FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE
March 7, 2012
Richland, WA

Topics in this Meeting Summary

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.

Opening

Pam Larsen, River and Plateau Committee (RAP) chair, welcomed everyone and introductions were made. The committee decided to delay adopting the February meeting summary until April to allow more time for review.

Susan Leckband, Hanford Advisory Board (Board or HAB) chair, encouraged everyone to attend the Hanford Budget and Cleanup Priorities Public Meeting on March 15. She said the Budgets and Contracts Committee (BCC) would be meeting in the morning and again briefly after the public meeting to discuss possible next steps.

Tifany Nguyen, U.S. Department of Energy-Richland Operations Office (DOE-RL) said DOE-Office of River Protection (DOE-ORP) will be hosting a Waste Treatment Plant (WTP) Open House on March 15 from 5-7:30 p.m. at the Richland Red Lion.

200 UP-1 Remedial Investigation/Feasibility Study[*]

Issue Manager perspective

Dale Engstrom, RAP vice-chair and Lead Issue Manager (IM) for the 200-UP-1 Remedial Investigation/Feasibility Study (RI/FS), introduced the topic. He said the entire Hanford Site was divided in half and then each of those halves was divided in half again. UP-1 is the western half of the Central Plateau. Dale said a colleague showed him a 1993 version of the RI/FS for the UP-1 groundwater operable unit (OU), demonstrating the length of time the 200-UP-1 RI/FS has been in process. Dale said RAP would hear from the U.S. Environmental Protection Agency (EPA) about what the plan is for UP-1 as evaluated in the RI/FS.

Dale said there are some minor issues with the RI/FS, but overall it seems reasonable; he agrees with the analysis and approach. Dale suggested waiting until the proposed plan is publically available to consider drafting Board advice.

Presentation

Emy Laija, EPA, presented information that she will be sharing at the EPA National Remedy Review Board later in the month (Attachment 2). She said that while she would not be presenting directly on the RI/FS, all the information in the presentation comes from the RI/FS. The final version of this document has not been released. She said the purpose of the Remedy Review Board is to examine high-cost projects, typically projects that cost over $75 million. The Remedy Review Board promotes consistency with EPA decisions across the nation. Emy asked the committee to offer input on the information she plans to present to the Remedy Review Board.

Emy also provided a handout detailing Table 8-1 of the 200 UP-1 RI/FS (Attachment 3). This table includes a high-level summary of the remedial alternatives described in the RI/FS.

Agency perspectives

Naomi Bland, DOE-RL, said Emy's presentation was excellent, and she had nothing further to add.

Brenda Jentzen, Washington State Department of Ecology (Ecology), said Ecology is reviewing Draft B of the 200 UP-1 RI/FS and will provide comments to EPA later in the week. She said EPA is already addressing many of the issues Ecology has with the RI/FS. She does not believe there are many major issues with this remedy.

Committee Questions and Response

[*] Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

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

Q: Are the overlapping groundwater contaminant plumes layered?

> *R: The map is two-dimensional and is not meant to illustrate depth. The plumes are comingled and are not homogenous; contaminants have gone through the soil at different rates (Kd value). They have reached groundwater.*

Q: The map of the plumes shows a limited number of contaminants of concern (COCs). How are COCs ranked?

> *R: Contaminants are ranked in terms of risk. The goal is to clean up the aquifer to reach drinking water standards. The map shows potential COCs; those determined to be COCs are based on risks. Carbon tetrachloride is the major risk.*

Q: How comprehensive is the knowledge of lateral extent?

> *R: We have a fair amount of data on the distribution of contaminants. We can also do a cross-section throughout the area. In some cases, contaminants stay above mud while in other cases contaminants move below mud. We must think in three-dimension. There is much more information on the extent of the contaminant plumes that was not included in this presentation.*

Q: Where is the point of compliance?

> *R: Compliance is required for the whole plume. We will obtain a level where contaminants reaching the Columbia River are considered acceptable based on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Contaminants are not expected to reach the Columbia River even a thousand years into the future. The 200 UP-1 RI/FS will contain information on direct fate and transport modeling that will illustrate the expected plume movement.*

Q: Will contaminants reach the Columbia River after 1,000 years?

> *R: The modeling only projects out to 1,000 years and in that timeframe contaminants did not reach the Columbia River. The fate and transport modeling was completed to determine if a risk exists. The modeling determined there is a risk so it is being remediated.*

Q: Are the models used to predict out to 1,000 years the same that were used for the Tank Farm Environmental Impact Statement (EIS)? What are the average hydraulic properties? Using an average flow would likely be inaccurate as flow rate changes. Water flow follows the easiest path.

> *R: The models used are the same. The modeled hydraulic flow was also basically the same. An average flow rate was not used. Flow rate was assumed to change as water moves through the system. This will be illustrated in the final 200 UP-1 RI/FS.*

Q: Does monitored natural attenuation (MNA) mean no remedial action will occur?

R: MNA means contaminants will be monitored as they decay naturally. There is no technology currently available to clean up tritium. That does not mean the tritium will be ignored; plume movement and function will be monitored. We know how it will degrade.

Q: Are you confident that the three injection wells will successfully contain the iodine-129 plumes?

R: There is a lot of confidence that this technology will be successful. We will also be carefully monitoring the wells so any concerns will be obvious very quickly. There does need to be a technology developed to handle iodine-129, because we cannot continue in a holding pattern for perpetuity. DOE has committed time and money to look at technologies.

Q: Is iodine-129 re-injected into the groundwater?

R: This is the same problem we encountered at ZP-1. Some of the contaminant is taken up into the treatment facility. We will not re-inject water that contains iodine-129 in concentrations above cleanup levels. Small amounts of iodine-129 can be addressed. However, the facility cannot handle massive amounts of iodine-129, which is why we want to hold it in place until there is a technology that can fully address it.

C: It would be useful to have a slide that explains the entire pump and treat system. There have been concerns in the past about whether it will satisfy the Resource Conservation and Recovery Act (RCRA) requirements for well monitoring. Wells will become dry.

R: We know that some wells will go dry, especially shallow ones and those will be replaced. Any gaps in wells will be addressed through monitoring. New monitoring wells are proposed for 200-UP-1 and 200-ZP-1. All the water that is pumped out will be pumped back in at some point. The water level will be lowered, but we will not de-water the aquifer. There is a shallow gradient for pumping so there will not be a vast draw-down.

Q: Can you explain the non-discounted numbers from Table 8-1?

R: The non-discounted numbers are what the real cost of each alternative would be in today's dollars. These numbers indicate the potential actual cost given the inflation rate. EPA requests discounted cost estimates, because comparison between alternatives is simpler. The cost difference between alternatives relates to high set-up costs when pumping the distal part of the nitrate plume. A large volume will be sent to the pump and treat facility, which will have maintenance costs that are higher with higher volumes of nitrate.

C: Nitrate flows easily through the soil and into groundwater. When the facility is designed, is there a way to increase nitrate capture in case the plume moves to outer edges of the capture zone or to force nitrate further away from the Columbia River?

R: There are various ways of reducing nitrate. The most effective is with the biological system. The system is built to target nitrate.

C: There is a commitment to clean to higher standards if more contamination is found. That is not addressed in the 200 UP-1 RI/FS. The Board is constantly told about the commitment to re-examine issues in the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) 5 Year Reviews. Can there be requirements to re-evaluate more frequently?

R: That is an issue better addressed in the Record of Decision (ROD). The requirement for the number of monitoring wells to be used and the plan to treat groundwater will be contained in this document.

Q: What is the groundwater monitoring plan for the tank farms?

R: The tanks will have their own groundwater monitoring systems under the Resource Conservation and Recovery Act (RCRA). This is a CERCLA ROD.

Q: Can you confirm that the treatment, storage, and disposal (TSD) units in cribs in the Central Plateau will be under RCRA or CERCLA and have their own groundwater monitoring?

R: DOE is likely going to manage some of the CERCLA requirements for those cribs. The decision will not be made until there is a closure plan. At that point, groundwater monitoring will be evaluated in terms of CERCLA or RCRA and that is when the decision will be made.

The committee decided to wait until the complete document is available before deciding whether to draft Board advice. There were many concerns expressed that will be tracked by the issue managers to see if they have been addressed in the proposed plan that goes out for public review and comment in the next few months. EPA's goal is to issue the ROD by the end of the Fiscal Year.

On behalf of the Board, Susan Leckband recently sent a letter to EPA that referenced HAB advice the Board would like acknowledged at the Remedy Review Board. Emy will include this letter with her materials. Susan Hayman said she will forward that letter to the entire committee along with Emy's presentation.

300 Area Remedial Investigation/Feasibility Study (joint with PIC)[*]

Issue Manager perspective

[*] Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Dale Engstrom, Lead IM for the 300 Area RI/FS, introduced the topic. He said RAP already received a presentation on the 300 Area RI/FS with a discussion of the proposed alternatives. A large component of the alternatives involves natural attenuation, which would require 38-40 years according to the model. DOE proposes infiltrating or injecting a polyphosphate solution to sequester some of the uranium. Older literature from Pacific Northwest National Laboratory (PNNL) indicated that the procedure did not work very well or was slow. Dale said he asked for more information about the sequestration process to obtain a better understanding of how this will work.

DOE presentation

Mike Thompson, DOE-RL, presented information on uranium sequestration via phosphate infiltration/injection test history supporting Alternative 3, which is the preferred alternative (Attachment 4). He said 17 acres were remediated in the mid-1990's when Bechtel was contractor for the 300 Area cleanup.

Mike said that, alternatively, the cost to excavate the contaminated soil would be over a billion dollars, and would likely release more uranium than currently present. DOE-RL is planning to inject phosphate using a phased approach since the technology is still experimental. Mike said where uranium contacted phosphate; it precipitated as expected. The problem occurs when the water velocity is too swift for adequate contact. The first half of the test was successful, while the other half was unsuccessful.

Regulator perspectives

Larry Gadbois, EPA, said he supported Mike's conclusions. EPA supports the preferred alternative in the proposed plan. He said the choice is between using phosphate to treat the uranium or excavating uranium through a "big dig." A big dig would require not only excavating waste sites, but also the surrounding area. It would be a massive excavation since the uranium radiated outwards through groundwater and laterally from the waste site.

Madeleine Brown, Ecology, said Ecology does not have anything to add at this point.

Committee Questions and Response

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

C: It is hard to visualize this completely in terms of the area that would be injected, the depth of injections, and the time of year when this would take place.

> *R: The first phase would be done when river levels are high. We have a pretty good coverage of wells in the subsurface and we know where high levels of uranium are. We are working to obtain a balance between demonstrating remediation at a large enough scale, while also finding a size that would meet all objectives for going forward to meet optimization.*

Q: What is the scale?

R: The scale is 375 feet by 375 feet. The concept is to drill sufficient boreholes to inject phosphate into the periodically rewetted zone (PRZ) as well as the groundwater. Injections to the groundwater would be done when the water level is rising. Mobile contaminants cannot be completely treated. Discussions with EPA include a plan for an enhanced remediation approach through well field injections below the water level, which leads to a better result.

Q: What amount of uranium reaches the Columbia River from agriculture?

R: There is a one page description that will be available later this week detailing what material comes from the 300 Area on the Hanford Site, what material originates from the three irrigation returns, and what is coming from the Columbia River itself.

C: It appears these tests failed in the field.

R: The tests did not fail. The ability to form an apatite barrier was not successful in the groundwater. The formation of autunite was successful so DOE is moving forward with that approach. Autunite formation was successful in the groundwater and DOE is now testing effectiveness in the vadose zone and PRZ. If the phosphate can reach the subsurface, it does not take long for it to reach the groundwater. Phosphate could be applied through drip irrigation or large irrigation systems at the surface. There will also be injections very closely spaced to the boreholes entering the vadose zone. DOE is trying to infiltrate from the surface downward as well as in the subsurface. Injections will not occur as a single pulse; injections will continue as needed.

C: Whenever phosphate is applied it should be associated with some liquid. If liquids are used, there is a concern about driving uranium into groundwater. DOE risks spiking the groundwater with uranium if excavations use dust suppression in the form of water.

R: This is the reason for the enhanced design with injected wells that treat the PRZ. Uranium will be released out of the vadose zone into the PRZ. The objective is to provide treatment below. Since we do not know how successful this will be, we are doing it in a phased approach. Ideally, there would be a number of tests, but there is neither time nor funding to complete multiple tests before the proposed plan is due for delivery.

C: You stated that autunite has a low solubility and that it does not depend on conditions of the aquifer. Are all forms of uranium converted to autunite?

R: Not all forms of uranium are converted to autunite. Adding phosphate could change the reoxidation chemistry and release uranium into the Columbia River. There are many types of uranium in the subsurface. Some have precipitated out and are very stable. The carbonates are very apt to dissolve and be mobile.

C: There is some question about the risk versus the success of spending the required $117 million for the project. What is the amount of uranium going into the Columbia River currently? The basic question is if we are spending money that does not need to be spent. Are there higher priorities on the site?

R: There are much larger risks at the Hanford Site, such as chromium along the Columbia River. From the perspective of DOE, we have a projected timeframe for when the system will restore itself, although some may argue about the validity of those estimates. In reality, the uranium plume is in a state of quasi-equilibrium depending on movement of the Columbia River. CERCLA requires cleanup to the highest beneficial use. There are actions that can be taken now to minimize uranium moving into the Columbia River. The question is how soon you want the aquifer restored. There is a risk with the new technology versus the expected return for meeting restoration goals sooner. There is also a risk of not completing other work if funds are expended on this project. Taking a phased approach will answer many of these questions. If the approach does not work, the site will naturally attenuate.

Q: Why not combine the digging aspect with the injection wells?

R: A combination of injection wells with excavation is considered under Alternative 4. This alternative involved excavating high concentrations or uranium and then sequestering it. This approach has much higher costs and there are also exposure risks to workers that we do not have with the preferred alternative.

Q: Given the long half-life of uranium, under what conditions do you expect to see autunite immobilize?

R: Under natural conditions autunite is extremely stable. Even with all the uranium on-site, the level of uranium in water is only three times higher than drinking water standards. If the phosphate injections are successful, the autunite should remain stable.

C: The Board has always supported remove, treat, and dispose (RTD) approaches. There are serious concerns when new plumes are created as a result of experimenting with new technologies, such as what occurred at the 618-7 burial grounds.

Q: Have new plumes resulted from the application of water during other remediation procedures?

R: Yes – at the C-7 site in B/C Area.

C: The argument for leaving the uranium in place is interesting and deserves more discussion. Excavating the area should not be an overwhelming project – Interstate 5 (I-5) required excavating as much material and the costs were not astronomical.

R: I-5 was not contaminated with uranium. The costs under Option 5 are based on excavating the highest concentration of uranium, which would not be sufficient to clean up the site. The actual cost for the highest concentration is $1B. It will cost more for 17 acres and put more uranium into the river.

C: There are many externalities, but we never talk about actual cost. How much damage will uranium cause during a half-life? If we leave uranium, it will leach into the ground and the Columbia River. There are costs associated with that, including costs to human life. We have a moral obligation to deal with the uranium. Three times the drinking water standard is too high and people should not be saying "only three times the standard." There is a chance this approach will not work so the money will be spent with no results. We should not wait until the next 5 Year Review to re-evaluate the approach.

R: We examined every technology available and felt this approach has the greatest chance of improving the condition. We are not going back in five years. If it does not work, the uranium will naturally attenuate, which would also be acceptable.

Uranium is only three times higher than drinking water standards. From EPA's perspective, the approach is not a complete treatment, but if we reach water quality standards for most of it we are at the remediation action objective. The remaining uranium will be relatively immobile, but it can move enough to re-contaminate groundwater. Core samples will be taken to see if sequestration worked. That is what will be investigated in Phase 1.

C: Evaluating alternatives based on fossil fuel consumption and carbon emission take focus away from the real issue.

R: DOE is required by Presidential Order to evaluate carbon footprint (emissions).

C: The real problem seems to be groundwater beneath a certain area and the pipeline that went out to it. While the overall purpose of cleanup is to protect the Columbia River, the uranium does not appear to present a challenge to the river. Very little groundwater enters the Columbia River.

R: The groundwater contamination is a major problem along with the pipeline that has not yet been remediated. The entire goal of the remedy is to restore the aquifer to drinking water standards. Uranium leaking into the Columbia River is not an issue right now, but there is an issue from irrigation. This remediation approach is not a Columbia River protection issue; it is an approach to restore the aquifer.

C: There is a lot of uranium originating from natural sources. The Columbia River contains a large amount of uranium and the uranium from Hanford Site sources is not very significant. Phosphate fertilizer contains uranium, which is the natural form. The processed form of uranium that is found at the Hanford Site is different than the natural form and it is present at higher levels. Natural uranium is not radioactive.

C: The approach has already been tested and it does not work. The apatite barrier does not work. I do not like the alternative chosen. An approach that includes both excavation and phosphate injections would be preferable. If points are targeted, workers and the groundwater can be protected.

C: There are concerns with Draft A of the 300 Area RI/FS. It reads as if the alternative was pre-selected and the data analyzed in a way that reinforces that selection. There should be more transparency.

Q: There are fundamental concerns about the remediation technology. Dale and Larry have both spoken with the person at EPA Headquarters who has expertise in this area. Do you have confidence in the effectiveness after speaking with him?

> *R: The expert said the technology does work, particularly if there are a lot carbonates in the system, which is the case at the Hanford Site. The challenge is getting contact between the phosphate and uranium.*

C: RTD is an approach that has been favored by the Board, particularly for long-lived radionuclides. Immobilization appears to be more of a mitigation strategy than a final solution. It would be an approach to take before excavating material.

C: The same question about whether the preferred alternative is backed by enough information would also apply to Alternative 4. Has that been analyzed thoroughly enough? We do not have enough data to endorse any of the alternatives. Larry's comments about excavation are valid. How much data is needed before stating which alternative is the best?

Dale wrapped up the discussion by noting the range of opinions concerning the proposed remediation approach; there is clearly not consensus of opinion at this point. The committee identified some high-level advice points to bring to the April Board meeting, because June will be too late to affect the proposed plan that will be available for public comment. The Board will offer more detailed advice on the proposed plan in June.

The April advice will recommend an amendment to keep the status of an Interim ROD and not issue a final ROD with the knowledge that the technology will be re-investigated prior to the next CERCLA Five Year Review. The Board will also ask for better clarification on the risk assessment and note that technology should be tested before determining that it is the final remedy selection. The advice will also restate the Board's RTD values without including any specific statements about the alternatives. Dale will have a draft ready by March 16. He asked the committee to send comments to him by March 19.

Site-wide Permit (joint with PIC)[*]

Presentation

Madeleine reviewed her presentation on the Reissue of the Hanford Facility Dangerous Waste Permit (Attachment 5). Madeleine said she would like two types of feedback from RAP: how to make the information more enticing to public audiences, and which parts of the presentation should be used for the May 3 HAB/public workshop. She said Ecology's job is to protect, preserve and restore air, land and water in Washington State. Ecology must ensure the Hanford Site follows state regulations to protect the environment, which is why Ecology requires the Permit for cleanup. Hanford operations were ongoing for

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decades before environmental regulations came into existence. Madeleine reviewed Hanford's nuclear production history from World War II through the Cold War and into cleanup mode. She acknowledged cleanup that occurred prior to the first Permit being issued in 1994, such as moving waste from single shell tanks into double shell tanks. Madeleine said there is still a significant amount of contaminated waste on site and there are a number of regulations that guide cleanup action. EPA has authority over the Hanford Site through CERCLA and Ecology has authority through RCRA. The Permit covers the treatment, storage and disposal of dangerous waste. Activities on the Hanford Site are covered in the Permit since everything on the site is interconnected. The Permit contains units to differentiate the various cleanup operations, since all have unique considerations and these units can be modified as necessary. The Permit is required to be updated every 10 years. DOE did apply for a renewed Permit in 2004, but it takes a long time to go through the entire renewal process.

Madeleine said there is a long public comment period because of the length of the document. A public workshop is scheduled on May 3. Public meetings will be held in Seattle, Portland and Richland in addition to holding meetings via WebEx. Ecology is working to make the permit more accessible and transparent. The website has a lot of information and questions can be sent to Hanford@ecy.wa.gov. Madeleine closed by asking that if anyone knows a group or class who would be interested in the presentation, to let her know.

Committee Discussion

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

Presentation Suggestions

The Committee agreed that Madeleine's presentation was excellent. They felt it is at the appropriate level for general public understanding. RAP offered the following suggestions:

- Use this presentation as a broader education piece, such as offering it to the Washington State Department of Education. It could also be filmed.
- Add a statement about how public comments will be used. People want to know that their comments are valued.
- Several people offered minor suggestions on word choice, such as not mentioning the "huge mess" as much and clarifying the number of buildings that have been demolished versus the number still standing. The aerial photos of WTP should be updated.
- Explain the relationship between the State Environmental Policy Act (SEPA) and the Permit.
- Include Tri-Party Agreement (TPA) milestone dates to better clarify the portion of the presentation on enforcing deadlines. How is the permit enforceable?
- Describe how waste was handled before the first permit was issued in 1994 and clearly explain what the permit changed. The difference is in the standards for cleanup. DOE has always had

operational standards, but earlier standards were not sufficient for environmental goals. It is important to avoid the impression that there were no standards before Ecology became involved in the cleanup.

Permit Workshop Agenda Discussion

Liz Mattson, IM for the Permit, handed out two items: a revised draft Permit public workshop agenda (Attachment 6) and draft Permit workshop information for Board presenters (Attachment 7). Liz said the agenda has been revised based on previous discussion between RAP and the Public Involvement and Communications Committee (PIC). She reviewed each agenda item.

Liz noted that a large part of the discussion includes perspectives from different Board members on concerns pertinent to the permit. These concerns would reflect past Board values. Interested speakers need to be identified; they would likely have approximately ten minutes to share their concerns and then another two minutes to answer questions. This will provide an opportunity to state the Board's alternative perspectives to what Ecology presented during the morning.

The committee discussed the general agenda, especially the 12:30 – 2:00 p.m. discussion of perspectives/issues of concerns pertinent to the permit. RAP noted the following points:

- The time blocks may need to be shifted. There might be too much time allocated for Overarching Permit Information in the morning. Madeleine's presentation requires approximately 25 minutes. There are only two topics that would be added to her presentation (SEPA Determinations and the Risk Budget Tool). Other points would be covered in less detail. Conversely, an hour and a half might be too short a timeframe in the afternoon if people are going to be airing concerns on such a large number of topics. There are nine potential topics noted on the agenda. Three HAB values could be selected for discussion.
- It should be clearly articulated at the workshop that any comments gleaned from sticky-notes from the gallery of units or other comments made during the May 3 workshop will not be formally tracked by Ecology. These comments would be considered unofficial. It was suggested that Ecology provide an official place to send detailed comments. The workshop will happen within the boundaries of the comment period so this differentiation will be especially important.
- There are IMs for these topics who are not ready to share perspectives yet, such as for institutional controls. Multiple teams should not be discussing the Board's concerns on the same topic, especially since they will likely come up with different points.
- Ecology is in the process of posting the draft permit to their website, which will probably be online April 15. Board members noted that they will not be able to research and compare values against the Permit if it is not easily available.

- Liz asked more people to consider joining the IM team. People could just come to the IM meeting without becoming an official IM. There might be a call or in-person meeting before the April meeting.

Susan H. will send the draft agenda to the entire committee with the discussion paper and a request for people to sign up for presentation topics. Jean and Liz will help craft this email.

This topic will be discussed again at the April RAP meeting.

Committee Business

DOE's Response to HAB Advice 242*

Issue Manager introduction

Maynard Plahuta, IM for HAB Advice 242, said he felt DOE's response to the advice "Preservation of Historic Properties and Artifacts" was inadequate (Attachment 8). Though dated in October 2011, the response was received by the Board over a year after DOE received the Board's advice. Maynard questioned DOE's commitment to preservation of historic artifacts, given their response to the advice. Maynard drafted a letter in response to DOE's response to the advice (Attachment 9). He said in many cases project managers either do not take historic preservation seriously or are not fully informed, particularly among the contractors. Maynard said there are some new advice points that have occurred since Advice 242 was issued. The National Historic Preservation Act (NHPA) has clear guidelines on what items should be preserved. Additionally, some items might not fit preservation goals, but could still be of other use. DOE should consider preserving items beyond those explicitly covered under NHPA.

Committee Discussion

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

C: RAP could ask DOE to give a presentation on implementing preservation goals from contractor leadership to management.

> *R: Colleen French has stated she can give a presentation to the Board. Board members are concerned that the entire preservation program is in her hands. They are also concerned that contractors may have demolished items without checking first to see if there is potential for re-use.*

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

C: Maynard's letter effectively captures the question of how effectively DOE and the contractors are adhering to an "appropriate preservation culture." That is the main issue.

C: Preservation of tribal cultural elements was not addressed in this advice. The advice was focused on the history of the Hanford Site tied to the Manhattan Project and Cold War Era buildings. Tribal nations concerns were kept separate, because the Board did not want to become involved in discussions between tribal nations and the United States government.

C: Part of the problem is that nothing in the contractual arrangements forbade destroying everything on the Hanford Site. There was a letter that recommended National Historical Preservation Act (NHPA) should flow down to the contractors in all instances so that contractors are aware of preservation concerns. There is no accountability for contractors.

C: There should not be a financial reward for removing objects as opposed to preserving them. There should be an award for preservation. Award fees for preservation would carry weight.

C: Any kind of fines/rewards must come from somebody's budget. What would the funding structure be for this type of proposal?

C: DOE has responsibility for NHPA and there should be enforcement capability to ensure project directors are considering preservation of historic artifacts beyond NHPA guidelines.

C: It if frustrating that the Board did not receive a response to advice points in a timely manner. That is a consistent point that could be made. The Board could advise DOE to respond to every advice point with equal consideration and depth.

RAP decided to present the draft letter at the April Board meeting, if there is committee consensus. Depending on DOE's response to the letter, the Board may or may not prepare further advice. Maynard will revise the letter with help from Pam by March 9. Susan H. will then send it out for committee review and comment. Maynard asked for committee comments by March 16.

Committee Leadership Selection

Pam has been nominated to continue as RAP chair. Dale has been nominated to continue as vice-chair. There were no objections so each will continue their leadership roles for another year.

6 Month Review of Committee Accomplishments & April Meeting Topics

Susan H. led the committee through the six month review of committee accomplishments based on HAB priorities and TPA priorities. Many topics are on-going and have been discussed at multiple meetings since October. The committee also updated the potential April meeting topics table. RAP has a number of topics to discuss in April, including: an update on the 100 Area RI/FS, the Site-wide Permit, transuranic waste and 324 B-Cell remediation.

Susan H. also reviewed the follow up/action items prior to the conclusion of the meeting.

Attachments

Attachment 1: Transcribed flip chart notes
Attachment 2: Remedy Review Board Briefing by Emy
Attachment 3: Table 8-1: 200 UP-1 Groundwater OU Remediation Alternative Summary
Attachment 4: Uranium Sequestration via Phosphate Infiltration/Injection Test History Supporting the Preferred Alternative
Attachment 5: Reissue of the Hanford Facility Dangerous Waste Permit
Attachment 6: Revised Draft RCRA Permit Public Workshop Agenda
Attachment 7: Draft RCRA Permit Workshop Info for HAB Presenters
Attachment 8: DOE's response to HAB Advice 242
Attachment 9: Proposed HAB letter to DOE-RL following its response to HAB Advise #242 - Draft

Attendees

HAB Members and Alternates

Shelley Cimon	Liz Mattson	Dick Smith
Dale Engstrom	Vince Panesko	John Stanfill
Floyd Hodges	Jerry Peltier	Bob Suyama
John Howieson	Maynard Plahuta	Jean Vanni
Pam Larsen	Meme Samkow (phone)	Steve White
Susan Leckband	Daniel Serres	

Others

Naomi Bland, DOE-RL	Madeleine Brown, Ecology	Bruce Ford, CHPRC
J.D. Dowell, DOE-RL	Dieter Bohrmann, Ecology	Joy Shoemake, CHPRC (phone)
John Morse, DOE-RL	Dib Goswami, Ecology	Barbara Harper, CTUIR (phone)
Tifany Nguyen, DOE-RL	Brenda Jentzen, Ecology	George Klinger, CTUIR
	Dennis Falk, EPA	Nicole Addington, EnviroIssues
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