018 milestone.
- Norma Jean Germond asked if New Mexico is still interested in 2030 being the date for shipping the waste, and if DOE is looking at how all the site's waste will fit in WIPP. Matt said he does not agree that all the waste will not fit into WIPP. He said even at the largest suggestion of TRU projections he thinks WIPP can handle all of the TRU waste. Norma Jean said the concern is if it does not all fit in WIPP, where else would the waste go? Matt said WIPP is excepting legacy waste and newly generated waste that might be TRU. Craig said different dates can be added in the RODs to require waste to go to WIPP earlier.
- Gerry asked if RH TRU is removed from the site in 2016, is there a schedule for shipment or could the waste stay until 2035 without treatment? Jane said the waste could potentially stay on site until 2035, but there will be annual milestones to analyze what waste is available to go to WIPP. DOE does not want to stockpile the waste. Gerry suggested having a milestone stating how long waste can be on site after it is retrieved, before it is treated or goes to WIPP. Jane said that is what the annual milestones are for and DOE is aware of these concerns.
- Gerry asked if there is a milestone for construction to start for RH TRU capabilities. Matt said there will be a milestone once the design of the facility is completed.
- Ken asked when the first RH shipments would leave. Matt said DOE is looking to ship around 37 drums next summer. Ken asked if there would be a time lapse before more RH waste is shipped. Matt said yes, there will be some waste that was thought to be contact handled and then found to be RH. He said some waste is just over the limit for contact handled and DOE is finding ways to deal with this. Susan asked if the waste being discussed is the waste that was buried pre-1970. Matt said correct.
- Keith asked if there is any certainty that the PUREX tunnels do not have TRU waste in them. Matt said TRU waste in the PUREX tunnels will be covered during the CERCLA process.
- Gerry asked if there was discussion on alternatives for large package material. Matt said yes the contractors are looking at supplementing the process. He said for large package material DOE has looked at expanding permit conditions.
- Gerry said the change package does not define commercial treatment. Jane said the change package does give the option for commercial treatment. Gerry said commercial treatment is important because some waste will need different treatment and shipment.
- Jane said there was another milestone that might be of interest regarding no path forward waste. She said DOE will address the disposition of no-path-forward material within the project management plan.

## **Identification of Board Issues**

- Dale said the TPA change package document was strenuous to read and had a lot of information; he encouraged the agencies to reorganize some of the information.
- Wade Riggsbee said he has concerns about the tradeoffs for the deep vadose zone and how it is framed in the TPA language, regarding pushing milestones out that could be moved up in the schedule given emerging technologies.
- Wade said he would like to see more focus on pre-70 TRU waste and have milestones to treat and dispose of this waste. Matt said pre-70 TRU waste is part of the SW2 process.
- Wade said he is concerned about the definition of pipelines. Craig said Ecology maintains the pipeline OUs and EPA is going to meet with Ecology and DOE to talk about the pipelines. Wade said he would like to see more definition and some dates for pipeline issues.
- Wade said there are concerns over preparation of RODs, which is an issue with RH waste.
- Gerry suggested changing the name of the groundwater units to 200 East and 200 West. Craig said the EPA already has a ROD with the previous name, which might present legal problems. Emy asked if Gerry is referring to changing legal documents or just for the public documentation. Gerry said changing the name so that the areas would be called 200 East or 200 West in all documents.
- Gerry said a key issue is that the completion deadline for tank farm OUs is represented as including retrieval. Matt said that is not included in Appendix C.
- Gerry said the use of unenforceable target dates for M-91 is an issue because there is no obligation or backup for funding.
- Gerry asked if alternatives for treatment in private capacity are built in to the milestones. Jane said she thinks alternatives are built in the milestones, but there might not be clarification whether it is private capacity or not.
- Susan asked if the Board members want to provide advice on the Change Packages. Liz said it would be useful to have more discussion before advice is drafted.

## **Handouts**

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

- Proposed TPA changes to Central Plateau Cleanup Work, Matt McCormick, DOE-RL, May 12, 2010.
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## **Attendees**

### **HAB Members and Alternates**

Sam Dechter	Steve Hudson	Maynard Plahuta
Dale Engstrom	Pam Larsen	Gerry Pollet
Ken Gasper	Susan Leckband	Wade Riggsbee
Norma Jean Germond	Liz Mattson	Dick Smith (phone)
Laura Hanses	Ken Niles	Keith Smith
Floyd Hodges		

### **Others**

Paula Call, DOE-RL	Dieter Bohmann, Ecology	Dale McKenney, CHPRC
Briant Charboneau, DOE-RL	Jane Hedges, Ecology	Marc Jewett, CHPRC
Matt McCormick, DOE-RL	Ron Skinnarland, Ecology	Janice Williams, CHPRC
Margo Voogd, DOE	Craig Cameron, EPA	Mike Priddy, DOH
Chris Kemp, DOE-ORP	Emy Laija, EPA	Susan Hayman, EnviroIssues
		Blair Scott, EnviroIssues
		Shrron Braswell, MSA
		Barb Wise, MSA
		Emmett Moore, WSU