

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 7, 2014

Board Chairman P. Winokur, Vice Chairman J. Roberson, and Member S. Sullivan, accompanied by staff members J. Batherson, M. Forsbacka, and S. Stokes, were on-site for discussions with the Office of River Protection (ORP), Richland Operations Office (RL), and their contractors. They also visited the 242-A Evaporator, C Tank Farm, the Waste Treatment Plant, 100 K West Basin, and the Full Scale Test Facility.

Sludge Treatment Project (STP). RL approved the updated Preliminary Documented Safety Analysis for the STP Engineered Container Retrieval and Transfer System (ECRTS) with no conditions of approval. RL also approved the Critical Decision (CD)-2/3 Report, but specified four conditions, two of which are: RL must approve any changes associated with ongoing design enhancements intended to minimize the consequences of a spray leak or optimize the loading of Sludge Storage and Transfer Casks; and the RL Federal Project Director must approve any changes to the STP Code of Record. Finally, RL, in conjunction with the DOE Chief of Nuclear Safety, approved the revised Safety Design Strategy (SDS) such that it reflects the final design in the CD-2/3 Report. This contractor noted that this completes the approvals required by DOE Order 413.3B, *Program and Project Management*, for the project to procure, install, and test the ECRTS system in the 100 K West Basin and Annex.

Waste Treatment Plant. The contractor's senior Safety Design Integration Team (SDIT) received revised design basis accident travelers from the facility SDIT and have resumed their review (see Activity Report 1/10/2014). The senior SDIT noted many improvements in the quality of the revised travelers. However, they also noted that there are a number of items that require significant additional engineering analysis to reach full closure. The contractor is concurrently working to integrate the data from the travelers into the draft SDS for the High Level Waste Facility. ORP personnel are planning their approach for the review and approval of the SDS, which will include support from DOE headquarters personnel. SDS development and approval is one of the key milestones that will support the authorization to proceed with engineering, procurement, and construction of the HLW Facility (see Activity Report 12/20/2013).

Tank Farms. During recirculation of double-shell tank AY-101, a worker did not complete a calculation within the procedurally required time. This was noted by an corporate assessor (see Activity Report 1/10/2014) observing the work. The activity was also not shutdown promptly when the surveillance time requirement was exceeded.