

**FINAL MEETING SUMMARY**

**HANFORD ADVISORY BOARD  
TANK WASTE COMMITTEE**

*November 14, 2013  
Richland, WA*

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| Briefing on the DOE Hanford Tank Waste Retrieval, Treatment and Disposition Framework – Joint topic with the Public Involvement and Communications Committee (PIC); Health, Safety and Environmental Protection (HSEP) Committee; and the Budgets and Contracts Committee (BCC)..... | 1 |
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*This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.*

**Opening**<sup>1</sup>

Dirk Dunning, Oregon Department of Energy (ODOE) and Hanford Advisory Board (HAB or Board) Tank Waste Committee (TWC) Chair, welcomed the committee and introductions were made. The committee approved the September meeting summary.

**Briefing on the DOE Hanford Tank Waste Retrieval, Treatment and Disposition Framework** –  
*Joint topic with the Public Involvement and Communications Committee (PIC); Health, Safety and Environmental Protection (HSEP) Committee; and the Budgets and Contracts Committee (BCC)*

*Introduction*

Dirk Dunning introduced the topic of U.S. Department of Energy (DOE) Hanford Tank Waste Retrieval, Treatment and Disposition Framework. Dirk noted that the purpose of this discussion is to receive information about DOE’s framework document issued in late September and what it means for the U.S. Department of Energy, Office of River Protection (DOE-ORP).

*Agency presentation*

Ben Harp, DOE-ORP, provided a presentation on DOE Hanford Tank Waste Retrieval, Treatment and Disposition Framework. The presentation, provided as Attachment 2, included information about the origin of the Framework from Secretary Moniz’ visit to Hanford Site in June 2013 and outlines the phased approach to construction startup of the Waste Treatment Plant (WTP). Ben specified that the WTP is currently in the alternatives analysis phase.

*Regulator perspective*

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

Dan McDonald, Washington State Department of Ecology (Ecology), noted that from Ecology's perspective, the Framework is a white paper for discussion. The signed consent decree for Tri-Party Agreement (TPA) protocol is the basis of Ecology's understanding. There is no agreement among the agencies on any of the phases or approaches presented. Ecology has not agreed to the Framework and awaits a technical discussion with DOE to determine if what is presented is the best approach. Jeff Lyon, Ecology, noted that he agreed with Dan McDonald's comments and Ecology is hoping to receive technical information about the Framework from DOE.

*Committee discussion*

C. The committees are encouraged by DOE's attempt to deal with this difficult situation but troubled by the tone of animosity from the State. A realistic approach is needed to treat the tank waste sooner rather than later. New information released from the U.S. Geological Survey (USGS) indicates that a 7.0 magnitude earthquake could occur in the region. Given that we have a constrained environment at Hanford Site, this evokes a greater sense of urgency for how to treat the waste in the tanks. Discussions with the Governor and Secretary of Health in New Mexico indicate it is likely that transuranic (TRU) waste will be accepted in New Mexico.

C. It is important to consider the approaches put forth in the Framework as potential until there has been public dialogue.

C. No route for disposal is identified for supplemental immobilization. If there is going to be a new waste disposal form that is not in the current environmental impact statement (EIS), there will need to be a supplemental EIS.

*R. [DOE-ORP] A supplemental analysis would be needed if the waste is not going to be processed at the Low Activity Waste facility (LAW).*

Q. Does the Framework consider the potential Nuclear Regulatory Commission (NRC) reclassification of waste, and would a reclassification of waste affect the Framework?

*R. [DOE-ORP] The tank waste is under DOE Order 435.1, and DOE does not expect any changes.*

Q. Is there any public process for education or comment as the Framework is developed?

*R. [DOE-ORP] The Framework will be routed to the State of Washington to solicit feedback before it can move forward.*

Q. Does the redundancy in LAW processing mean fail-safe engineering?

*R. [DOE-ORP] Redundancy assumes there will be outage times and during those outage times the plant can continue processing waste. This would allow the total processing time to increase. All of this is dependent on discussions with Ecology.*

C. The phased approach looks good. At what point in time would DOE anticipate being able to identify cost estimates on Phase 1?

*R. [DOE-ORP] For direct feed LAW, DOE has a lot of history and basis for making a cost estimate. For the characterization facility, there are estimates from building tanks previously. It*

*is likely that DOE will have a rough order of magnitude on the cost of Phase 1 in one to two years.*

C. What is the schedule for the technical resolution teams at the vitrification plant, and when does DOE expect to receive feedback on issues in question?

*R. [DOE-ORP] The high level waste facility has limited construction expected to begin in FY 2014.*

C. DOE has never reported investigation on analysis comparing new improved glass. The glass material used should operate against as broad a mixture of materials as possible. All of the material is barely operable under the best of conditions. Is DOE willing to consider an alternative path?

*R. [DOE-ORP] DOE is trying to expand the glass capabilities and has sent the new material to a range of independent groups to validate new models.*

Q. There is a generic term for treating or drying waste to get it into a form where it can be processed. Can DOE provide detail on what that processing is, and what percentage of the waste is easy or hard to process?

*R. [DOE-ORP] After retrieval from the tanks, the waste is put in a dryer in pelletized form. There is potential for the waste to end up as mixed low-level waste. The construction project review team reported a rough estimate that 80% of the dried waste is easy to process. The potential for large particles invokes different processing needs. Cesium would be distributed among the tanks so it is not all in one tank. At this point, the Framework is not finalized, as DOE has given direction for a proposal.*

Q. Can you provide information on DOE's Grand Challenge?

*R. [DOE-ORP] The Grand Challenge was an opportunity to collect ideas from site offices and contractors to save \$250 million or more. DOE received 28 ideas, which were scored through technical groups. Three national laboratories participated in a two-day workshop, where employees presented ideas. Three ideas were chosen that could influence a phased strategy, such as permanently removing technetium and focused down to where to utilize technology in the process. Grand Challenge activities will enhance the Phase 1 process.*

Q. Will New Mexico accept remote-handled TRU waste, or only contact-handled?

*R. [DOE-ORP] New Mexico indicated acceptance of contact-handled only.*

Q. A re-baseline number for resolution of technical issues to restart the high level waste facility was promised years ago. When will this number be released?

*R. [DOE-ORP] For high level waste, it will be defined this year, and there is no date yet for pretreatment.*

C. Tank waste is a large complex problem with many pieces that have not been addressed to the public. Questions include, when will the plant be built, when will the waste be out of the tanks, and what is the plan for carrying out the work.

*R. [DOE-ORP] Cleanup includes processing waste and creating space in the double shell tanks (DSTs). DOE is taking measures to get the waste out of the tanks as fast as possible. DOE is conducting risk-reduction activities and extending the conversation to Oregon and communities nearby to put the plan together and establish the timeline.*

C. It is encouraging to hear that DOE solicited input and conducted the Grand Challenge. It sounds like a closed process now that ideas have been submitted. It would be best for DOE to be open about the ideas received and open it up to the public to be transparent about what is being considered.

Q. Are there any teams looking at quality assurance issues?

*R. [DOE-ORP] Yes, quality assurance is a primary concern for DOE.*

C. The TWC has been frustrated by the lack of information shared on this topic with the HAB. The HAB wants successful treatment and disposal of the tank waste and appreciates DOE attending the committee meeting to continue discussions on this topic.

#### *Next Steps*

The committee discussed ideas for next steps, including:

- Request that DOE-HQ to provide the committee with topics in technical team consideration and the timeframe of when that information will be completed and become public.
- Write a brief letter to Secretary Moniz requesting he speak with the General Counsel and noting the Board's expectation of transparency and concern about public openness. The committee agreed on the concept for the letter and asked issue managers to draft it in preparation for bringing it to the December Board meeting.
- Draft advice to bring to the December Board meeting about the Board's discontent with the process to date and the lack of transparency from the technical teams. The draft advice would copy Secretary Moniz, while the letter would be addressed directly to him. The committee agreed on several conceptual advice bullets and tasked an issue manager group with drafting the advice.
- Draft advice on openness would be coupled with a sounding board at the December meeting to gather initial feedback and guidance on future advice. Questions could include, what would you want to see happen as a result of this framework, and what advice points, if any, would you like to see in future advice? Future advice points might include system end state definitions, consideration of alternatives and what to do if it fails, and system plan issues and coordination.
- Encourage DOE to have ongoing conversations with Ecology. The public needs to be involved with how the broader planning process unfolds. There needs to be a way to involve the public beyond open house-style conversations.

The committee noted the following potential topics for future discussion: Interim pre-treatment functionality (e.g. how to retrieve waste from tanks) and a "glass 101" presentation as an informational session on different types of glass analyzed and considered for Hanford tank waste disposal. This topic would need further issue manager framing and coordination with the agencies before it is brought to the committee.

## **Committee Business**

Due to time constraints, the committee decided to postpone committee business to the November call. During the call, the committee will discuss the 3-month work plan and the January topics table.

## **Attachments**

Attachment 1: Transcribed Flip Chart Notes

Attachment 2: DOE presentation on Hanford Tank Waste Retrieval, Treatment, and Disposition Framework

## **Attendees**

Board Members and Alternates

|                |                 |                 |
|----------------|-----------------|-----------------|
| Richard Bloom  | Rebecca Holland | Ken Niles       |
| David Bernhard | John Howieson   | Jerry Peltier   |
| Allyn Boldt    | Steve Hudson    | Maynard Plahuta |
| Shannon Cram   | Mike Korenko    | Mecal Samkow    |
| Sam Dechter    | Pam Larsen      | Dick Smith      |
| Dirk Dunning   | Susan Leckband  | Bob Suyama      |
| Harold Heacock | Liz Mattson     |                 |

Others

|                      |                         |                               |
|----------------------|-------------------------|-------------------------------|
| Ben Harp, DOE-ORP    | Robbie Biyani, Ecology  | Sharon Braswell, MSA          |
| Cathy Lou, DOE-ORP   | Melinda Brown, Ecology  | Reid Peterson, PNNL           |
| Erik Olds, DOE-ORP   | Jeff Lyon, Ecology      | John Britton, WRPS            |
| Kevin Smith, DOE-ORP | Dan McDonald, Ecology   |                               |
| Jeff Frey, DOE-RL    | Ginger Wireman, Ecology | Abby Chazanow, EnviroIssues   |
|                      | Tom Rogers, WA-DOH      | Hillary Johnson, EnviroIssues |

DOE Framework Next Steps

1. Advice
  - Request timeframe on topics that tech teams are looking at; timeframe for completing tech team and public access to that info.
2. Letter from the Board to Secretary of Energy
  - Concern about public openness
  - Ask Secretary of Energy to talk to General Council
  - Pam, Harold, Steve

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DOE Framework Next Steps (cont.)

- Concern about lack of public and stakeholder meaningful participation
- Concerns about framework document itself
- Openness Advice
  - Liz, John, Dirk, Bob, Becky
  - Draft to IM on Monday; group

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DOE Framework Next Steps (cont.)

3. Sounding Board
  - What do you want to see happen as a result of this Framework?
  - What advice points, if any, would you like to see?
  - Purpose: to gather additional feedback and guidance on future advice
- Send Framework to Board again

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For Potential Future Advice

- System end state definitions
- Consideration of alternatives if the current ones fail
- System Plan issues/ coordination

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November call topics

- 3-month work plan
- January meeting topics table
- Assign issue managers to HAB 2014 work plan

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BIN/ Follow-Up Topics

- Interim pre-treatment system functionality – future topic
  - How do you get waste out of the tanks
- Glass 101 – tied to WTP – Needs IM Framing – Bob Suyama, Liz Mattson, Maynard Plahuta
- Review [proposed December Board meeting] sounding board comments; consider need for future advice