

**FINAL MEETING SUMMARY**

**HANFORD ADVISORY BOARD  
PUBLIC INVOLVEMENT AND COMMUNICATION COMMITTEE**

*November 4, 2014  
Richland, WA*

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*This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and 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 Communication Committee (PIC) chair, welcomed the committee and introductions were made. The committee adopted the September 2014 meeting summary.

*Announcements*

Liz reminded committee members in attendance that the Hanford Advisory Board (HAB or Board) would celebrate its 20-year anniversary the following evening. Liz noted that anyone interested in supporting the effort should get in touch with Susan Leckband or another member of the celebration’s planning group.

**Public Information Materials**

*Introduction\**

Liz stated that the conversation on public information materials was intended to be an opportunity for the committee to offer thoughts and suggestions relating to the effectiveness of existing and future public

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\* Attachment 1: Examples of public outreach text (draft and final; DOE-RL)

education materials. Kris Skopeck, U.S. Department of Energy – Richland Operations (DOE-RL), provided the committee with examples of DOE education and outreach materials in various stages of completion for PIC’s consideration and discussion.

### *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. Who reviewed those provided examples that have already been released to the public? Was PIC consulted throughout the process?

*R. [DOE-RL] The materials that have already been sent out went through the Tri-Party Agreement (TPA) agency review process. The HAB was not involved in their creation. The full-page fact sheet that was provided today did not receive favorable feedback from the public; therefore, DOE is interested in PIC’s impressions.*

C. When composing these types of materials, it is a good idea to write them so that anyone, even someone who is completely unfamiliar with the Hanford Site, could appropriately understand their message. It is also effective to request specific actions.

C. In the provided materials, DOE provides many short explanations in the sidebars. Those are very helpful to the general public. However, these explanations should not include acronyms such as “RCRA” unless the write-up clearly spells out what the acronym is referring to. There are many readers who would not be familiar with unattributed acronyms.

C. Especially in materials announcing comment periods, the title of the publication should give the reader an understanding of when the comment period will be open and when it will close.

*R. [Washington Department of Ecology (Ecology)] There are two Hanford Site mailing lists—one sent through the postal system and one sent through email. Postal Service mailings reach approximately 2,000 homes, and email mailings reach approximately 1,400 inboxes. Those who subscribe to the email list do receive additional updates noting comment period start dates; those who receive mailers do not.*

C. For announcements pertaining to permit modification comment periods, would it be possible to include the roles of DOE and the regulating agencies within the announcement? The modification process is usually quite confusing to anyone who is unfamiliar with it. This information could potentially demonstrate to the public how smaller permitting issues fit into the overall scope of Hanford cleanup.

*R. [Ecology] Ecology’s website does a good job of explaining upcoming and ongoing comment periods, especially relating to permit modifications. From the main page, it takes approximately two clicks to get into specific information. Looking forward, Ecology could consider adding more detailed descriptions of Class II and Class III permit modifications.*

Q. Several HAB members represent community interest or non-profit groups, and their organization's mailing list may appreciate this type of information. Could DOE-RL send these materials to these organizations for forwarding as they are created and released?

*R. [DOE-RL] Yes.*

Q. Outreach strategies and technologies are rapidly evolving. Do the TPA agencies have any sense of how effectively information is being dispersed? How are the TPA agencies working to ensure that communication strategies are effective?

*R. [Ecology] Current strategies involve multiple venues for outreach. In addition to mailings, agencies also utilize social media. Digital outreach strategies provide feedback in the form of analytics (click rates, open rates, etc.), which are very helpful when planning future efforts.*

C. The materials that PIC was shown today are all very process-heavy. Largely, the general public is less concerned about process and more concerned with the big-picture and with high-level outcomes. It is usually helpful to reiterate the general context of facilities and cleanup practices as opposed to focusing on procedure.

C. Creating these outreach materials is a complex process because they need to be equally pertinent to readers of all levels. Perhaps hyperlinks could be incorporated to a greater extent? These links could give additional technical depth for those interested in exploring issues more deeply.

The committee thanked Kris for the opportunity to review and discuss the materials. Liz noted that PIC would be glad to have additional conversations on the subject in the future.

### **Tri-Party Agreement Agencies Public Involvement Calendar**

#### *Introduction\**

Liz noted that updates and discussion on the TPA agencies' Public Involvement Calendar was recognized by PIC as being a standing meeting segment, and she opened the topic up for committee discussion.

#### *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. There are many holding bin items that are noted as "TBD." This is concerning; is there any additional scheduling information that could be noted aside from "TBD?" Could general dates be identified?

*R. [U.S. Environmental Protection Agency (EPA)] The holding bin items are organized in the order that we would like to see them occur. This organization strategy does not always work, and sometimes our projections are off. However, we do note these items in the desired progression.*

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\* Attachment 2: Tri-Party Agreement Agencies – Public Involvement Calendar – Fiscal Year 2015

The committee thanked the agencies for compiling and updating the Fiscal Year (FY) 2015 Public Involvement Calendar. The document is hosted online by Ecology, and it can be accessed at [http://www.ecy.wa.gov/programs/nwp/PI/pdf/TPA\\_PI\\_Calendar.pdf](http://www.ecy.wa.gov/programs/nwp/PI/pdf/TPA_PI_Calendar.pdf).

## **Savannah River National Laboratory Expert Panel's Tank Vapor Report (joint w/ TWC and HSEP)**

### *Introduction*

Becky Holland, Health, Safety and Environmental Protection Committee (HSEP) chair and member of the Savannah River National Laboratory Expert Panel, introduced additional members of the Hanford Tank Vapor Assessment Team (TVAT), including Bill Wilmarth, TVAT chair, and Andy Maier, TVAT vice chair. Becky noted that the purpose of the briefing was to allow PIC, Tank Waste Committee, and HSEP members the opportunity to learn more about the results of the independent study. Dave Olson, Washington River Protection Solutions (WRPS), was also in attendance to provide follow-up to the presentation and note next steps for tank farm vapor management.

### *TVAT Briefing\**

Bill stated that WRPS charged the TVAT with the task of determining if existing tank farm practices were adequately protecting workers from the adverse health effects that may result from exposure to chemical vapors. Bill recognized that the effort was an assessment, not a compliance audit. Bill and Andy's presentation covered the following main points:

- The research approach that was used as a basis for this study resulted from National Research Council recommendations. The assessment scope was broken into six technical areas; experts from each of these six areas were chosen to lead a segment of the assessment.
- TVAT began planning for this study in June 2014. Research efforts included two site visits and a review of thousands of WRPS documents. Site-visits provided the team with the opportunity to see industrial hygiene (IH) functions at the tank farms as they were occurring in real-time. The team also interviewed stakeholders (including representatives from state government, agencies, non-profit groups, and the HAB) and requested that they provide feedback on the issues that the report should include.
- To determine whether there is a causal link between vapor exposure and adverse health effects, the team utilized Hill's Criteria for Causation. This well-known framework was established many decades ago and is used primarily in the fields of toxicology and epidemiology.
- Following research and data collection efforts, TVAT arrived at four major conclusions: (1) the data strongly suggests a causal link between chemical vapor releases and subsequent adverse

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\* Attachment 3: Hanford Tank Vapor Assessment Team Briefing (Savannah River National Laboratory Presentation)

health effects experienced by workers, (2) adverse health effects are likely the result of acute exposure to high vapor concentrations, (3) IH programs that emphasize standard, full-shift exposure measurement and compliance cannot adequately address the complex and episodic nature of Hanford tank vapor incidents, and (4) addressing tank vapor exposure issues will require the full commitment of the Hanford Site leadership.

- Overall, the report noted approximately 45 interdependent recommendations that fall into three overarching categories (Programmatic, Mechanistic Aspect of Exposure Scenario, and Abatement).
- The team recommends that occupational exposure limits should be established for acute exposure to vapors. WRPS should create an acute Chemicals of Potential Concern list to supplement the existing chronic Chemicals of Potential Concern list.
- Leadership at the Hanford Site made a strong commitment to worker safety by inviting the TVAT to conduct the assessment with full autonomy. In addition, WRPS requested that the assessment team follow up on the report by assessing WRPS's implementation plan, which should be provided to the TVAT for review by mid-November.

#### *WRPS Perspective\**

Dave Olson recognized that the TVAT report provided an important framework for future WRPS policies and practices as the organization works to supplement their chronic exposure program with an acute exposure program. He stated that implementing TVAT's recommended strategies would likely take four to five years and many millions of dollars. In the near-term, WRPS is taking steps to mitigate worker exposure to vapors (including respirator requirements and piloting infrared vapor-detection technology).

Dave noted that WRPS received an advanced draft of the TVAT report in September and began to immediately implement protection strategies based on the report's conclusions and recommendations. WRPS is committed to following implementation strategies through until tank farms are exposure-free.

#### *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 your analysis relate to the long-term health effects? Why were no medical professionals included on the team?

*R. [TVAT] This study did not cover that aspect of vapor exposure; however, there is a planned epidemiological study which will include medical professionals. The assessment team has recommended that this epidemiological study take long-term health effects into account.*

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\* Attachment 4: Response to Hanford Tank Vapor Assessment Team (TVAT) Report (WRPS Presentation)

C. This report presents a wealth of helpful information; however, there are a large number of people who have been affected by vapor exposure over the years. This effort will hopefully go further in the future and examine health effects and latent symptoms relating to vapor exposure.

*R. [TVAT] The report recommends that additional study on those issues be conducted.*

C. The report was disappointing in its lack of review of recent exposure incidents. These incidents were very impactful to the area, and should have been included in the assessment.

Q. Why was a member of the Hanford Atomic Metal Trades Council (HAMTEC) included on the team? At what level was this decision made?

*R. [TVAT] There were many levels of management, going all the way up to the Secretary of Energy, that weighed in on the decision to include a HAMTEC representative on the team. It was beneficial to the study in that it allowed the team to have perspective into the reality of conditions and procedures in the tank farms. The inclusion of a HAMTEC representative also provided the team with more credibility, impartiality, and transparency.*

Q. There is oftentimes not enough action at the Hanford Site. What are the analytics for measuring success on this issue? Would it not be more effective to worker health to put in better real-time safety controls as opposed to looking into strategies for fugitive vapor control?

*R. [WRPS] The near-term activities will be very active. WRPS does not plan on studying this issue anymore; we would like to implement strong solutions and run our implementation plan like a project to ensure that this effort is successful.*

Q. How are exposure rates calculated for workers?

*R. [TVAT] Many chemicals have different effects based on exposure strength and exposure duration. Often, there are different benchmarks that are needed to determine effects based on different exposure scenarios and different combinations of chemicals. For that reason, the team proposed that acute exposure level be considered alongside the chronic exposure levels. Measured peak exposures that are averaged out over longer periods of time can be misleading.*

Q. Will WRPS consider base- and organic-absorbing cartridges for face masks? Is that the general solution that is being thought of at the moment?

*R. [WRPS] Yes, that is a general solution. Assuming that the acute exposure theory is valid, workers need to be protected from instantaneous exposure. The described cartridges would provide protection in these scenarios.*

Q. Past studies have recommended many of the same solutions; however, implementation plans were conducted half-heartedly. How will WRPS ensure that the recommendations from this study will be effectively implemented in the long-term?

*R. [WRPS] WRPS has committed to running the implementation strategy for TVAT recommendations like a line-item project. WRPS is committed to seeing this program through to completion.*

Q. Does the assessment team plan on reporting the findings of their efforts to the public?

*R. [TVAT] The study was only recently published, and WRPS employees are the focus of ongoing briefings. Public briefings may come later; the team has not had the opportunity to plan any yet.*

R. [WRPS] Public outreach may be more appropriate once an implementation plan is completed.

The committee thanked the presenters for the informative briefings. TWC noted that the committee would work together with HSEP to discuss the report further and explore potential follow-up steps during a joint session at the November meeting. Both committees noted that they were interested in hearing a briefing on the WRPS implementation plan once released.

## **Committee Business**

### *HAB Member Self-Assessments*

Ken Niles noted that the Oregon Department of Energy (ODOE) released the 25-year edition of the Hanford Report. The document is available on ODOE's website. Ken also noted that Board members from ODOE will be presenting on Hanford cleanup at an upcoming Oregon Museum of Science and Industry Science Pub.

John Howieson, Physicians for Social Responsibility (PSR), noted that he presented an update on Hanford cleanup to the Oregon chapter of PSR.

Peggy Maze Johnson, Heart of America Northwest, stated that her organization has been actively sharing Hanford Cleanup information with communities in Seattle and beyond. Peggy also noted that she recently conducted an advocacy training session where the Hanford Site was used as an example.

Susan Leckband, League of Women Voters, was interviewed by NPR as a part of their "12 Women of Hanford" series; her interview will be incorporated into both a radio broadcast as well as an interactive display. Susan also provided an interview to the BBC. Finally, Susan noted that she has been communicating with Erika Holms, who is currently working at Washington State University to develop curriculum for Hanford cleanup. Susan was hopeful that this partnership could lead to enhanced opportunities for involving high-school and college students in the Board's work.

Emy Laija, EPA, taught a class on environmental regulations and spent a session discussing superfund sites. Representatives from Ecology came to share information with the group.

Dieter Bohrmann, Ecology, noted that he had recently been working in Bellingham, Washington, assisting in a variety of education, speaking, and engagement opportunities. He noted that he conducted a

“Hanford Overview” session, and Ecology’s Dan McDonald conducted a session on the Waste Treatment Plant.

Finally, Liz, Hanford Challenge, identified that she was hopeful that her organization would host a “Hanford and Gingerbread” session in Richland during the Board’s December committee meeting week. The Hanford and Gingerbread activity tasks participants with creating Hanford structures out of graham crackers and icing, and Liz noted that the process is both fun and educational. Additional Hanford and Gingerbread events may take place in the Seattle area.

*Follow-up Items*

The committee noted that they would update their 3-Month Work Plan during the December committee call, and PIC will plan to meet prior to the February 2015 Board Meeting.

**Attachments**

**Attachment 1:** Examples of public outreach text (draft and final; DOE-RL)

**Attachment 2:** Tri-Party Agreement Agencies – Public Involvement Calendar – Fiscal Year 2015

**Attachment 3:** Hanford Tank Vapor Assessment Team Briefing (Savannah River National Laboratory Presentation)

**Attachment 4:** Response to Hanford Tank Vapor Assessment Team (TVAT) Report (WRPS Presentation)

## Attendees

### Board members and alternates

David Bernhard (phone)	Gary Garnant	Susan Leckband
Richard Bloom	Rebecca Holland	Peggy Maze Johnson
Tom Carpenter (phone)	John Howieson	Liz Mattson
Shelley Cimon	Steve Hudson	Ken Niles
Dirk Dunning (phone)	Mike Korenko	Bob Suyama

### Others

Kristen Skopeck, DOE-RL	Emy Laija, EPA	Sonya Johnson, CHPRC
Erik Olds, DOE-ORP	Dieter Bohrmann, Ecology	Cathy McCague, EnviroIssues
Lori Ganache, DOE-ORP	Madeleine Brown, Ecology	Ryan Orth, EnviroIssues
	Heather John, Ecology	Brett Watson, EnviroIssues
	Earl Fordham, WDOH	Chrissy Swartz, HANW
	Dave Jansen, WDOH	Emily Bays, Hanford Challenge
	John Martell, WDOH	Kathleen Jacob, KEPR-TV
	Tom Rodgers, WDOH	Michelle Searls, Northwind
		Andy Maier, SRNL Team
		Bill Wilmarth, SRNL Team
		Terri Marts, URS
		Dave Olson, WRPS
		Annette Cary, Tri-City Herald