

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 5, 2014

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox, D. Gutowski and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending December 5, 2014

**Tank Farms.** The contractor declared a TSR violation after determining that waste transfers occurred while the safety-significant freeze protection temperature monitoring system was required to be operable. The system contained unqualified components (see Activity Report 11/21/2014).

**618-10 Burial Ground.** The contractor declared a PISA when they questioned if they exceeded the amount of material at risk (MAR) assumed in the safety basis for a small fire. The contractor performs non-destructive assay of retrieved drums for waste characterization but has not used the results to track the MAR in the waste staging area. There are similarities with this incident and one that led to upgrading the facility to Hazard Category-3 (see Activity Report 4/26/2013).

**Waste Treatment Plant (WTP).** The contractor started control selection for systems associated with vessels RLD-7 and 8 in the High-Level Waste (HLW) Facility (see Activity Report 7/11/2014). The control selection uses a draft Hazards Analysis Report which includes candidate design basis accidents. This control selection is intended to be consistent with the control strategies in the HLW Safety Design Strategy.

ORP is auditing the contractor's commercial grade dedication (CGD) program. The audit will include evaluation of the contractor's oversight of subcontractor CGD activities.

ORP received all of the contractor's plans to resolve eight key technical issues for the Pretreatment Facility. These plans incorporate ORP's review comments.

**Plutonium Finishing Plant.** The site reps met with contractor and RL personnel to discuss weaknesses in a work package that is used to remove the ventilation exhaust duct piping upstream of the credited HEPA filters (see Activity Report 11/7/2014). The work instructions are generic, and checklists are used to supplement them for equipment removal. Additionally, several work steps could not be completed as written. Contamination levels for some of the ducts are in the hundreds of millions of dpm alpha/100 cm<sup>2</sup>. The contractor revised the package to correct multiple problems that were not captured by the review and approval process.

**REDOX Plant.** Because of migrating radiological contamination (see Activity Report 11/21/2014), the contractor is planning the remaining surveillance entries as high hazard activities. Although this action may allow entry into areas inspected during the last annual surveillance, significant restrictions will remain on the area of the facility that can be viewed.

**DOE Headquarters Oversight.** The DOE Office of Enterprise Assessments began a review of work planning and control by the Central Plateau Contractor and related oversight by RL.

**222-S Laboratory.** The Tank Farms Contractor started an assessment of Hazard Controls for the Laboratory. The assessment was requested by contractor senior management and focuses on hazards analysis and the development and implementation of hazard controls.