



U.S. Department Of Energy Office of River Protection

Hanford Advisory Board – Agency Update

Kevin W. Smith
Manager

Brief Background - Kevin Smith

- **Manager of Los Alamos Site Office**
- **Acting Manager of Kansas City Plant Site Office**
- **Deputy Manager of Y-12 (Oak Ridge) Site Office**
- **Assistant Manager of Nuclear Material Stabilization Project**
- **Chief of Safety for Air Combat Command (U.S. Air Force)**
- **Deputy J3 (Operations) for U.S. Forces Korea**
- **Commander of 49th Operations Group (Stealth Fighter Operations)**

Just a side note: Kevin is from Olympia, Washington

Brief Background - William “Bill” Hamel Assistant Manager for Waste Treatment Plant

- **Assistant Manager of Infrastructure Support for Idaho Operations Office**
- **Federal Engineering Division Director for Waste Treatment Plant**
- **Team Lead for High-Level Waste Projects at West Valley Demonstration Project**
- **Extensive experience in nuclear facility design, construction and operations**

Just a side note: Avid hiker, backpacker and mineral collector

Low Activity Waste Facility – 61% Complete



4

Analytical Laboratory – 65% Complete



Balance of Facilities – 53% Complete



High Level Waste Facility*



*Percent complete pending resolution of technical issues

7

Pretreatment Facility*



*Percent complete pending resolution of technical issues

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Office of River Protection

Tank Farms Progress

Demonstrated New FoldTrack Technology for Single-Shell Tank Retrievals

Scheduled for Deployment in Tank C-110 in Fiscal Year 2013



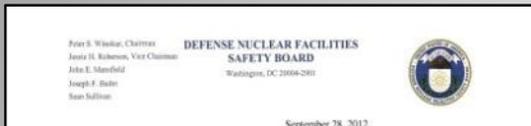
Tank Farms Progress

Retrieval Activity Continues in C-101

Currently 40% Complete



Specific Topics for the Hanford Advisory Board



September 28, 2012

The Honorable Steven Chu
 Secretary of Energy
 U.S. Department of Energy
 1000 Independence Avenue, SW
 Washington, DC 20585-1000

Dear Secretary Chu:

On September 28, 2012, the Defense Nuclear Facilities Safety Board, in accordance with 42 U.S.C. § 2286a(a)(3), unanimously approved the Hanford Tank Farms Flammable Gas Safety Strategy, which in this Recommendation identifies the need to take actions to reduce gas events at the Hanford Tank Farms.

After you have received this Recommendation and as the Board will promptly make it available to the public. The Board's Recommendation contains no information that is classified or that this Recommendation does not include information restricted (DOE) under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2141-2144, to be placed promptly on file in your regional public file and to be published in the Federal Register.

The Board will evaluate DOE's response to this Recommendation in its Board's Policy Statement 1, *Criteria for Judging the Adequacy of Implementation Plans for Board Recommendations*.

Sincerely,

 Peter S. Winokur
 Chairman

Enclosure

c/ Mr. Scott L. Sarnach
 Mrs. Mari-Jo Campagnone

The Secretary of Energy
 Washington, DC 20585
 January 7, 2013

The Honorable Peter S. Winokur
 Chairman
 Defense Nuclear Facilities Safety Board
 625 Indiana Avenue, NW, Suite 700
 Washington, DC 20584

Dear Mr. Chairman:

The Department of Energy (DOE) acknowledges receipt of the Defense Nuclear Facilities Safety Board's (DSFBS) Recommendation 2012-2, *Hanford Safety Strategy*, issued on September 28, 2012, published October 12, 2012, and accepts the Recommendation.

The Board acknowledged in its Recommendation that an issue noted that more work was needed to make the ventilation control. DOE agrees. In developing an implementation plan, DOE is confident that the most expeditious approach to control for Double Shell Tank (DST) ventilation control Recommendation 2012-2.

DOE's approach to addressing sub recommendations 1 and 2 follows:

- Phase 1 will be to complete implementing the DOE's Analysis by January 2013. This will include applying monitoring control with a new control that will install on a periodic basis. This Documented Safety Analysis (DSA) primary task ventilation system demonstrates the importance of maintaining active ventilation on these tanks.
- Phase 2 will be to install initial early significant level monitoring of the ventilation exhaust flow from each containment space, radiological purity for data collected this point, a robust safety-significant engineered containment flow measurement through each tank in real-time.
- Phase 3 will be to restore the tank flow and data used for data analysis as events occur.

DOE is committed to working with the Board to ensure that the Hanford site is safe and secure.

U.S. DEPARTMENT OF ENERGY

January 17, 2013

The Honorable Steven Chu
 Secretary of Energy
 1000 Independence Avenue, SW
 Washington D.C. 20585

Dear Secretary Chu:

The Oregon Hanford Cleanup Board, which advises me on the Hanford site, is concerned about the recent discovery that the inner liner of a Hanford tank is leaking. The board does not make this recommendation that building additional tank capacity is not a permanent fix, but a hit more time. In addition, Hanford's budget is already in a tight situation. Building new tank capacity represents a significant new expense.

Nevertheless, the clear degradation of at least one double-shell tank; the problems with the construction of the Waste Treatment Plant complex; and the need to store waste from the old single-shell tanks demand immediate action.

We don't presume to know the technical specifications of waste storage and future needs at Hanford - whether it is four new tanks, or six, or a mix of sizes and above- and below-ground tanks is needed. We leave that to you to determine. However, it is clear that Hanford needs additional capacity. The board also believes that new tank capacity should be integrated into the Waste Treatment Plant for blending, mixing and waste staging.

Advocating for new tank capacity should in no way be construed as a lack of confidence in the Waste Treatment Plant. Oregon's board believes it is even more important that funding continued to complete construction, commissioning and operation of the Waste Treatment Plant, preferably without losing further ground in the process.

Funding for new tank capacity should be in addition to the current level of funding. It should not have to defer planned cleanup work to resolve this problem.

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The Secretary of Energy
 Washington, D.C. 20585
 January 14, 2013

The Honorable Christine Gregoire
 Governor of Washington
 Olympia, Washington 98504

Dear Governor Gregoire:

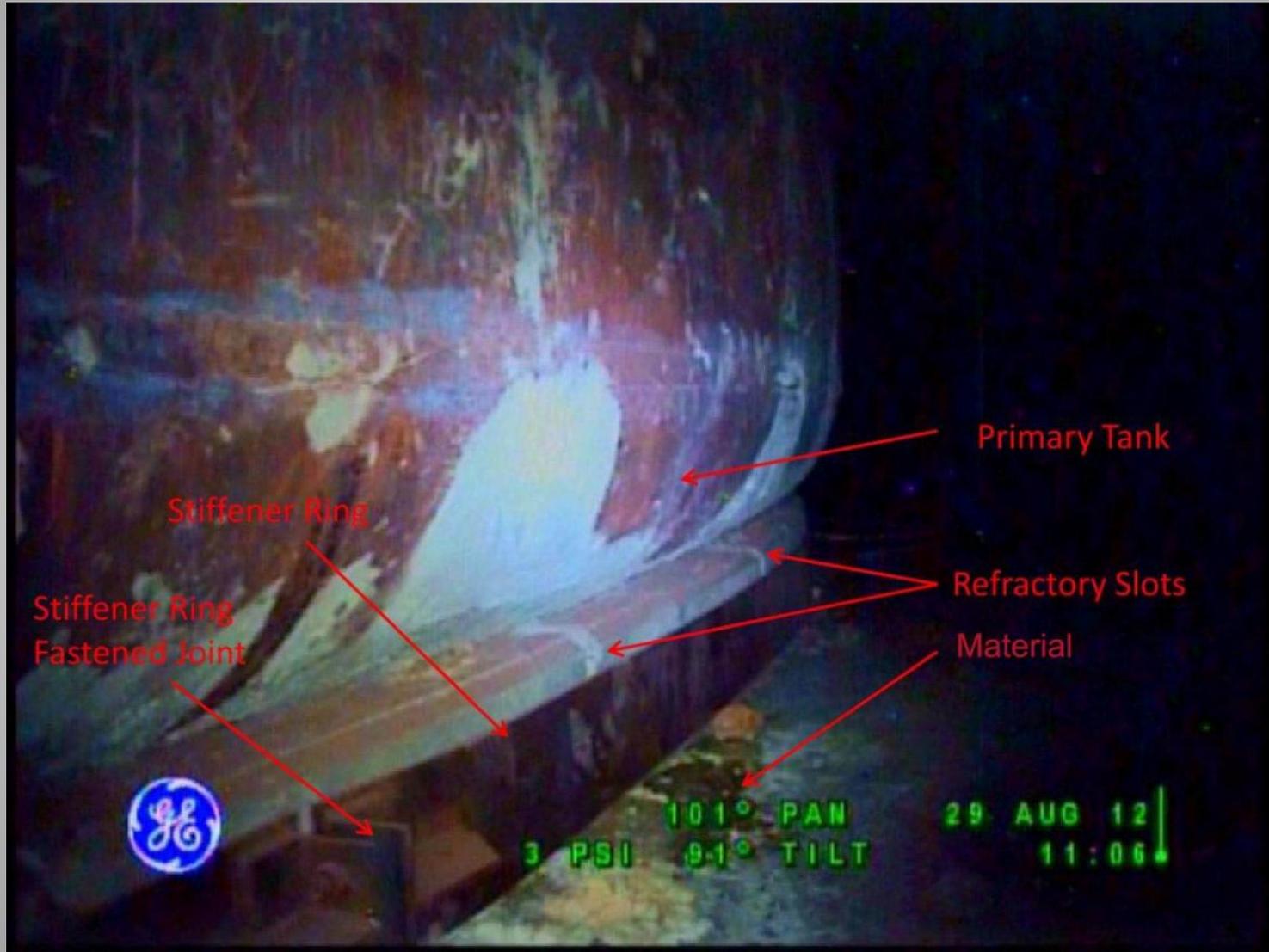
Thank you for your continued engagement regarding the cleanup of the Hanford site. As you know, several months ago, I assembled some of the nation's brightest individuals to review the Waste Treatment and Immobilization Plant (WTP) project technical issues and Hanford tank waste treatment strategies. This was a comprehensive review that was informed by and built upon previous expert reviews, taking into account new information and thus providing additional focus to ensure the WTP will operate reliably for its design life. Furthermore, the review has identified opportunities to increase the flexibility and reliability of the Hanford tank waste treatment system. For example, the Department is engaged in a serious and expeditious evaluation of the option to provide direct waste feed to the Low-Activity Waste (LAW) and High-Level Waste (HLW) facilities independent of the Pretreatment (PT) facility. This approach may provide an opportunity to begin operations of LAW and HLW prior to the completion of the PT facility, and would provide key system redundancies to the WTP plant and tank farms. I have also established an organization at the Office of River Protection to implement the solutions identified through this expert review process.

Your proactive engagement with the Department of Energy (DOE) has helped to define an effective approach for resolving the technical issues with the WTP project. Your staff has also been tremendously cooperative and helpful in providing the State of Washington's important perspective on these issues. These interactions have been very beneficial for DOE and I trust they have been transparent and informative for the State of Washington. This model of interaction between the State of Washington and DOE builds trust and enhances communication while preserving our respective roles as the owner of the cleanup and the regulator. We look forward to continuing this constructive working relationship.

To provide you an update on the project, the construction of the LAW facility, the Analytical Laboratory, and the Balance of Plant Facilities remains on track to be completed in accordance with DOE's construction commitments.

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View of Double-Shell Tank AY-102 Leak



No Anomalies Found Inside Annulus of Double-Shell Tank AY-101



No Anomalies Found Inside Annulus of Double-Shell Tank AZ-101



Topics of Interest



WRPS (Tank Farm)-Reaches a Record Safety Milestone

