FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
PUBLIC INVOLVEMENT AND COMMUNICATION COMMITTEE

April 12, 2016
Richland, WA

Topics in this Meeting Summary

Opening 1

Tri-Party Agreement Public Involvement 2

Waste Treatment and Immobilization Plant and Communications Approach White Paper 4

100 D/H Proposed Plan 7

HAB Report Summary 10

Public Involvement Principles 10

Hanford Advisory Board Member Self –Assessments 10

Committee Business 12

Attachments 13

Attendees 14

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

Opening

Liz Mattson, Public Involvement and Communications Committee (PIC) chair, welcomed the committee and introductions were made. Committee members adopted the February 2016 PIC meeting summary.

Announcements

Steve White, Columbia Riverkeeper, announced that he would retire from the Hanford Advisory Board (HAB or Board) following the April 2016 meetings. Steve noted that he has served on the Board since 1994. PIC members thanked Steve for his service and his many contributions to the Board's work.

Tri-Party Agreement Public Involvement

Dieter Bohrmann, North Wind – supporting the U.S. Department of Energy—Office of River Protection (DOE-ORP), opened the Tri-Party Agreement (TPA) Quarterly Public Involvement Planning meeting segment.

Dieter said that the TPA Annual Public Involvement Survey for 2016 received a record 183 responses. He noted that agencies would provide a summary of the survey results at the next TPA Public Involvement Planning Meeting in June 2016.

Tri-Party Agreement Public Involvement Calendar [1]

Dieter provided attendees with the TPA public involvement calendar, updated for April 2016. Dieter highlighted ongoing opportunities for public input, including:

- An initial comment period for proposed Class Three permit modifications to add units (Low-Level Burial Ground Trenches 31-34-94, T Plant Complex, Central Waste Complex, and the Waste Receiving and Processing Facility) to the state's Hanford Dangerous Waste Permit (comment period extended until May 13, 2016)
- A second comment period for proposed Class Three permit modifications to upgrade ventilation systems and to grout some hot cells at the Waste Encapsulation and Storage Facility
- A public feedback period for the 2016 Hanford Lifecycle Scope, Schedule, and Cost Report
- A public comment period for the Fiscal Year 2018 Hanford budget priorities

Dieter encouraged Board members to also review comment periods in the TPA Public holding bin. He recognized that the provided dates for many holding bin items would likely change, but he stated that Board members could review this list of upcoming topics to outline opportunities for future Board input. Dieter believed that the next State of the Hanford Site meetings would occur sometime in early calendar year 2017.

Draft Fact Sheet on Permit Changes Proposed for Hanford Dangerous Waste Management Area [2]

Kris Holmes, U.S. Department of Energy—Richland Operations (DOE-RL), provided PIC members with a draft fact sheet for an upcoming public comment period concerning the clean closure of the 276-BA Organic Storage Area. Kris welcomed feedback from committee members regarding the fact sheet's format and content.

Attachment 1: Tri-Party Agreement Agencies Public Involvement Calendar – Fiscal Year 2016 (April 2016)
Attachment 2: Draft Fact Sheet on Permit Changes Proposed for Hanford Dangerous Waste Management Area

Committee Questions and Responses

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

Q. How does the TPA Public Involvement Calendar correlate with the HAB work plan? Are comment periods scheduled with the Board's meeting schedule in mind?

> *R. [DOE-ORP] The TPA Public Involvement Calendar and the HAB work plan do not necessarily correlate with one another on an annual basis. Board members and TPA agency representatives coordinate throughout the year during HAB committee meetings and calls to plan for upcoming comment periods as they are scheduled.*

C. It would be helpful if the TPA Public Involvement Calendar included links to follow-up documents, such as Records of Decisions (ROD) and public comment responses, for recently expired public input opportunities. This would help the public track their feedback and learn how it influenced Hanford Site cleanup.

C. [DOE-ORP] The TPA Public Involvement Calendar was not initially conceptualized as a HAB meeting product; the upcoming HAB leadership workshop will provide HAB leadership and agency liaisons with the opportunity to examine the format of the calendar and potentially incorporate changes that will make it more approachable to the public.

Draft Fact Sheet on Permit Changes Proposed for Hanford Dangerous Waste Management Area

Q. Regarding the closure of the 276-BA Organic Storage Area, has there been soil sampling conducted around and underneath the secondary containment structure? The fact sheet does not make this point clear; therefore, it will be difficult for the public to know whether or not three feet is the appropriate remediation depth. General Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remediation goes to a depth of 15 feet, and the draft fact sheet does not make it clear as to why the three-foot remediation depth was chosen prior to sampling being conducted.

> *R. [DOE-RL] There will be sampling around the concrete joints prior to remediation and closure. Further information will need to be gathered regarding prior sampling efforts, and that information, if it exists, could be incorporated into the final fact sheet to provide additional context for the remediation strategy.*

C. For the draft 276-BA Organic Storage Area fact sheet, it is important to include a paragraph that reminds the public why they should care about the unit's closure. The title of the draft document makes it sound like the closure will affect the single "Hanford dangerous waste management area" when, in reality, 276-BA is one of thousands of waste management areas at the Hanford Site.

C. A map showing where the 276-BA Organic Storage Area is within the Hanford Site would help to provide additional context, and it would be useful to the public.

C. It is important to add a list of chemicals of concerns to the fact sheet. This list of chemicals should also include potential dangers associated with each one of the noted contaminants (e.g. tributyl phosphate is potentially explosive).

Q. [Ecology] Could DOE-RL potentially incorporate shortened website URLs into fact sheets to make them more accessible?

> *R. [DOE-RL] DOE-RL worries that if shortened URLs are incorporated but then become broken, it would be more difficult for people to search for relevant information.*

C. [DOE-ORP] All closures on the Hanford Site are automatically categorized as a Class Three permit modification. Class Three modifications require two comment periods—an initial 60-day period held by the permittee, U.S. Department of Energy (DOE), and a follow-up, 45-day comment period held by the agency issuing the permit.

> *R. Determining which agency is in charge of operating a comment period can be very confusing. Knowing the lead agency is important when requesting an extension to the comment period. Future fact sheets could work to call out primary contacts more effectively.*

Q. The permit modification levels are challenging for the public to understand (e.g. the differences between a Class One modification and a Class Three modification). Since there is no easy way around the jargon associated with the different levels of permit modifications, could this and future fact sheets incorporate a header that very briefly frames each class of permit modification and then highlights which class of modification the comment period falls within?

> *R. [DOE-ORP] The agencies will look into the possibility of a format change for the fact sheet layout.*

PIC members thanked TPA agency liaisons for the opportunity to review and comment on the TPA public involvement products. TPA representatives recorded committee feedback and noted that they would take it into account while revising the documents.

Waste Treatment and Immobilization Plant and Communications Approach White Paper

Liz Mattson provided PIC members with background on the Waste Treatment and Immobilization Plant (WTP) communications approach that DOE-ORP requested from the Board in late 2014. Liz noted that the Tank Waste Committee (TWC) and the PIC had been jointly working on the document [3], and she said that the white paper would be introduced to the Board for initial review and discussion at the next day's Board meeting. Liz encouraged members to identify potential updates prior to discussion at the June 2016 HAB meeting, when Board members would be asked to finalize the WTP communications approach.

Attachment 3: Waste Treatment and Immobilization Plant Communications Approach (Version 1, Revision Date 3/29/2016)

Bob Suyama, TWC chair and issue manager, provided PIC members with an overview of the communications approach layout. He highlighted that the document's framing questions were included as bullets on the first page, and he noted that the HAB response to these framing questions were included within the "Summary" beginning on page one and the "Waste Treatment and Immobilization Plant Tools and Techniques Table" beginning on page three. Bob said that the remaining information beginning on page six of the document was background detail that reinforced the conclusions issue managers incorporated into the table.

Agency perspective

Sharon Braswell, North Wind – supporting DOE-ORP, provided a brief history of the WTP communications approach purpose and goals. Sharon noted that the communications approach was initially requested by Bill Hamel, DOE-ORP, as a way to better understand how to best communicate the complex information associated with WTP construction (especially the High-Level Waste facility and Direct Feed Low-Activity Waste) to a variety of audiences. Sharon recognized that Board members had put a lot of work into transforming this broad request into something manageable and targeted.

Committee Questions and Responses

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

Q. The white paper in its current form seems to incorporate a lot of information. Should the Board work to condense this information into a less lengthy product? What should Board members do if they disagree with some of the information included within the white paper?

> *R. A shorter white paper is not necessarily better, as a strength of the white paper format is its ability to contain more detail and background. DOE-ORP requested a wealth of information and provided feedback that the detail was helpful to their needs.*
>
> *R. As the communications approach is a white paper and not HAB advice, it represents a compilation of suggestions from a variety of Board members—not a list of ideas that are wholly agreed upon by all Board members. The communications approach itself could state this more clearly so that there is a lower possibility for confusion as the HAB works to approve the communications approach at the June 2016 Board meeting.*

C. This is a lengthy document, and the Board should not view this as immutable following Board approval. For example, if suggestions included within the communications approach do not prove to be effective, the Board could revisit the document at future committee and Board meetings.

Q. What do issue managers see as the intent of this document? Is it highlighting strategies for addressing the concerns of various audiences?

> *R. The communications approach document will hopefully serve as a basis for DOE-ORP's own WTP communication plan. This document is the Board providing considerations to DOE-ORP as the agency plans to discuss the facility with different members of the public.*

Q. There has never been a public input opportunity on DOE's vitrification strategy for the treatment of tank wastes. There are no public decision points to incorporate into the plan, because there is no official public comment period planned. There are alternatives to vitrification that DOE is not considering, and there is a need for additional double-shell tank storage space as well. Currently, the communications approach does not incorporate these ideas.

> *R. If the Board would like to weigh-in on how DOE should modify their decision-making process for waste treatment, the WTP communications approach is not the product to do it in. As is, the communications approach provides additional HAB perspective so that DOE-ORP communications may be most appropriately targeted to address the needs of various audiences. If there are suggestions or strong disagreements that emerge as Board members discuss this document, the TWC may wish to explore those ideas further as potential HAB advice.*

C. A piece that is still missing from the communications approach is a paragraph that tells DOE-ORP how the communications approach could best be used. The Board conceptualized this approach as additional information to inform DOE-ORP's own communications plan. If DOE-ORP plans to use the strategies highlighted in the communications approach and win broad public favor for the WTP and the strategy of vitrifying tank wastes, their needs will not be met. The DOE-ORP communication plan should work to encourage an ongoing relationship between DOE-ORP, the HAB, and the public.

C. [EPA] The Board could make some relatively minor changes to this document that would allow it to be more effective. Incorporating a paragraph that notes potential alternative treatment strategies is one way to enhance the document with the Board's perspectives.

> *R. The WTP communication approach is not looking at alternatives, it is applying DOE-ORP's current path forward to future communications. The document does not provide broad-approval from the HAB, it is just the HAB providing communication suggestions to DOE-ORP.*

> *R. [EPA] The white paper could include a paragraph within the communications approach noting this point and reflecting the Board's history with the WTP and tank waste treatment strategies.*

C. Moving the table to the end of the document would provide additional context and better emphasize the purpose of the communications approach. In addition, the table could be enhanced with an "Intent of Communication" column that would highlight DOE-ORP's primary purpose for communicating (e.g. education, gathering input, building trust, etc.).

C. The table is also missing several key audiences. Some audiences (e.g. congressional staff) were removed from earlier drafts; however, the latest version may provide an opportunity to re-insert these groups. Specific audiences (currently italicized in some of the cells within the "Audience" column) could be split into their own column.

C. It is important that the document addresses DOE-ORP's credibility and believability. Until DOE-ORP overcomes these perceptions, it will be difficult to communicate other ideas.

Bob and Liz thanked committee members for their suggestions and comments. They noted that the communications approach would move forward at the next day's Board meeting, with changes proposed by PIC members highlighted during the Board meeting presentation. The communications approach would then be updated with PIC and Board input in preparation for final Board review in June 2016.

100 D/H Proposed Plan

Liz Mattson provided PIC members with context for discussion of the 100 D/H Proposed Plan topic. She noted that the Proposed Plan was originally intended for release in early 2016; however, the U.S. Environmental Protection Agency (EPA) requested that additional detail be added to the plan so that it more accurately reflected completed interim cleanup. Liz said that TPA agencies planned for the release of the 100 D/H Proposed Plan in June 2016, and she noted that PIC members had requested that DOE-RL create a questions and answers document prior to the plan's release to assist members of the public as they review the Proposed Plan and provide comments. Liz highlighted the complexity of the 100 D/H cleanup and the interim RODs; she was hopeful that the questions and answers document would provide needed context for the Board and the public once the 100 D/H Proposed Plan was released for review.

Agency Perspective

Kris Holmes, DOE-RL, provided PIC members with a draft 100 D/H Proposed Plan – Questions and Answers document [4] for review and discussion. Kris noted that the document was framed by questions posed by PIC members and answered by contractor and project staff familiar with work at the 100 D/H Area. She noted that she approached the questions posed by PIC members as a member of the public would, and searched for answers on the internet. Kris said that this effort highlighted some inaccurate and some outdated information online that DOE-RL would work to update in anticipation for the release of the Proposed Plan.

Kris was interested in discussing the format of the final questions and answers document, recognizing that the current draft was lengthy and that it would be expensive to mail. She proposed that there could be a smaller version of the document that would be printed and mailed, and that a lengthier version could be accessed electronically.

Regulator Perspective

Dennis Faulk, EPA, said that the questions and answers document was well-constructed and that it provided helpful information in response to the proposed questions. Dennis requested that PIC members assist TPA agencies by reflecting upon how members of the public could use the sheet once the 100 D/H Proposed Plan is released for review.

Attachment 4: Draft 100-D/H Area Proposed Plan – Questions and Answers

Committee Questions and Responses

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

Q. Some of the language that is included in the questions and answers document may be difficult for the public to approach. Additional review of the document should work to identify jargon and clarify its meaning.

Q. Who is the specific audience for the questions and answers document?

> *R. [EPA] This document would target members of the public who have a rudimentary knowledge of the Hanford Site and its reactors.*

C. The map that is included in the document is helpful; however, it could be clearer if it showed a wider view of the Hanford Reach and the Tri-Cities and labeled the reactors Also, the text "100-F/IU-2/IU-6" could be removed, as it confusing.

C. It would be helpful to provide a general introduction to the document to frame what a Proposed Plan is in the context of Hanford Site cleanup.

Q. The reactors along the Columbia River will need to be removed someday; however, their removal is not covered by the 100 D/H Proposed Plan. How could the first question acknowledge this uncertainty?

> *R. [EPA] The decision to hold on dismantling the reactors was made in the mid-1990s. Once dismantled, the reactors will go to Hanford's Central Plateau for disposal. Each reactor will cost approximately $30 million to dismantle via CERCLA guidelines; however, the exact timeline for dismantling the reactors is not yet finalized.*

Q. Why does the answer to the first question emphasize that the reactors were modified several times?

> *R. [EPA] DOE modified the reactors to increase plutonium production. More plutonium production meant that more waste was produced.*

C. [EPA] It would be helpful to note that the profile of contaminants associated with all reactors along the Columbia River are similar to one another.

C. The answer to the second question should recognize that waste disposed of at the Environmental Restoration and Disposal Facility will remain there forever.

Q. What does "treatment for stabilization" in the answer to the second question mean?

> *R. [EPA] Prior to disposal, the chemical form of the chromium needs to be altered to prevent leaching. Treating waste containing hexavalent chromium makes the chromium less mobile and less toxic.*

C. The answer should provide additional detail on the harmful effects associated with hexavalent chromium contamination. The questions and answers document likely needs to be enhanced with an

entire section on health and exposure to contaminants of concern in the 100 D/H Area so that the public has a better sense as to why remediation is necessary. It would make sense to include this section following the second question.

> *R. [Ecology] It would be important to identify hexavalent chromium as a carcinogen. The document could incorporate a section that includes what the contaminants are, why they matter, and how cleanup will address them.*

> *R. [EPA] In many cases, aquatic contamination standards are driving cleanup at this point. Much of the groundwater at Hanford already meets drinking water standards; however, aquatic standards require additional remediation to meet.*

C. The fourth question, regarding the spread of contamination, may present too complex of an answer for the audience. It may be helpful to answer this question at a higher level and discuss it in terms of water pushing plumes of contamination into the soil and groundwater.

> *C. The term "mobility" may need to be simplified for a general audience. The fact sheet could shorten the response and simply note that contamination moves through soil.*

C. The fifth question, regarding monitoring contamination, could focus more on groundwater wells within the 100 D/H Area. It could also include information regarding the frequency that the monitoring wells are tested for contamination.

Q. How frequently are groundwater wells tested for contamination? Once per year?

> *R. [EPA] The frequency of testing is determined by how long wells have been sampled for and how stable findings are. The longer contamination levels remain stable, the less frequently groundwater wells are tested.*

Q. How do the TPA agencies monitor contamination spread by animals in the 100 D/H Area?

> *R. [EPA] There is no contamination to be spread by animals in the 100 D/H Area anymore; therefore, this is not a problem to convey at this point. Generally, one of the primary drivers of contamination spread at the Hanford Site is ants. Large caps were used extensively throughout the Site to stop ant colonies from brining buried contamination up to the surface.*

C. The sixth question regarding interconnectivity has too many numbers (areas) in the answer and the language needs to be simplified.

Q. How does the interim decision-making process work? Should the questions and answers document work harder to outline this process?

> *R. [EPA] The initial CERCLA process for the 100 D/H Area took approximately nine years to complete. It was apparent to the TPA agencies that the contamination presented risk; therefore, the agencies moved to interim action. Groundwater cleanup focused on the highest risk contaminants first.*

Q. EPA estimates that there are five to ten waste sites remaining in the 100 D/H Area. What cleanup work is left following the remediation of these five to ten sites?

> *R. [EPA] The only additional work following waste site remediation is dismantling the reactors and operating the pump and treat operations for an additional 15-20 years.*

Dennis and Kris thanked PIC members for their perspectives. Kris stated that she would edit the fact sheet and incorporate HAB feedback in preparation for final PIC review during the committee's May 2016 call.

HAB Report Summary

Gary Garnant noted that he began working on summarizing and compiling an initial set of reports that Board members may find interesting and useful to future Board work. Gary noted that he authored short synopses on historic reports related to plutonium production and waste disposal at Hanford, high-level waste disposition strategies in other countries, and German and Russian efforts to construct atomic weapons in the mid-1900s.

Gary said that he would work with TPA agency liaisons and the facilitation team to post his recent summaries on the HAB's SharePoint site.

Liz encouraged PIC members to send any additional documents of potential interest to the Board to Gary for his review.

Public Involvement Principles

Liz stated that PIC members were interested in continuing discussion on HAB general public involvement principles, noting that the Board may wish to author additional advice or a white paper that provides updated HAB perspective on public involvement needs. Liz recognized that the first step in this process would involve PIC members compiling past HAB public involvement advice and TPA agency advice responses and then examining the information for common threads. Liz was hopeful that this analysis would be completed by the next PIC meeting, anticipated for June 2016.

Liz noted that issue managers would begin to examine past documents and that PIC members could check on the progress of advice review during the May 2016 PIC call.

Hanford Advisory Board Member Self –Assessments

Tom Galioto, Public at Large, said that he was able to work with DOE-ORP to identify two presenters for a briefing and question and answer on Hanford cleanup at a local men's cancer group. Tom was pleased to report that approximately 40-50 people attended the presentation.

Gary Garnant, Grant & Franklin Counties, said that he did a presentation on Hanford cleanup with members of the public. Gary stated that he discussed with the group the over-production of plutonium at the Hanford Site.

Steve Hudson, Hanford Watch, noted that he recently met with deans at Portland Community College to discuss potential interest for bringing in speakers to discuss Hanford Site cleanup with students. Steve stated that the student population appears to be more interested in the problems at Hanford and less interested in the cleanup efforts. Steve was hopeful that his experiences with members of the public under 30 years old could help to inform future Board and PIC conversations on HAB youth involvement.

Liz Mattson, Hanford Challenge, encouraged fellow PIC members to listen to Hanford podcasts created by students of fellow HAB member Shannon Cram. Liz also shared that Washington had recently cut state funding for Public Participation Grants, which impacted Hanford Challenge's funding. Liz was hopeful that the organization could receive emergency funding, but she was not optimistic. As a result of the funding loss, Liz underscored that Hanford Challenge's ability to conduct outreach in the coming months would be hampered.

Sam Dechter, Public at Large, said that he attended the recent DOE FY 2018 Budget Priorities workshop in March 2016.

Helen Wheatly, Heart of America Northwest, recognized that there is a lot of confusion as to the nature of the Hanford Site in the Seattle and Olympia area. She was planning to participate in a Fellowship of Reconciliation the following week, and she hoped to engage on the topic of Hanford cleanup with other attendees.

Ginger Wireman, Ecology, said that she had speaking engagements planned for the fall with Mathematic, Engineering, Science Achievement students.

Dieter Bohrmann, North Wind – supporting DOE-ORP, stated that Kevin Smith, DOE-ORP Manager, was planning on speaking to the Richland Rotary in early May 2016.

Kris Holmes, DOE-RL, said that the office has many upcoming speaker events planned. She also highlighted the Hanford Health and Safety Expo on May 10-11, 2016.

Ken Niles, Oregon Department of Energy (ODOE), said that he provided a presentation to a science and ethics class at Portland State University. Ken also highlighted a recent visit that he had with a government minister from Mongolia. Ken also noted that Dale Engstrom, ODOE, recently provided a presentation on groundwater to a group of 300 participants at a Science, Technology, Engineering, and Math fair. Finally, Ken noted that ODOE provided an overview of his department to a joint legislative oversight committee.

Committee Business

PIC 3-Month Work Plan [5]

PIC will plan to hold a committee meeting prior to the June 2016 Board meeting. To prepare for this upcoming discussion, committee leadership will have a committee call in May 2016. PIC members identified that the upcoming June 2016 meeting would tentatively include the following topics:

- Receive an update from TPA agencies on Hanford public involvement (TPA Quarterly Planning Meeting)
- Receive an update on HAB-generated summaries of relevant reports, publications, and articles
- Discuss past HAB advice relating to Hanford Site public involvement principles and determine the need for additional advice on the topic
- Discuss strategies for new HAB member orientation
- Discuss the WTP communications approach white paper in anticipation of June 2016 Board adoption
- Receive a briefing or tutorial on the revised 100 D/H Proposed Plan questions and answers sheet
- Receive public involvement self-assessments from HAB members

Attachment 5: PIC 3-Month Work Plan

Attachments

Attachment 1: Tri-Party Agreement Agencies Public Involvement Calendar – Fiscal Year 2016 (April 2016)

Attachment 2: Draft Fact Sheet on Permit Changes Proposed for Hanford Dangerous Waste Management Area

Attachment 3: Waste Treatment and Immobilization Plant Communications Approach (Version 1, Revision Date 3/29/2016)

Attachment 4: Draft 100-D/H Area Proposed Plan – Questions and Answers

Attachment 5: PIC 3-Month Work Plan

Attendees

Board members and alternates:

Don Bouchey	Becky Holland	Gerry Pollet
Sam Dechter	Steve Hudson	Bob Suyama
Tom Galioto	Liz Mattson	Helen Wheatley
Gary Garnant	Ken Niles (phone)	Steve White

Others:

Kris Holmes, DOR-RL	Dennis Faulk, EPA	Jennifer Colborn, MSA
Richard Buel, DOE-RL	Ginger Wireman, Ecology	Jennifer Copeland, MSA
	Rochelle Twomey, Ecology	Dieter Bohrmann, North Wind/DOE-ORP
		Sharon Braswell, North Wind/DOE-ORP (phone)
		Becky Wiegman, Perma-Fix Northwest
		Shintaro Ito, PNNL
		Katherine Bittinger, WSU
		Michael Turner, public
		Cathy McCague, EnviroIssues
		Brett Watson, EnviroIssues