Executive Summary

The Board adopted one piece of advice concerning the Hanford Long-Term Stewardship Program Plan.

Board business

The Board will have committee calls and meetings in May. The Board discussed:

- 2009 Hanford Advisory Board annual report
- 2009 Board Evaluation
- May leadership retreat
- June Board meeting topics
- Board members confirmed committee leadership

Presentations and updates

The Board heard and discussed a number of presentations on the following topics:

- Update on the Comprehensive Environmental Responses, Compensation and Liability Act Five-Year Review
- Draft Tri-Party Agreement Change Packages
- 2009 Board Evaluation results

Public comment

There was one public comment provided.
Susan Leckband, Non-Union, Non-Management Employees (Hanford Work Force) and Board chair, called the meeting of the Hanford Advisory Board (HAB or Board) to order. The meeting was open to the public and offered ongoing opportunities for public comment.

Board members in attendance are listed at the end of this summary, as are agency and contractor representatives and members of the public.

Eight seats were not represented: City of Pasco (Local Government), City of West Richland (Local Government), Franklin and Grant Counties (Local Government), Central WA Building Trades (Hanford Work Force), Washington State University (University), Physicians for Social Responsibility (Regional Environmental/Citizen), Yakama Nation (Tribal Government), and the Confederated Tribes of the Umatilla Indian Reservation (Ex-Officio).

Welcome, introductions and announcements

Susan Leckband welcomed the Board to Portland.

Susan Hayman (Susan H.), EnviroIssues, announced that the annual report is completed, with copies distributed at all Board member seats. Additional copies are in the back of the room. Susan apologized for the delay with the annual report and noted that Bob Suyama served since June 2009 as vice-chair. Future printed copies will be corrected.

Susan H. introduced GoToMeeting technology, an online tool that will be tested at this meeting. GoToMeeting enables those calling in to the meeting to see presentations and document editing on their personal computers through an online link. Susan H. also noted that issue manager training would take place near the end of the day on Thursday, and encouraged Board members to add their thoughts and ideas to the flip charts located in the back of the room to stimulate the conversation during the training.

Susan H. introduced Chelsey Funis, EnviroIssues, who will be replacing Hillary Johnson as the HAB note taker.

The Board meeting was audio-recorded.

Confirm February meeting summary adoption

Board members did not submit any major changes to the February meeting summary. The February meeting summary was finalized and adopted over email within the operating ground rules requirement of 45-days after the meeting.

The adopted February summary was confirmed. It is available on the HAB website.

Committee reports

Tank Waste Committee (TWC)
Larry Lockrem, Non-Union, Non-Management Employees (Hanford Work Force), said the TWC met on March 11 and selected new committee leadership. Dirk Dunning, Oregon Department of Energy, will replace Larry as chair, and Larry will replace Rob Davis, City of Pasco (Local Government) as vice chair. Larry thanked the TWC for doing an excellent job and gave a special thank you to Rob for the support he provided.

Larry said the TWC met in March to discussed two main issues: the Single Shell Tank Integrity program and the Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS).
Larry said the Single Shell Tank Integrity Panel was formed in 2008 to help guide the improvement of the Single Shell Tank Integrity Program. The panel met twice during 2009 to learn about the construction, operation, and status of the single shell tank program, and to develop a set of recommendations for the program. All of this information is available on the Washington River Protection Solutions (WRPS) website. The final report with the 33 recommendations is publicly available.

The second topic discussed at the March meeting was the TC&WM EIS. Dirk provided an overview and indicated that there are 67 issues identified that the TWC needs to track. Dirk said 31 of the issues are area specific. Larry noted that 10 of the 31 issues should be tracked in advice.

Larry commended the Board in going through the TC&WM EIS and noted that it took a lot of effort to get their advice out in a short period of time.

Larry said the TWC discussed topics for discussion in April including; System Plan Revision 5, Waste Incidental to Reprocessing (WIR) program, supplemental treatment technologies, the 242-A Evaporator upgrades, tank farm blending, safety control systems, and materials risk analysis on the tanks.

Larry said the TWC has scheduled a meeting for April 15 to discuss supplemental treatment areas, review tritium analysis, and rotary micro filtration at Waste Management Area C.

Larry thanked Lori Gamache, DOE-ORP, and Cathy McCague, EnviroIssues, on behalf of the TWC for their support and feedback.

Public Involvement and Communication Committee (PIC)
Steve Hudson, Hanford Watch of Oregon (Regional Environmental/Citizen), announced that he will continue to serve as committee chair and Liz Mattson, Hanford Challenge (Hanford Work Force), will replace Ken Niles as vice chair. Steve thanked Ken for stepping in and for doing a great job in 2009.

Steve stated that over the last four months the PIC has been working hard to develop a public involvement strategic plan and recommended the Board review materials from PIC meetings and sounding boards because they provide great ideas and suggestions for improving public involvement, especially concerning public comment periods.

Steve said the PIC is working on tracking materials, calendars, and specific public involvement tips that were a result of the TC&WM EIS release and that it will be useful to other committees and enhance the HAB.

Steve thanked the Board for providing suggestions and critiques of public involvement activities, and for allowing the PIC to tap into the expertise of the Board. Steve said the PIC will continue to explore evening web seminars and developing more creative and effective presentations that draw in younger generations.

Steve asked the Board to fill out the TPA Public Involvement Survey set up at the back of the room. He also reminded the group that the comment period on the TC&WM EIS has been extended until May 3.

Steve informed the group that the PIC met yesterday to discuss their overarching goals. PIC will meet on April 14 to discuss tools and criteria to help characterize how to meet these goals and develop a way to measure the effectiveness of these tools. The PIC will also discuss its priorities and the success with those priorities, the agency advice given on HAB Advice #222, and comment on the TPA change package fact sheets.

Steve informed the Board that the PIC will hold an informal debrief meeting immediately after each public meeting to identify strengths and weaknesses with the meeting as part of the PIC’s responsibilities.

National Liaison
Shelley Cimon, Public-at-Large, discussed the issue of foreign fuel coming into the U.S. from Italy. State Senator Andy Berke and Representative Ty Cobb are sponsoring a bill that would prohibit nuclear waste blending. The intent of this bill is to keep this foreign waste, specifically Italian waste, from coming into the country.
Shelley cited a second bill, the Radioactive Import Determination Act, proposed by Tennessee Congressman Bart Gordon and U.S. Senator Lamar Alexander, that would prohibit foreign radioactive waste from entering the U.S. Shelley added that the Italian waste that was scheduled to go to Utah will no longer be shipped to that location.

Shelley said the U.S. has approximately 150 – 200 orphan wastes sites and facilities that DOE Environmental Management (EM) is responsible for. EM has been looking for funding to address this issue and was able to award $16.8 million of American Recovery and Reinvestment Act (ARRA or stimulus) money to a company called Homeland Security Capital that will dismantle 49 orphan facilities in Oakridge, Tennessee.

Shelley said DOE Headquarters (HQ) is holding a stewardship workshop in Grand Junction, Colorado, in November. She thought Board leadership will most likely participate in the workshop. Shelley added that the EM Site-Specific Advisory Board (EM-SSAB) chairs are meeting in Oakridge at the end of this month discuss long-term stewardship and legacy management. Bob Suyama will attend.

Susan added that this meeting is very visible. The EM SSAB will report back to the Board about top level HQ staff presentations and other information. The discussion will likely include EM budget priorities and what will happen once ARRA funding runs out in 2011.

Susan said the EM SSAB will likely discuss draft advice on long-term stewardship, which aligns well with past advice the Board has given. EM SSAB advice is drafted and distributed to all of its member boards for signing.

Shelley noted that Larry Camper from the Nuclear Regulatory Commission (NRC) will be at the April meeting to provide a presentation on the new rule making and classifications. Shelley’s goal is to get the NRC out to the Hanford Site.

Health, Safety and Environmental Protection Committee (HSEP)
Keith Smith, Public-at-Large, announced that HSEP selected its new leadership. He will continue to serve as chair and Mike Korenko, Public-at-Large, will continue to serve as vice chair. He said HSEP, like the other committees, held leadership selection a few months early to enable the new officers to attend the Board retreat in May.

Keith said the HSEP had a number of issues on their plate and was happy to see progress with building demolition and site remediation. However, he added that it is very important to do this work safely to avoid injury to employees, exposure to the public, and finish with a clean environment.

Keith said a key topic for HSEP this year is tank vaporization. Keith thought tank vaporization is a difficult problem for two reasons. First, it is hard to know when one of the tanks is going to emit vapors and it is difficult to tell where the vapors will go. Many of the tanks’ tops are set down into a berm, which enables the contractor to trap vapors inside that berm. The second reason is people react differently to vapor exposure. Some people are extremely affected by vapors while other are not affected at all.

Keith had a meeting recently on tank vapors and, for the first time since he has been on the Board, HSEP was able to have Shirley Olinger, DOE-Office of River Protection (DOE-ORP) manager, attend. She weighed in on their concerns and a few of the things DOE-ORP is trying to do about those concerns. A safety representative as well as the Washington State Department of Ecology (Ecology) was also in attendance at this meeting and Keith felt that the meeting went very well. Keith said Ecology is trying to get vapor emissions out of where people work and are monitoring them as well.

Keith said HSEP is trying to schedule another meeting in the fall about vapor emissions to assess how things have changed for the work force. Keith noted that HSEP is also following the issue of those people who are affected by vapor emissions and noted that it may warrant advice to the Board for consideration with regards to how this problem should be managed. Keith added that Tom Carpenter, Hanford Challenge (Hanford Work Force), is the issue manager for tank vapors and is following this topic closely with direct contact with the work force.

Keith said beryllium disease has been a high profile topic. The Board has issued three pieces of advice on this topic and most recently sent a letter in response to DOE’s response to the first two pieces of advice. The two pieces of advice on beryllium received substantial interest from DOE; HSEP received a direct call from Frank Marcinowski
from DOE-HQ. Frank told HSEP that HQ concurred with the HAB’s advice and their letter and agreed to follow the advice.

Keith said a Health Safety Team from HQ is currently investigating the beryllium program and how it is being implemented. HSEP met with Glen Podonsky from the leadership team and he expressed concerns about the program because, following previous investigations, DOE did not act on the results. Keith said HSEP should have results from the Health Safety Team at the next Board meeting in June. Three of the members of this team were requested by the Beryllium Affected Group - John Martini, Lisa Maier and Tim Takaro. All three of them will be involved in the investigation and the final report.

Keith said Mike Korenko attended all 11 of the briefings. Mike said concerns were raised by the HAB about the independence of the review. Mike feels the Health Safety Team is doing a great job and he is comfortable with their work. The investigation is thorough; they are finding things HSEP did not find before and the site is already responding well to what they have been doing. Mike informed Susan Leckband that the Health Safety Team will debrief the HAB on this topic in the near future.

Keith said HSEP has a meeting this week to talk about biological controls at Hanford. A Hanford Site employee contracted the West Nile virus. Keith said an employee will come to the next HSEP meeting on the affected employee’s behalf. Keith stated that DOE used to do a great job of keeping the mosquito population under control but he was not sure how controls are being implemented now. Keith said he hoped new Ecology rules regarding spraying within a certain distance of water ponds does not impede the ability to control mosquitoes. Keith estimates a large increase in West Nile infections if this rule is propagated.

Jane Hedges, Ecology, said an Ecology representative responsible for mosquito control permitting could provide an overview on the program the next HSEP meeting. Keith will send Jane the agenda.

Keith stated that the other topic HSEP will discuss is the status of the Health and Safety Team. The DOE might be disbanding this team and HSEP is very concerned about this because they have been effective in making corrections with health and safety at the complex. Keith said the committee might be drafting advice for this team to continue.

Keith noted that the compensation programs for employees that have been affected with asbestos and radiation have been very successful. Keith had two friends that initially tried to get into the compensation program and were treated poorly. Keith encouraged them to try again and what they experienced was drastically different. They were greeted warmly, provided with information, staff helped them fill out of their forms and schedule their physicals. Keith complimented DOE for doing their part and making this a positive program.

Budget and Contracts Committee (BCC)
Harold Heacock, TRIDEC (Local Business), will continue to serve as vice-chair and Gerry Pollet, Heart of America NW (Regional Environmental/Citizen) will continue to serve as chair.

Harold said the committee has been focusing on the TPA consent decree and the TC&WM EIS. BCC has asked for the agencies to prepare a lifecycle cost and budget report. Harold said this report is going to take a lot of effort and time to develop but will be helpful to address the schedule and financial concerns raised by the Government Accountability Office (GAO) and the rest of the nation.

Harold said BCC is also focused on their yearly cycle of budget advice, budget planning, priorities, and ARRA funding.

River and Plateau Committee (RAP)
Pam Larsen, City of Richland (Local Government) thanked Maynard Plahuta, Benton County (Local Government) for doing an incredible job as vice-chair and for his continued assistance with the committee. Pam will continue as RAP chair and Dale Engstrom, Oregon DOE (State of Oregon), will serve as vice chair.

Pam said RAP has been heavily involved in the review of the TC&WM EIS and working with the Committee Of The Whole (COTW). At the March 9 meeting, RAP worked on the Long-term Stewardship Plan advice which will
be discussed today and she thanked Bob Suyama and Doug Mercer, University of Washington (University), for their help on this document.

Pam said advice concerning the terms unrestricted use and unrestricted surface use will also be discussed today. She also noted that RAP is focusing on the 100-N Area and the committee has an updated work plan for the next few months. Pam thanked Susan Hayman for tracking the RAP’s six month work plan.

Pam said on Tuesday RAP will meet to discuss K Area, the draft TPA change package, uranium and technetium 99 in the deep vadose zone, and the history and use of reverse wells on the Hanford Site. In May, RAP will revisit the Comprehensive Land Use Plan (CLUP) and discuss the status of the Resource Conservation and Recovery Act of 1976 (RCRA) permit and the Non-Radioactive Dangerous Waste Landfill (NRDWL).

Pam said the Hanford Communities Organization will be filming an issue briefing Friday, April 30 on groundwater at the request of DOE. This video will be filmed with participation from the TPA agencies and the Department of Health, and will be made available for local and regional television.

Pam said the GAO is looking at the impact of not proceeding with Yucca Mountain. They are interested in the impact of TPA agreements across the complex, and what the costs and impacts are to sites that do not have a place for high level waste to go.

Executive Issues Committee (EIC)
Susan Leckband said she has been asked to provide the GAO with the HAB perspective on the impact of not being able to use Yucca Mountain as a deep geologic repository.

Susan said the Board facilitation contract ends this year and the Board will help DOE develop the next scope of work. Shelley and Maynard will help DOE on the Request for Proposal (RFP) that will go out for the Board facilitation contract. The Board will have the opportunity to provide input on this work scope. Susan feels this is an incredibly vital element to the HAB that contributes to its success.

Susan said the Board will identify their priorities for 2011 at the leadership retreat, which will incorporate TPA agencies’ priorities for the Board. Outcomes and draft Board priorities from the leadership retreat will be shared with the full Board at the June Board meeting. At the June meeting, the Board will also review the results of its self-evaluation and how to make any necessary changes.

Paige Knight, Hanford Watch of Oregon (Regional Environmental/Citizen), reminded the Board to be mindful when using acronyms, especially when there are members of the public present.

Advice on the Long-Term Stewardship Plan
Bob Suyama introduced the draft advice on the Long-Term Stewardship (LTS) Program Plan (Plan). He said the LTS Plan was introduced to the HAB in February. A COTW meeting was held on March 3 to specifically discuss the LTS Plan. Draft advice was then developed and brought to RAP who reviewed it and decided to bring forward to today’s meeting for approval.

Bob said while looking at the LTS Plan he learned that as DOE and the active contractors finish remediation and close waste sites, responsibility will move over to the Mission Support Alliance (MSA) contractor who will be responsible for long-term stewardship of the site.

Bob said the word “long-term” may be misleading – now is the time when decisions are being made about how to close clean up the Site, what contamination will be left in the ground, and how the leftover contamination will be watched over forever. Bob stated that the Board needs to advise the agencies on making the right choices now in order to minimize future problems.

Bob said a lot of the Plan goes beyond the scope of DOE-Richland Operations Office (DOE-RL) or Hanford, which is why Susan suggested bringing the Plan to SSAB so that DOE-EM can review it. This Plan is going to apply sites across the nation.
Doug thanked Bob for his mentorship, and Paula and Boyd for their support on this advice. He shared a few comments:

- **Use of the Plan:** Doug noted that this Plan should be used as a reference document and not a decision document. Doug said the Board needs to look at decision documents such as the CLUP, EIS, or record of decision (RODs) to find decisions, details and answers to questions.

- **Scale of the issues:** Doug said the RAP recognizes that the LTS Plan is a Hanford Site plan driven by federal laws, DOE-HQ policy, and other agencies such as the U.S. Environmental Protection Agency (EPA). It is important to keep in mind when reviewing the LTS Plan advice that the Board may need to go through a higher agency or the EM SSAB to get these issues resolved.

- **What the Board can do:** Doug said Board has covered many issues concerning long-term stewardship and thought it should now focus on specific activities that can actually be accomplished, including identifying the Board’s specific action items, its resources, and who at DOE-RL and DOE-HQ are amenable to the Board’s ideas.

Doug said funding for long-term stewardship at this site is an ongoing concern and addressing this problem is probably at a level beyond the local DOE field offices. This is a federal issue and the Board, which is a local site advisory board, might need to look elsewhere.

Many Board members feel B Reactor is the single best possible opportunity for sharing long-term stewardship information and knowledge. However, funding for B Reactor is an issue that needs to be resolved at the federal level to ensure tribes and other stakeholders are involved.

Doug felt the Board could be most effective at helping to use B Reactor as an example of long-term stewardship and advising on real cost accounting of the LTS Plan. Doug noted that there are things that can be done at the local level to retain the memory of not just what happened to the site and the role it played in World War II, but also the consequences of that mission.

**Agency perspective**

Paula Call, DOE-RL, thanked the Board for its energy and effort concerning long-term stewardship. She said DOE will take the final advice seriously and is looking forward to further conversations about implementing this Plan. Paula added that it is an exciting time to be discussing LTS because the lands along the River Corridor will likely transition into LTS later this year.

Paula explained the difference between LTS and legacy management. Legacy management is an office in DOE that takes lands once the regulatory requirements for cleanup have been completed. This will not take place at Hanford for a long time so in the interim, LTS will happen on the sites that have been cleaned but are not ready to be moved into the legacy management phase.

John Price, Ecology, said he thought the advice was accurate and contains a number of items that highlight future work for the Board. John said LTS falls outside the regulatory process but it is important to public confidence in the cleanup.

John stated that in reference to the first bullet concerning tribal involvement, tribal government can play a vital role in the cleanup; however, it is hard for DOE to calculate that in. John also stated that the B Reactor falls outside the regulations.

Dennis Faulk, EPA, agreed with Doug’s comments. He thought that this was some of the best advice developed by RAP. Dennis liked that Doug differentiated that this is not a decision document but a strategic plan for LTS. Dennis reiterated that the agencies use institutional controls to monitor if they are following requirements and upholding their responsibilities in terms of their RODs. He cautioned the Board that the Plan should not drive the ROD – the ROD should drive the Plan.
Dennis said the agencies could use the Board’s help to assist in accounting their long-term costs. This is a difficult task because parsing out costs into individual decisions is complex. The more advice the committees can provide to the agencies on ways to parse out costs the better off they will be.

Discussion

Pam asked Dennis if the agencies have looked at what other closure sites have done, such as Rocky Flats, Mound, and Fernald. Dennis said EPA runs their cost estimate over the long run but it is difficult to assess how accurate they are when estimating needs to look at hundreds or thousands of years. In addition, Rocky Flats does not have a lot of experience. Dennis stated that the EPA will continue to explore whether or not estimating long-term costs is plausible.

Maynard saw the advice as applying to the DOE with regard to B Reactor, not to the regulatory people because they do not have regulations that apply to the advice. John agreed with Maynard and added that when the regulations do not apply, the advice should go to DOE and they are consistent with that. Dennis added that EPA will continue to reiterate that this is a viable option to tell the long-term institutional control story for Hanford so, from a policy standpoint, EPA will continue to make that observation.

Laura Hanses, Non-Union, Non-Management Employees (Hanford Work Force), asked if the decision had been made about the B Reactor museum. Maynard said the National Parks Service (NPS) and DOE are working on agreements as to how they will proceed. The NPS came out with a draft document that did not include some of B Reactor’s facilities. DOE-HQ is playing an active role to encourage NPS to include these facilities in the draft because they are critical to the history of the Manhattan Engineering project. NPS is recommending that the Manhattan District Historical Park located in Los Alamos Park have limited facilities. There is a meeting this week to discuss the matter further. NPS is trying to assist DOE-HQ in terms of providing access and programs to the general public, but not staffing it.

Doug said the draft NPS report is still open for commenting. He said B Reactor is not in the plans for the park because NPS is concerned with management costs. NPS estimates that it would cost $1.3 million per year to manage all of these sites and to include the B Reactor as a part of the National Parks system.

Laura asked if the Board has drafted advice stating that the Board supports the B Reactor. Susan Leckband answered yes.

Betty Tabbutt, Washington League of Women Voters (Regional/Environmental Citizen), said she was having trouble reconciling the language of the advice document and thought the Board should make specific decision details clearer. Betty asked if the Board is comfortable that the LTS Plan document does not describe specific plans.

Doug said he likes the LTS Plan because it is succinct and clear. He suggested the group refer to the LTS Plan as a reference document instead of a plan. Doug added if the Board would like further details they should refer to the Implementation Plan, which will be prepared later.

Ken said the State of Oregon reviewed the LTS Plan in the same way as the HAB. He is less concerned with DOE including specific details in the LTS Plan, as long as at some point the appropriate level of detail the Board expects is met.

Maynard agreed with Ken and said the advice should include the Board’s expectations of what they would like to see so that it could be defined in either the LTS Plan or the Implementation Plan.

Maynard thought the advice should emphasize that long-term stewardship planning at Hanford should be applied to other sites as well, and vice versa.
Betty suggested adding “or as part of the Hanford LTS Plan implementation” to the notion that the Board’s comments on the Plan may need to be further addressed. Betty felt this addition would help open the discussion up.

Rick Jansons, Benton-Franklin Regional Council (Local Government), said including the notion that plutonium contamination will need to be actively guarded implies that the Board accepts and supports the notion that plutonium contamination will remain at the Site and will stay at levels that require guards. This is not consistent with the Board’s position, and Rick suggested changing the verbiage.

Doug Mercer agreed the verbiage should change because the Board does not support plutonium contamination remaining at the site.

Gerry suggested removing the statement that the site would remain contaminated. The Board agreed.

Mecal Samkow, Oregon Hanford Cleanup Board (State of Oregon), suggested using a different word than disposal because it implies it will remain at the site forever. Doug said they wanted to make sure this advice addressed the long-term waste disposal areas even though the Board does not like this fact.

The group agreed it is important to state that the Board may not accept but acknowledges that some sites will require surveillance and this advice needs to distinguish those different areas.

Gerry said he worries that the agencies will take this literally -- that the Board supports leaving some areas contaminated. Bob Suyama said these words were taken from previous advice that has already been adopted.

The Board reviewed advice bullets to remove duplicative statements. It also changed language to ensure that the Plan is capable of addressing the discovery of further or previously unidentified contamination.

Maynard asked the advice to more accurately state the role the NPS will play in stewardship of the site. DOE owns the contamination into perpetuity.

Maynard said “culturally significant resources” should be removed because the DOE uses this terminology to describe tribal resources and sacred sites. Doug said they used “cultural significant resources” to show that the Board supports tribal resources. Doug asked John Stanfill (Nez Perce Tribe) if this should be removed. John said he appreciates the thought but it is not necessary to include this terminology.

The group agreed to include more verbiage that encourages the storage and preservation of all historical records to ensure that this information is shared for future generations.

The group agreed to change the closing comment to read “the Board’s goal is to support implementation of a LTS Program that is protective of the environment and will not burden future generations.”

Bob Suyama and Susan said this advice does not preclude opportunities to weigh in on the LTS Plan or add additional advice to this topic. Bob felt the changes made to the advice were positive. The advice was adopted.

Public comment

Sabina Hilding, Alliance for Democracy, said she did not understand a lot of the Board’s discussion, but she felt there should be more specific and detailed information. She also had an objection to the B Reactor museum because it makes the site too user friendly and is a public relations ploy. She feels the museum is a waste of resources.

Advice on Unrestricted Surface Use and Unrestricted Use

Maynard introduced the draft advice on “unrestricted surface use” versus “unrestricted use” cleanup levels. Maynard, Dale Engstrom, and Wade Riggsehee, Yakima Nation (Tribal Government) were the lead authors of the advice. This was one of the items discussed during the December 2009 workshop on the baseline assumptions. This
advice refers to the notion that the terms “unrestricted surface use” and “unrestricted use” imply that anything can be done on this land, which is a misperception. Maynard stated that when the terms “unrestricted surface use” or “unrestricted use” are used in RODs or public meetings, it is important that the general public understand that there are limitations and those limitations are identified.

**Agency perspective**

Dennis said he was struggling with this advice. The idea of “unrestricted surface use” came directly from the Board and these terms are embedded in past RODs that the TPA agencies have written, and will continue to be used in future RODs because it has a regulatory context. He suggested creating an informal term to use with the public. Dennis asked the Board if they were retracting their recommendation included in HAB Advice #23 that requests the TPA agencies use the term “unrestricted surface use.” If so, this should be clearly stated in the proposed advice.

John said the advice is difficult to use. State regulations say that only two exposure scenarios will be used to set cleanup levels: residential and industrial. This is a difficult discussion because residential use is not realistic but state regulations require it.

John referred to the bullet encouraging the TPA agencies to become more sensitive to the term “unrestricted surface use.” John said he feels the agencies have done this already. An example of this is in the 100-N Area. Ecology performed a cleanup analysis and found that unrestricted surface use was allowed except for irrigation because it would contaminate ground water to unacceptable levels. Ecology went back and modified the ROD to specify that irrigation was not allowed at that location. John said the agencies are careful about the use of these terms and classifying areas as such.

Paula said DOE understands this language is confusing and is happy to work with the Board to come up with supplementary language.

**Discussion**

Paige said she has concerns with the term “limited use” because it does not indicate that these locations are contaminated, and leaving the public to determine this is unfair and in poor conscience. Paige asked that, as the Board learns more about contamination, how will the regulations and the language evolve to avoid becoming stagnant? Paige asked Paula if she planned to help the Board change language and regulations.

Paula said DOE can supplement the language to help people understand it more clearly and provide more transparency.

Betty said does not think the issue is with public perception but getting the proper information to the public. She understands changing regulatory terminology is difficult and suggested adopting guidance for plain talk use.

Paige said it would be great if DOE and the regulators could work together on supplementing language to provide more clarity.

Dennis said he is happy to work on terminology and definitions that EPA uses when developing public information pieces but he is not ready to change it in the regulatory context. There are limitations when writing a ROD that make this change very difficult.

John said he appreciates comments from the Board because the agencies need to appropriately communicate risks to the public. He suggested developing qualifiers such as “may include” when using the term “unrestricted surface use.”

Larry felt this advice in addition to HAB Advice #23 could put the Board in a difficult position. He suggested bringing the advice back to the committee to better incorporate both the regulatory and Board perspectives.
Ken said he was surprised at comments made by Dennis and John. He said he understands they work in the regulatory world but they are making this more difficult than it needs to be. Ken said the Board is asking for clarifiers, not regulatory changes. He also suggested using the word “descriptive” instead of “negative” or “positive.”

Doug said he has similar conceptual issues as Larry. Doug felt the Board needed to look at HAB Advice #23 before making any decisions on this advice. Doug asked if the groups’ concerns were with the terms that are used or with the regulatory harmonization between the Model Toxics Control Act (MTCA) and CERCLA.

Dennis said Paige helped clarify what the Board was asking agencies for in this advice and he suggested adding in this clarification to make it better defined. He said he has an adverse reaction to “limited use.”

Doug asked if the group had an issue with the language or the criteria for cleanup. If the issue is with language and public perception, that should be recognized and the Board should find a way to make it more understandable. If the group is concerned with the language being used in the RODs then the group should discuss it in that sense.

Doug suggested removing “some of the Board” because the advice is supposed to be a consensus.

Doug said the agencies need use plain talk in the 2015 Vision footprint site because it misleads the public into thinking only the Central Plateau will remain contaminated when that is false. Paula said she heard this concern in the base assumptions workshop and DOE-RL will address it later today.

John said if the term “limited use” was removed from the advice, the agencies would be able to compromise and be more careful in the future about using “unrestricted surface use.”

Pam said this is not time sensitive and should be brought back to the RAP Committee for clarification. Susan Leckband agreed.

Mecal asked what area the advice applied to and what the process required for changing terms included in RODs or MTCA. Dennis said the advice applies to the 100 areas.

John said the process for changing language in RODs can be done through an Explanation of Significant Difference. In terms of changing regulation, regulations are updated every five years and Ecology does include public input.

Mecal asked what the federal process was for changing regulations and if unrestricted surface use includes recreational camping. Dennis could not answer to federal processes but in the context of exposure areas, camping would be one of the areas included. The EPA accepted low exposure scenarios that will not allow rural residential development but could allow other uses. EPA is also looking into tribal uses and whether or not those fall under rural residential.

Maynard said the advice is a perception issue and the Board is not trying to change regulation. Including these terms in a newspaper, for example, is too misleading. He agreed the advice should go back to RAP for further development.

Dick suggested combining this advice with HAB Advice #23.

Shelley said she is willing to take the comments from the group and bring them back Dale and the RAP. She also said this dialogue should have happened in RAP instead of spending time during the Board meeting. She feels the RAP has lost a connection with the agencies and this discussion reflects that.
Dennis said that was valid criticism. He said this was a rich discussion and would a great topic for the RAP meeting. Dennis apologized for derailing the process but he was glad that the discussion happened.

Gerry agreed this discussion should have happened in RAP. He said the term “unrestricted surface use” is not included in MTCA or its regulations. HAB Advice #23 states that the Board wants fully unrestricted use and HAB Advice #23 was part of the push to get the agencies to look at cleaning up near the Columbia River. Gerry did not think “unrestricted use” should ever be used in a ROD because years from now developers will want to build near the river and will interpret the ROD and “unrestricted use” literally. Those residences will be approved and instead of pulling water from the river, which is illegal, will pull groundwater because Washington State law does not require an approval or a permit to dig a well for five homes.

Gerry said the agencies need to add language to all RODs and notices that specifically state limited usage on certain resources under MTCA and the Board needs to include this suggestion in their advice.

Douglas thanked Gerry for his suggestion and said he fully supports advice that is concerned with improving language that goes out to the public. Language is important in terms of stewardship because if usage is not defined properly, than the institution has failed. Doug encouraged the committees to discuss the language concerns because it affects all aspects of the cleanup.

Doug applauded DOE for putting a high priority on implementing usage restrictions and doing what the Board has asked for in the 100 Area.

Doug pointed out that the Board is inconsistent in their own language concerning unrestricted surface and needs to be more careful of this.

Doug asked Gerry if the footnote included in the draft advice that defines “fully unrestricted surface use” is the regulatory definition included in MTCA or in the Department of Health’s standards created for MTCA. Gerry said there is no relevant Department of Health standard and MTCA has a standard that require the agencies to clean up the surface and the groundwater. The second standard is an industrial cleanup area where the same risk standards need to be met.

Gerry said the Board was trying to be practical, not attempting to create a term for regulatory practices or how to define levels of cleanup.

John said this advice is timely because it will help shape language in the final RODs for the river corridor that will be discussed in 2012.

The advice was not adopted. It was sent back to RAP for further development.

TPA agency update

DOE-ORP

Steve Pfaff provided an update for DOE-ORP. He noted that the comment period for the TC&WM EIS is still open and said they have received a lot of great comments already.

Steve updated the Board on the status of tank retrievals. Contractors have removed the last long length of contaminated pieces of equipment from tank C-111. The tank holds 57,000 gallons of waste that contains twice as much radioactivity as C-104. DOE-ORP is working to find ways to dispose of highly contaminated equipment. Steve said they are installing new retrieval equipment into C-111 and retrieval is schedule to begin in August or September.
Steve said they have pumped 75% of the waste out of C-104. The tank started at 259,000 gallons of waste. He said as they removed the old equipment a part of it broke of that is sitting glued to the bottom. They are going to use a mechanical arm to try and move it out of the way to continue using the slurry pump.

Steve said they will use the Mobile Arm Retrieval System (MARS) in tank C-107 to rake the waste into the middle, pump it out, and hopefully meet the TPA goals, which is something they have not been able to do with other retrieval systems.

Steve showed a picture of MARS. He said they have been practicing a lot of techniques on mock up tanks to ensure that cutting down into a real tank will be safe and that all materials will be extracted. They have also been experimenting with a cutting technology that uses high pressure water and garnet or sand to see how easily they can cut through the dome of a tank. They designed a larger riser that is 47” in diameter that they will put through the dome of the tank and will practice using this multiple times before going to the tank farms.

Steve provided an update on the TY tank farm, which is part of the ARRA work. Steve said an asphalt barrier will be installed over 6 tanks in the TY tank farm. Five of the six tanks are assumed to be leaking. DOE-ORL has done a lot of direct push sampling in the soils around the barrier to try to minimize the water from pushing contamination further into the vadose zone.

Steve provided an ARRA status update.
- Excavated transfer lines to remove the cleanout box in order to bring 242-A Evaporator waste feed line up to RCRA compliance
- Removed old steam lines to make way for upgrades at the 222-S Analytical Laboratory
- Installed a Leak Detection Replacement System to provide leak detection for a mile long transfer line that runs from the 242-A Evaporator to the Liquid Effluent Retention Facility

Steve reviewed the status of the Waste Treatment Plant (WTP).
- Overall design – 78% complete
- Overall construction – 53% complete
- Total staff – 3,100
- Craft workers – 900
- Walls at the pretreatment facility now reach up to 77 feet high. Designs are in progress for the concrete slabs used to increase the elevation. The walls will be 120 feet when the pretreatment building is complete.
- Walls at the high level waste facility now reach 14 feet high.

Steve showed a picture of the Analytical Laboratory hot cell area that will handle highly radioactive sample. The lab is designed to process 10,000 samples per year to support the WTP operations. A wet chemistry area with hood is also included in the WTP laboratory. This lab will not replace the 220 lab.

**DOE-RL**

Matt McCormick provided an update for DOE-RL. He showed a graphic containing DOE-RL’s 2015 Vision for the Hanford Site Cleanup.

Matt gave an overview of the Hanford Site Active Cleanup Footprint Reduction plans. The following are excerpts from his presentation.
- Hanford Site active cleanup footprint reduction
  - Key objective is shrinking the active cleanup footprint to:
    - Protect the Columbia River and groundwater
    - Reduce cost
    - Make some lands available for DOE mission-related uses such as Energy Parks
    - Show overall cleanup progress
  - Significantly reduce operations
    - 45-60% and 85-90% in calendar years 2011 and 2015, respectively
    - Continue reductions after 2015
Following Hanford Active Cleanup Footprint Site reduction, DOE will consider the possibility of allowing certain land uses if they are consistent with the CLUP and applicable federal laws and regulations.

**Active footprint reduction criteria**
- Complete surface waste site cleanup and remove excess facilities in compliance with regulatory requirements
- Implement groundwater remediation systems that will continue to operate and treat contaminants

**Components of footprint reduction**
- Three major geographic components
  1. Hanford Reach National Monument
  2. River Corridor
  3. Central Plateau

**Hanford Reach National Monument**
- 290 square miles
- Managed to protect natural and cultural resources as per Presidential Proclamation 7319 of June 9, 2000
- DOE is cleaning up debris piles, excess facilities, and abandoned scientific experiments
- Active Cleanup Footprint Reduction expected in year 2011

**River Corridor**
- 220 square miles
- Includes the 100 and 300 Areas along the south shore of the Columbia River
- Phased completion planned to occur between years 2010 and 2015
- Active cleanup footprint reduction expected to be achieved by 2015

**Central Plateau Outer Area**
- About 65 square miles, includes all areas of the Central Plateau beyond the boundary of the Inner Area
- Cleanup planned similar to the River Corridor
- Active Cleanup Footprint Reduction expected between the years of 2015 and 2020

**Central Plateau Inner Area**
- Expected to be approximately 10 square miles
- Anticipated to be the final footprint of the Hanford Site, and will be dedicated to long term waste management and containment of residual contamination
- This area will include WTP and Environmental Restoration Disposal Facility (ERDF)

**Activities post-footprint reduction**
- DOE will manage Hanford Site in accordance with the CLUP and CERCLA RODs
- Groundwater remediation activities will continue as needed to meet cleanup criteria
- CERCLA Five Year Reviews will assess the effectiveness of remedial actions and may identify additional remedial actions
- Results from the Natural Resource Damage Assessment (NRDA) may identify additional restoration activities
- Operation of Office of Science facilities (300A), Laser Interferometer Gravitational-Wave Observatory (LIGO), Columbia Generating Station, B Reactor National Historic Landmark with potential museum, and other mission-related activities will continue

Matt provided a cleanup progress update. He said in March, DOE-RL shipped more than 88 cubic meters of waste off the Hanford site and to date have shipped 3,180 cubic meters total.

**River Corridor Cleanup Progress**
- 300 Area
  - Washington Closure Hanford will remove hot cells from the 327 building beginning next week
  - Removal of all nine hot cells scheduled to be complete in late May
  - Hot cells will be disposed at ERDF
  - 308 glove box removal (more than 50 glove boxes) is underway and expected to be completed by the end of the summer
• With the completion of the 618-1 burial ground, met a major TPA Milestone (M-16-62) two years early
• 336 building safely demolished in March

• 100 Area
  o 118-K-1 Silos
    ▪ Operated from 1955 to 1971
    ▪ Could contain basin sludge, cobalt 60 irradiators, spent nuclear fuel
    ▪ 2008 characterization indicates high-dose items in silos 1 & 2
    ▪ Start-up reviews March-May 2010
    ▪ Remediation June-August 2010
  o N Reactor
    ▪ Continuing to eliminate excess walls and structures to prep the reactor for cocooning
    ▪ Reactor’s Fission Product Trap - located in a tunnel 20’ below grade - grouted for disposal at ERDF
    ▪ N Reactor is the last operating reactor at Hanford

• ERDF
  o Upgrades funded by ARRA making a difference
  o Excavation of super cell 10 about two months ahead of schedule
  o Facility and equipment upgrades have contributed to ERDF setting new disposal records nearly every week since the first of the year
  o Most shipments ever during the week of March 14th, included best day with 578 containers of waste disposed – each containing 25 tons of contaminated material

• Central Plateau cleanup progress
  o Transuranic (TRU) waste shipments
    ▪ Resumed shipping TRU waste from Hanford Site to Waste Isolation Pilot Plant (WIPP) in Carlsbad, N.M.
    ▪ ARRA has allowed DOE to resume shipments
    ▪ Stimulus money enabling workers to expand waste packaging operations
    ▪ Begin with 2 shipments/week, planning for 5/week by late spring/summer
  o U Canyon
    ▪ Placement and size reduction of equipment continue
    ▪ Loading of Cell 2 completed and cell has been closed
    ▪ Work currently in progress in cells 25 and 26
    ▪ Approximately 76% of the large mapped items have been placed
    ▪ Approximately 125 major pieces of equipment will be relocated to prepare the U Canyon for demolition
  o U Plant ancillary facilities
    ▪ Asbestos removal is in progress at the 224-U and 224-UA Buildings, along with 203-UX
    ▪ These are the last of five ancillary facilities planned for demolition near U Plant
  o Deep vadose zone desiccation characterization test
    ▪ Completed 7/28/09
    ▪ High air flow/high vacuum resulted in removal of sediment pore water (condensate recovery contaminated with Tc-99/nitrate)
    ▪ Currently evaluating alternate test site to determine if this phenomenon can be replicated (purpose of test to determine volume and duration of removal)
    ▪ DVZ Desiccation Pilot Test
      ▪ Scheduled to start October 1, 2010
      ▪ 25 monitoring boreholes installed
      ▪ >700 instruments to monitor test
      ▪ Overall project and monitoring system reviewed by expert panel
      ▪ Test will conclude by March 25, 2011

Matt updated the Board on the ARRA progress. He said since the end of February, DOE-RL has received $1,634,500,000 and spent $ 362,275,226. The number of jobs reported to the DOE-EM through fourth quarter 2009 (calendar year) equals 2,924.
Ecology

Jane Hedges provided an update for Ecology. She said on March 3 they filed a petition with the NRC to appeal the Yucca Mountain decision to withdraw the license. The NRC Board has assessed the decision and decided that they will not make a choice on Ecology’s intervention until the federal court of appeals and other representatives are heard and resolved the issue. Jane said the glass they designed is up to Yucca Mountain standards but other sites may have different standards. Jane promised to keep the Board informed on this topic.

Jane provided an update on the intergovernmental meeting held last fall. Ecology asked the internal secretary to require DOE to create a public list of milestones and compliance status. They agreed and it is being drafted by the Environmental Commissioners of the State (ECOS). Jane has seen a draft and it is very well done. She said the document is complex wide and includes the enforcement and status across the site. She said it is a great public information tool.

Jane announced Kathy Conaway as Ecology’s new enforcement officer. Ecology sent a notice violation to the tank farm contractor and DOE-ORP for an inspection they did on the 242-A Evaporator. The violation had to do with training requirements that did not match with those include in the RCRA permit. Those problems have been corrected and the contractor is rewriting their processes.

Jane provided an update on comment periods. A 45-day comment period is coming up on April 26 concerning modifications to the Hanford Dangerous Wastes permit. Another is a petition for the land disposal restriction requirements for beryllium contaminated materials. Jane said Ecology is still archiving TC&WM EIS comments and they will get them out as soon as possible.

Jane announced recent hires Erika Holmes and Dieter Bohrmann who will be conducting outreach and media for Ecology. Misty Carhart and Dave Mears were also hired to work on environmental topics. Jane announced Ecology will be attending the Make A Splash Festival in Walla Walla to inform the public about Hanford groundwater. They will also be attending the Salmon Summit in May which provides outreach to middle school children.

Jane reminded the group to fill out Ecology’s public involvement survey.

EPA

Dennis said EPA has been in negotiations with the Central Plateau, M-91 Milestone series in particular. EPA has also approved several work plans for the final investigations on the river. The Board and RAP weighed in on the 100 Area and the 300 Area, and are still weighing in on the N Area soon. All the work DOE needs to do to lead up to a ROD is memorialized in these work plans.

Dennis said EPA is still working through the TC&WM EIS to submit their comments.

Dennis said EPA is trying a new tool included on the public involvement schedule. The tool will help show how things do and do not fit together depending on schedules. This living tool came from the Board’s suggestions concerning public involvement strategic planning.

Discussion

Larry asked if the TV presentation Shirley Olinger, DOE-ORP manager, gave on Hanford is available. Steve Pfaff agreed to send that information out.

Dick asked how the waste disposal from the tank retrieval is classified and disposed of. The TC&WM EIS says when a tank is cut up the waste needs to be classified as high level, and these wastes are very similar. Steve said waste from the tank farms is not high level waste but to determine the risk, the equipment needs to be cleaned off. As the tools are extracted from the tanks, they spray, wrap them, and a machine goes inside and scrubs the salt wall screen. Although they are coming out of highly contaminated tanks, the cleansing process lowers the contamination level. This type of waste can go to ERDF and DOE-ORP is working to find safe ways of transporting it. As for the
tank material, the River Protection Project Disposal Facility include in the TC&WM EIS alternatives that could hold the tank parts.

Dick asked about the size of the garnet particles used for tank cutting is and if these particles cause problems at the WTP. Steve said in practice, the garnet mix starts off as 500 microns and is reduced to about 50 microns after the cutting process. Preliminary analysis showed they would not disrupt the waste treatment downstream but they are still awaiting final results.

Mike said a company called Curtiss-Wright Corporation has designed a pump for Savannah River that pumps radioactive sand and he encouraged the agencies to look at Curtis Wright designs. Matt said they have been looking at Curtis Wright designs in pumps for WTP and for tank retrieval.

Norma Jean Germond, Public-at-Large, asked Steve if another power plant was going be built to run WTP. Steve said a new substation was built along with the WTP to supply electricity to all of the new buildings across the 60 acre area. The substation has two independent paths of electricity coming off the Bonneville Power Administration (BPA) lines but that power is not yet being used. When the facilities go online, that is when they will begin pulling power from the new lines. Steve said they will need to assess if this substation will be big enough to meet the needs facility and are looking into using new technologies to supplement.

Mike commented to Jane that the Board provided advice requiring a waste repository and also submitted engineering advice recommending DOE put together a capstone series of “what if” scenarios. An example of this is, if there is not a waste repository, what are the implications?

Mike asked Matt if pumping carbon tetrachloride identified different areas with technetium-99. Matt said the pump system for carbon tetrachloride plume that is located by the plutonium finishing plant does have some technetium-99 in it and they do remove it. The soil vapor extraction process used to extract carbon tetrachloride has not identified technecium-99.

Mike asked Steve if they have conducted a high level conceptual study about future decommissioning and demolition of waste treatment facilities and how this study might affect the design of these facilities. Matt said he does not have an answer to that.

Keith asked Steve if they are dealing with the communication difficulties between the contractor and the subs hired to construct and design WTP. He also commented that there has been a lot of improvement on the infrastructure at ERDF. Ken reiterated that the progress at the site is amazing to see.

Keith asked Matt if anything was happening with TRU waste. Matt said this is still in the planning phase. Ken asked if TRU waste will be shipped to Idaho. Matt said yes and it is tentatively scheduled for mid June.

Doug commented that he is not comfortable with the phrase “shrinking the active footprint” because the agencies are only shrinking the contamination on the surface. Matt agreed but noted that after completing cleanup on some areas, they will want shrink the infrastructure footprint concerning by removing water lines, power lines, and other unneeded infrastructure. Doug added that it is more accurate to say they are shrinking the footprint of soil contamination. Dennis agrees that it is important not to oversell this notion but it is also important to show the public that Hanford is being cleaned up.

Maynard asked if the 200 square miles of the monument and 200 square miles in the River Corridor are redundant. Matt said Maynard is probably right and the numbers were double counted.

Ken asked if there are silos in other areas of the site. Matt said the silos are unique to the K Area.

Ken asked what kinds of concerns the regulators have with the TC&WM EIS that would require a workshop this late in the review process. Dennis said it took a lot of time to get through 6,000 pages so they drafted initial comments, sat down with DOE to share them, and had a discussion about whether or not their observations were accurate. EPA also wanted to ensure the EIS acknowledged ongoing cleanup through the superfund program. This workshop was to help inform their final set of comments.
Ken asked if the EPA has a rating of comments. Dennis said yes there is a rating but he does not know what it is yet. Jane said some of the questions Ecology raised had to do with DOE’s guidance. They also discussed changing pieces of the document that could be confusing to the public.

Laura Hanses, Non-Union, Non-Management Employees (Hanford Work Force), asked where Mission Support Alliance (MSA), the contractor for the Mission Support Contract, was in terms of addressing traffic flow and congestion. Matt said they are doing the study currently and he will share the final analysis once it is complete. Gene Van Liew, Richland Rod & Gun Club (Local Environmental) commented that MSA is increasing the speed limits, implementing roundabouts and removing stop signs to help workers on site which is good for HSEP to be looking at.

Paige asked Matt how hot the traps in the grouting are and if the thermal heat causes grout to hold or not. Matt said it is not hot thermally and he did not know how high radiation levels are. This waste form and the heat given off by it is not an issue in terms of heating the grout.

Paige asked Steve the last time DOE-ORP showed the percentage increase in progress that has been made and percentage of cost overages. Steve said he could bring this information to the next meeting.

Paige said she likes the idea of “shrink the footprint” but encouraged the group to think about language use with the public.

Shelley asked how to approach the issue of the potential disconnect between what cleanup levels should be for the interim ROD and the final RODs for the River Corridor. What happens if the numbers are not met and backfilling begins? Matt said the cleanup on the river is effective and cleaning it to prevent future contamination and the source term levels are conservative. In addition, the regulators must be consulted before backfilling happens. There is some risk but it is minimal. Dennis said the chance of having to go back is not zero but it is small. There is a chance that areas contaminated with chromium will need to be revisited but those are limited. Jane added that there is a disagreement on how the agencies will get to that decision but they will have that answered before the final RODs come out.

Larry asked if the headspace gas sample analysis was still being done in Idaho or if WIPP requirements changed and eliminated this. Matt said yes but the requirements have been reduced.

**Update on the CERCLA Five-Year Review**

Cliff Clark, DOE-RL Environmental Manager and Head of the Five-Year Review process, introduced the review. He said this is the third review under the CERCLA process, which requires cleanup of sites where hazardous materials present a threat to human health or the environment. CERCLA is a federal law and is implemented through the National Contingency Plan (NCP) regulations.

Cliff provided an overview of third CERCLA Five-Year Review. The following are excerpts from Cliff’s presentation.

- **CERCLA, the NCP & Executive Order 12580 direct:**
  - Department of Energy (DOE) is the lead agency responsible for conducting the response actions at the Hanford Site
  - As the lead agency, DOE is required to conduct reviews of the status of the response actions no less frequently than once every five years

- **History**
  - First Five Year Review completed April 2001
    - For the period 1995 – 2000
  - Second Five Year Review completed November 2006
    - For the period 2001 - 2006
  - The Third Five Year Review
    - For the period 2006 – 2010
    - Scheduled to be completed November 2011
• EPA guidance:
  o The purpose of the Five-Year review is “to evaluate the implementation and performance of a remedy in order to determine if the remedy is or will be protective of human health and the environment.”
  o For the purposes of this five-year review “Remedy” includes action decisions from the Engineering Evaluation/Cost Analysis/Action Memorandum processes.
• Primary objectives for Five-Year reviews as stated in EPA Guidance:
  o Ensuring the long-term effectiveness of engineered or institutional measures put in place to protect human health and the environment.
  o Optimizing the effectiveness and implementation of remedy requirements.
  o Minimizing duplicative documentation and paperwork
• DOE Scope of Five-Year Reviews:
  o Evaluate whether a remedy is operational and functional;
  o Evaluate those assumptions critical to the effectiveness of the remedial measures or the protection of human health and the environment…made at the time of the remedial decision to determine, given current information, whether these assumptions are still valid;
  o Determine what corrective measures are required to address any identified deficiencies; and
  o Evaluate whether there are opportunities to optimize the long-term performance of the remedy or reduce life-cycle costs.
• The primary objectives for this DOE review are to:
  o Evaluate the performance of the selected remedy for each CERCLA decision document (Record of Decision or Action Memorandum).
  o Confirm that immediate threats have been addressed and that the remedy will be protective when complete, where a remedial action has not been completed.
  o Confirm whether the selected remedy remains protective where a site is in the Long-Term Management phase.
  o Recommend actions to improve performance when the Five-Year review indicates that the remedy is not performing as designed.
• This review will include evaluation of CERCLA remedial and removal actions completed or being conducted in the:
  o 100 Area National Priority List (NPL) Site
  o 200 Area NPL Site
  o 300 Area NPL Site
  o 1100 Area NPL Site (this was deleted from the National Priorities list but still contains contamination and needs to be evaluated)
• Approach:
  o The third five-year review will meet the scope and objectives of DOE and EPA guidance.
  o The second five-year review report will be the foundation on which this review is built. It will be updated to reflect decisions made and activities initiated, continued, and/or completed since 2006.

Cliff said they encourage comments from the public on the Five-Year Reviews.

Dennis said recommendations in the review are not legally binding. The EPA needs to concur with the findings in the report before it is finalized. He said all actions items included in the last Five-Year Review have all been completed except one.

Cliff said the review, comments and responses, and letter are available on the Hanford website.

Discussion

Ken said they received a lot of letters concerned with ways to pump and treat contamination to a certain concentration. Is there a treatment like this in place and has its effectiveness been analyzed? Cliff said they have not fully analyzed the effectiveness.
Doug asked if an analysis has been done to determine cost effective alternatives. Cliff said the remedies that have been selected are the appropriate remedies. Cliff said the purpose of the Five-Year Review is not to select remedies but to consider if a remedy is right and effective.

Doug said he is concerned with this in terms of stewardship because there are no mechanisms to go back and reassess the mechanisms that were originally chosen. Cliff said when the Five-Year Review is done they look to see if there are any changes in regulations or technologies or requirement that address the specific contaminants, and if so, the remedies are reassessed.

Doug asked if the resources exist to have a truly robust review process. Dennis said it is in the best interest of the responsible parties to assess new remedies. He said the incentives to do this are built in to the process. Keith asked what the agencies will do if the caps fail; does the process recommend how to fix the problem? Dennis said the review would identify that and send those finding to the projects and decision makers to find a better remedy. This process has is indicative of the strides made to Chromium in the 100 Areas.

Dick and John agreed that as long as a remedy is proven to work, there is no need to change it.

Gerry asked how public comment on the review was solicited and if a notification was sent to the Hanford Cleanup list. Cliff said comments could be submitted online. Paula said a listserv notice was sent out and was announced at every stakeholder meeting since the summer.

Gerry suggested charting comments submitted for the Five-Year Review, having them publicly available, and showing the public how DOE plans to address them in the next review.

Gerry asked if DOE has solicited formal consultation from the National Marine Fisheries Service (NMFS) on remedies selected. Cliff said they have worked with the National Resource Council but he was not aware of anyone meeting with the NMFS for consultation on this review.

Paige asked if the agencies are required to act on the recommendations submitted and if data is available to back up DOE’s decision. DOE generates a list of action items available online in a national database. The goal is to complete those within the five year period. Dennis said the agencies could try harder to be more transparent on the decisions made.

Paige said the mailer sent out for the Five-Year Review was not effective. Cliff and Paula said they prepared a fact sheet, received edits from EPA and Ecology, and sent it out 6-8 weeks ago using the TPA mailing list. Paige said the agencies need to do better in communicating with the public.

Mecal asked if CERCLA takes into account data collected by non-agencies. Cliff answered yes; however, the data must follow the rules stated under CERCLA, and be verifiable and validated.

Doug asked what DOE-RL is required to do under CERCLA and where the Board can find the lifecycle cost methodology. Dennis said Tim Brincefield, EPA, can provide a presentation at a RAP meeting on cost analyses. He said it is difficult to estimate lifecycle costs because the work load is not getting smaller. Cliff added that lifecycle costs are also difficult because there are no projects that have gone through a complete lifecycle.

Pam applauded Dennis for the charting major issues for the Board to look at in 2010 and she encouraged the agencies to suggest topics they would like to see addressed.

**Draft TPA Change Packages**

Matt, Dennis and John provided an update on negotiations for completing the cleanup on the Central Plateau. The following are excerpts from their presentation.

- **Status of TPA negotiations**
  - The agencies expect to complete negotiations by mid-April 2010, followed by public comment periods.
  - The proposed changes involve:
- Cleanup of the Central Plateau waste sites, facilities and groundwater.
- Legal agreement and action plan changes to coordinate CERCLA and RCRA corrective action processes for alternative evaluation and decision-making.
- Action plan change to clarify responsibility for preparation of draft RODs and proposed corrective action decisions
- Management of mixed transuranic waste and mixed low-level waste.
  - Agencies signed an Agreement in Principle to address contamination from single-shell tanks and coordinate with other deep vadose zone investigations and remedial actions.

- Summary of Central Plateau cleanup milestones
  - Central Plateau waste sites, facilities and groundwater
    - Revise decision architecture to focus on geographic area-based operable units.
    - Add milestones for deep vadose zone treatment technology and decisions.
    - Coordinate canyon facilities and waste sites.
    - Update and incorporate the facility disposition process.
    - Coordinate RCRA/CERCLA, including combined decision documents: [corrective action decision (CAD)–ROD (ROD)].
    - Address preparation of draft RODs.

- Incorporate milestones for deep vadose zone treatment technology and decisions
  - The agencies agree that focus on deep vadose zone is a high priority because of potential impact to groundwater.
  - Remedies not readily available off the shelf.
  - Need a holistic and coordinated approach to developing and implementing technologies for addressing deep vadose zone.
  - Remedial investigation/feasibility study (RI/FS) work plan for deep vadose zone to include technology screening and recommendations for additional pilot and field testing; feasibility study and proposed plan to follow.
  - New M-15 series milestones added to continue uranium and technetium-99 remedy development.
  - DOE and its contractors are establishing a project team to focus on development of deep vadose zone remedies.

- Coordination of canyons/waste sites and facility disposition process
  - Milestones added to M-16 series to include U Plant canyon demolition and barrier construction.
  - New M-85 milestone series for RI/FS process for canyon facilities associated waste sites, and other Central Plateau facilities.
  - Created new TPA Appendix J to include an initial list of inactive facilities in the Central Plateau that will require a CERCLA response action.
  - Revision to TPA Action Plan Section 8 “Facility Disposition Process” that applies the CERCLA response action process to final disposition of the facilities.

- RCRA/CERCLA coordination and preparation of draft RODs
  - Revise legal agreement and action plan to coordinate RCRA corrective action and CERCLA decisions for some past practice waste sites.
  - Propose a RCRA permit modification to support the proposed CAD and ROD process changes; public comment period to run concurrent with the comment period on the draft TPA change packages.
  - Add new M-37 milestone series to coordinate RCRA treatment, storage and disposal (TSD) unit closure plans and completion of closure with CERCLA response action schedules.
  - Revise Action Plan to clarify roles for preparation of draft Records of Decision and proposed Corrective Action Decisions.

- Agreement in Principle
  - Develop TPA revisions to address contamination from single-shell tanks (DOE preference is to use CERCLA) and to coordinate with other deep vadose zone investigations and remedial actions.
  - Engage in discussion on remediation of environmental media contamination.
  - Enter into discussion when consent decree is entered in to court.
  - Conclude discussions within 60 days.
  - Revise relevant sections of TPA and/or action plan to reflect outcome of discussion.
  - Offer consultation with the Tribal Nations and provide briefings to the State of Oregon, the HAB, and other stakeholders, as appropriate.
• Summary of proposed M-091 changes
  o Retrievably-stored TRU mixed and retrievably-stored mixed low-level waste
    • Adjust existing M-091 milestones to consider ARRA funding and overall Hanford priorities.
    • Streamline and simplify change package content in response to 2009 public comments.
      • Replace “to be determined” dates.
      • Change embedded milestones to stand-alone milestones.
      • Simplify language.
      • Add milestone to address “no path forward” waste.
    • Establish enforceable milestones for retrieval, certification and shipment of TRU mixed waste in FY 2011 (aligned with ARRA funding), 2015 and 2016 (for certification of TRU mixed waste).
    • Establish enforceable milestones for the certification and shipment of TRU mixed waste off-site including large container contact-handled TRU mixed waste.
    • Identify target milestones for FYs 2012-2014, consistent with higher Site priorities for retrieval and treatment of TRU mixed waste.
    • Modify milestone structure to complete the conceptual and definitive design for disposition of remote-handled TRU mixed waste and large container TRU mixed waste; including a milestone to establish treatment and shipment of waste generated.

• Next steps
  o TPA agencies have signed a tentative agreement for Central Plateau cleanup.
  o The agencies are finalizing a tentative agreement for management of mixed transuranic and mixed low-level waste.
  o Draft Central Plateau and M-091 change packages are expected to be available for a 45-day public comment period April 26, 2010.
  o Based on the level of stakeholder interest, the agencies will consider holding public meetings.
  o The agencies plan to develop comment and response documents and finalize the draft change packages late summer 2010.

• Acquisition of capabilities for processing TRU mixed waste
  o This milestone is based on acquisition of robust remote-handled processing capabilities.
    • Alternative approaches are currently under investigation; however, limited capability in the commercial sector is available.
    • Annual progress is reported in the Hanford Site TRU mixed and mixed low-level project management plan, M-091-03.
  o This milestone includes:
    • Complete the conceptual design for remote-handled/contact-handled large package transuranic mixed capability by September 30, 2016.
    • Complete the definitive design for remote-handled/contact-handled large package transuranic mixed capability by September 30, 2018.
  o Establish treatment and shipment milestones after completion of design under M-091-44 (contact-handled large container and remote-handled TRU mixed waste).

• Retrieval of contact-handled retrievably stored waste
  o Annual milestones established for retrieval of suspect retrievably stored waste.
  o Enforceable milestones in FYs 2011 and 2015.
  o Target milestones in FYs 2012, 2013, and 2014.
  o Milestone completion date of September 30, 2016.

• Retrieval of remote-handled retrievably stored waste
  o Completion of retrieval of non-caisson remote-handled retrievably stored waste by September 30, 2016.
  o Completion date for retrieval of 200 Area caisson waste by December 30, 2018.
    • No change to this milestone

• Treatment of contact-handled small container mixed low-level waste
  o Completion date for treatment of contact-handled, small container mixed low-level waste in storage and from retrieval is September 31, 2017.
o Establishes new target milestone completion date of September 30, 2011 to include in the Project Management Plan the plans for treatment of “no path forward” and Toxic Substances Control Act waste.

o Consistent with RCRA, perform treatment within one year of generation for newly generated wastes (after June 30, 2009) to prevent a buildup of legacy waste in storage.

- Treatment of contact-handled large container and remote-handled mixed low-level waste
  o Completion date for treatment of contact-handled large container and remote-handled mixed low-level waste in storage and from retrieval is September 30, 2017.
  o Established new target date to treat waste in storage as of June 30, 2009 by September 30, 2011.

- Certification/shipment of contact-handled small container TRU mixed waste
  o Created a new milestone series with annual milestones established for treatment/certification of small container TRU mixed waste.
  o Enforceable milestones to produce certifiable TRU mixed waste in FY 2011.
    ▪ Consistent with ARRA funding
  o Complete shipment of 1000m³ of TRU mixed waste for off-site disposal by September 30, 2011.
    ▪ Linked to completion of retrieval
  o Complete shipment of contact-handled small container TRU mixed waste for off-site disposal by September 30, 2018.

- Treatment of contact-handled large container and remote-handled TRU mixed waste
  o Requires annual treatment milestones for contact-handled large package and remote-handled TRU mixed waste.
    ▪ Treat/certify 300 cubic meters by September 30, 2016, 2017 and 2018, respectively.
    ▪ Propose annual treatment and shipment milestones for completion of all waste on September 30, 2018.
      ▪ Following completion of definitive design, need to complete disposition of waste from this milestone (from M-091-01).
    ▪ Complete treatment and shipment by December 31, 2035

Discussion

Maynard asked if a discussion has taken place to set a proposed timeline to address the deep vadose zone issue. Matt said yes, there are milestones included in the draft change package to do treatability tests for the deep vadose zone and identify how to remediate it by 2015.

Ken commented that the Board supports an aggressive waste transport schedule but urged the agencies to note that they will not be able to transport as vigorously in the winter and should build their milestones accordingly.

Ken asked what “gives and gets” were negotiated in the TPA change package. Dennis said EPA was able to formalize the buildings into the draft TPA which enables more time for deep vadose zone testing. EPA also received formal firm commitments from DOE to develop the technology that will allow EPA to reach the interim milestones. John said they will have more milestones directly relating deep vadose zone. Matt said the agencies are getting a more comprehensive approach to the central plateau cleanup from this change package and a greater emphasis on deep vadose zone.

John said they will focus more on past test burial grounds and more milestones will likely relate to deep vadose zone contamination.

Matt said the public and agencies have had productive conversations to develop a comprehensive approach for dealing with deep vadose zone contamination; these are reflected in the change package.

Keith asked if September 30, 2015 is when DOE will start planning the Purex RI/FS work plan or if it is when the work plan will be completed. Dennis said planning will start in 2015.
Pam asked about the relationship between who writes the ROD and who makes the final decision. Dennis said EPA will still have a decision making role but the change package gives the lead federal agency the ability to write the first draft of the ROD instead of the regulatory agencies.

Pam asked if regulators have the same control in deciding upon cleanup remedies. Dennis said yes, those roles will not change.

Pam said some of the dates included in the RI/FS approach will push the WIPP deadline. Matt corrected that there is no WIPP deadline for transuranic waste.

Gerry asked why the agencies did not respond to public comments from the TPA change package in the fall. He said it is inappropriate for the agencies to put out a change package before comments on previous milestones are responded to. Matt said a thorough comment response document was drafted. Dennis said many of the comments submitted during the consent decree comment period have not been entered or responded to.

Mecal asked about the status of TPA litigation. John said Washington State and DOE are still in discussions.

Mecal asked what triggers TPA changes. Steve said the agencies often enter into change package negotiations when DOE notifies the regulators that it will not meet a milestone.

Dick asked when the public will be able to review proposed changes. He commented that sometimes investigations are complete before the public has a chance to review. Dennis said the agencies solicit public input during the proposed plan stage.

John said Washington State does not have the authority to require DOE to ship TRU waste off site, but they can make DOE treat it. A deal was negotiated that the State would ship the waste so that it does not remain on site. The State does not have enough information to pick shipping dates for TRU waste or to estimate the lifecycle costs of managing the waste.

Mike suggested challenging the contract and providing contractor incentives to increase the rate of cleanup.

Susan Leckband asked how many RODs will be created. Dennis said there will be approximately 11 RODs for soil sites and groundwater.

Shelley asked what the agencies plan to do with remote handled waste when the window for shipping to WIPP closes in 2030. Matt said DOE-RL discussed shipments to WIPP with the WIPP management staff, and they are comfortable with the TPA milestones.

**Issue manager training**

Susan Hayman introduced the agenda item about issue manager training. She said the Board has had a busy year and encouraged members to refer to the newly updated process manual for issue manager responsibilities.

Cathy recognized members who have or are currently serving as issue manager. She said the Board relies heavily on the expertise of issue managers. Cathy said finding participation has been a problem and encouraged members to volunteer.

Susan Hayman highlighted responsibilities and tips for issues managers:

- You do not have to be a technical expert
- Developing relationships with the TPA agency liaisons is important
- The TPA agency liaisons are Madeleine Brown, Ecology, Emy Laija, EPA, Lori Gamache, DOE-ORP, and Paula Call, DOE-RL
- The EnvroIssues facilitators are your friends and can help you be a successful issue manager
Susan Hayman had posted flipcharts with prompting questions about being an issue manager for Board members to write on during breaks and before and after the meeting on the first day. Cathy read the prompting questions and answers posted by Board members.

1. Why do you volunteer as an issue manager?
   - Intensely cared about the issue
   - Looked like an easy issue, easy way to support committee work
   - Passion
   - You have knowledge of the issue
   - Glutton for punishment
   - Asked a few questions...became the issue manager
   - Raised the concern and possible solutions...which is defacto volunteering to be issue manager
   - Advice creation is what we are here for
   - Concrete action/process for change
   - Participation = education
   - Poor judge of my time
   - Interested in issue
   - Sense of responsibility
   - Fear we might lose the topic

2. What are the lessons learned to pass onto new issue managers?
   - Make sure your fellow issue managers have time to help
   - Two issue managers are ideal vs. four or five (which is too many)
   - Make sure you have the time
   - Pre-work is critical
   - Protocols for talking to agency folks
   - Talk on phone – better than email reliance for feedback
   - Issue managers keep committee chair informed
   - Don’t forget to include agencies
   - More dialogue between issue managers and agency project managers (with DOE – Paula call on Laura present)
   - Too many issues, too few issue managers, too little time
   - Start your activity with a project plan – e.g. a schedule
   - Organize related points
   - Topic sentences
   - Short sentences
   - Focus on central purpose
   - Be wary of death by aggregation
   - Fewest words possible
   - Don’t take it personally when the dialogue gets expanded and you issues get subsumed in a larger framework of advice

3. If you have never been an issue manager, why not?
   - Don’t know about it/them
   - Distance (live in Portland)
   - Unclear how it works
   - Intimidating

4. Agencies: How can the issues managers work more effectively with you?
   - Remember to include regulators too!
   - Work through HAB points of contact
   - Identify how the issue relates to HAB priorities
Tell us what you need from us being succinct with what you need
Helpful to keep agencies informed as issues come to advice

The group added suggestions for helping issues managers be more successful:
- Perseverance
- Keep your ego in check
- Do not take on more than you can handle
- Prioritization of topics at committee level
- Issues are sometimes technical in nature
- Weaknesses may be a strength; collaborate with others on advice
- Keep in mind the audience; public and/or agencies
- Keep in mind historical Board advice and what has been done in the past
- List point-of-contact information, make it easily accessible
- Internships program to increase younger participation
- Rely on Board expertise in issue development
- Keep distinct job role vs. issue manager role
  - Muddiness - is it ok to be an issue manager when you are heavily invested in the issue?
- Issue of accountability
  - Advice appropriateness (advice to contractors)
  - Examine issues separately (a lot of gray area)
- Do not go on site “fishing” for issues
- Check in with Susan Leckband if you are unsure of issue appropriateness
- Find a path for the issue to reach Board consensus; recognize some issues will not get through Board
- Shadow an issue manager to understand the process
- Participation is influenced by availability of time and funding
- Use of technology to involve remote members (ex. GoToMeeting)
- Understand issue/topic request to project staff and how does it relate to policy
- Be flexible with your deadlines

Pam said can feel daunting for new board members to respond to complex documents if you are not a scientist or an engineer.

Susan Hayman said RAP had developed an issue-tracking table to provide issues managers with more direction.
Susan suggested other committees may wish to develop a similar document.

Doug said being less knowledgeable of a subject can sometimes be beneficial because it helps keep the Board out of the technical details.

Keith and Cathy reiterated using the TPA agency liaisons because they likely can help solve problems quicker.

Bob Suyama reminded the issues managers to keep the advice at a policy level and noted that using the Board and committee to work through advice makes it better.

Tom Carpenter, Hanford Challenge, (Hanford Work Force), asked if there is ever a time when it is not appropriate to be an issue manager; such as when there is a conflict of interest. Dennis said if it does not feel right then do not take on the issue manager role. Doug asked Dennis for an example. Dennis said working for a Site contractor and serving as an issue manager on a topic that would directly impact the contractor might result in bias. Tom added that he works on site with the workers on health and safety issues and he would be uncomfortable serving as an issue manager and giving advice on some of the related topics.

Shelley said the Board’s role is not to be an advocate for the people working on site. Mike said most of the advice affects the contractors because they work on the site.
Harold said the Board needs to engage in more philosophical topics that do not always make it to the agencies. He added that advice needs to be well written and useful.

Mecal asked what the time commitment is for issue managers and if work can be accomplished remotely. Susan Leckband said it depends on the issue and it can be done remotely but it is very difficult. Susan encouraged people with questions to talk to the TPA agency liaisons.

Dick noted that just because an issue is not on the agencies’ priority lists does not mean it should not be brought up. He encouraged members to take on less high profile issues because they might contribute to the success of the project.

Keith said Board members are vital resources to issue managers, even if they are not serving as an issue manager.

Liz said resources are a critical component to participation because if a Board member’s time is funded by their organization, they are more likely to participate.

Agency perspective

Steve Pfaff encouraged the Board to use video conferencing, webinars and other similar tools to communicate remotely with people. Steve said the HAB serves as a type of oversight board and he appreciates the work that is done outside of the Board.

Steve encouraged members to share ways the agencies can improve the issue manager process. Paula added that before presenting to a committee, it would be helpful if the issue manager provided direction on what they would like to hear in order to appropriately address their concerns.

Board business

May leadership retreat

Susan Hayman announced that the Board leadership retreat is May 3-5 in Boardman, Oregon. She is working with the agencies to ensure topics of concern are on the agenda. Board and committee leaders have until Thursday to submit topic additions.

Annual report

Susan Hayman thanked the Board and the agency representatives who participated in helping EnvirolIssues produce the 2009 HAB Annual Report. Copies were available at the Board meeting. Those interested in additional copies should contact Tammie Gilley, EnvirolIssues, at 509-942-1906.

2009 Board evaluation

Susan Hayman reported back on the 2009 Board self-evaluation. She said EnvirolIssues received fewer responses than desired, and reminded the Board that this survey provides important feedback for all members.

Cathy presented the results of the self-evaluation.

- Committee work (percentage strongly agree/agree)
  - Worked effectively (95%)
  - Managed cross-cutting issues well (85%)
  - Used work plans effectively (85%)
  - Enough time during meetings (60%)
  - Effective committee leadership (95%)
  - Understood issue manager responsibilities (55%)
  - Useful agency presentations (65%)
- Board work (percentage strongly agree/agree)
  - Adequate information (86%)
Time to prepare (65%)  
Time at the meetings (57%)  
Reflected Board and agency priorities (90%)  
Provided meaningful advice (90%)  
Accessible to the public (90%)  
Represented their constituents (55%)  
Helpful meeting format (80%)  
Effective Board leadership (81%)

- **Board support**
  - DOE, EPA and Ecology actively supported Board and committee work (70-80%)
  - EnvirosIssues provided good process support at Board and committee meetings, and in-between meetings (90-96%)
  - Meeting summaries were useful, accurate and timely (75-80%)
  - Most respondents found it easy to navigate the Board’s website (62%)
  - Website contained information needed (58%)

- **Board work - top priorities**
  - Twenty-three separate topics
  - “New Year’s resolutions”
    - Get more involved
    - Use the GoToMeeting function
    - Pay more attention to the details in the emails received from HAB
    - Clear the current backlog of advice to which the agencies have not responded
    - Encourage engaging formats for presentations and topics
    - Increase active committee participation among board members

- **Lessons learned**
  - The Board did a great deal of intensive and valuable work
  - The Board does not meet expectations for open public access - email notifications, website materials
  - Board leadership must remain neutral
  - Sounding boards provide some of the best opinion exchanges produced by the Board
  - The EIC is functioning particularly well
  - The HAB needs youth
  - A continuing goal should be transparency and real integration of the labs with "on the ground" cleanup needs

**Discussion**

Pam said she finds the HAB Web site challenging and suggested a HAB Web site tutorial. She asked if progress has been made on the DOE Web site keyword search function. Tammie said DOE is still working on this.

Gerry asked if meeting materials will remain up on the website and will they be searchable. Susan Hayman said yes, they are working on this to increase efficiency of material sharing. Gerry asked if the Web site belongs to DOE. Susan Hayman said yes. Paula said EnvirosIssues sends electronic versions of Board and committee meeting presentations to DOE for posting to the website.

Mike asked DOE to think about providing internship opportunities.

Mecal suggested using social media. Susan Hayman said PIC is talking about social media and is committed to using it. Paula and Madeleine added that DOE and Ecology will also be using it soon. Bob Parks, City of Kennewick (Local Government) cautioned using social media because anything that is posted becomes public record, needs to be maintained, and it is difficult to track.

**Ground rules review**

Susan Hayman reviewed the ground rules with the Board and added that members observed difficulty in maintaining these rules yesterday Shelley asked the facilitators to remind the Board to silence their cell phones.
Liz asked the facilitators to call for a break when the group becomes restless.

*June Board meeting topics*

Possible topics for the June Board meeting include:
- Hanford Site tour
- Beryllium briefing
- Leadership retreat outcomes
- Lifecycle cost and schedule report
- Update on the CERCLA scoping
- Unfinished advice on unrestricted surface use/unrestricted use
- Video of the mixing and testing system

Keith suggested Susan Leckband write DOE-HQ and urge them to complete new Board member appointments so new members can participate.

Susan Leckband thanked Board members for their participation and adjourned the meeting.
### Attendees

#### HAB MEMBERS AND ALTERNATES

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<th>HAB MEMBERS AND ALTERNATES</th>
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<td>Tom Carpenter, Member</td>
<td>Maynard Plahuta, Member</td>
<td>Steve Hudson, Alternate</td>
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<td>Norma Jean Germond, Member</td>
<td>Gerald Pollet, Member</td>
<td>Mike Korenko, Alternate</td>
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<td>Harold Heacock, Member</td>
<td>Keith Smith, Member</td>
<td>Larry Lockrem, Alternate</td>
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<td>Becky Holland, Member</td>
<td>Bob Suyama, Member</td>
<td>Liz Mattson, Alternate</td>
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<td>Rick Jansons, Member</td>
<td>Margery Swint, Member</td>
<td>Debra McBaugh, Alternate</td>
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<td>Paige Knight, Member</td>
<td>Gene Van Liew, Member</td>
<td>Nancy Murray, Alternate</td>
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<td>Pam Larsen, Member</td>
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<td>Susan Leckband, Member</td>
<td>Shelley Cimon, Alternate</td>
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<td>Doug Mercer, Member</td>
<td>Gerry Dagle, Alternate</td>
<td>John Stanfill, Alternate</td>
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<td>Ken Niles, Member</td>
<td>Laura Hanses, Alternate</td>
<td>Betty Tabbutt, Alternate</td>
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<td>Bob Parks, Member</td>
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#### AGENCY, CONTRACTOR, AND SUPPORT STAFF

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<td>Paula Call, DOE-RL</td>
<td>Madeleine Brown, Ecology</td>
<td>Dale McKenney, CHPRC</td>
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<td>Matt McCormick, DOE-RL</td>
<td>Jane Hedges, Ecology</td>
<td>Mark Jewett, CHPRC</td>
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<td>John Price, Ecology</td>
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<td>Dru Butler, MSA</td>
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<td>Lori Gamache, DOE-ORP</td>
<td>Dennis Faulk, EPA</td>
<td>Chelsey Funis, EnviroIssues</td>
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<td>Steve Pfaff, DOE-ORP</td>
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<td>Susan Hayman, EnviroIssues</td>
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<td>Cathy McCague, EnviroIssues</td>
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#### MEMBERS OF THE PUBLIC

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<td>Les Davenport</td>
<td>Matt Johnson, CTUIR</td>
<td>Alex Sage</td>
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<td>Sabine Hilding, Hanford Watch</td>
<td>Doug Riggs, Hanford Information Watch</td>
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