

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 27, 2017

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox and D. Gutowski Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending January 27, 2017

**Waste Encapsulation and Storage Facility.** A Radiological Control Technician discovered contamination in a posted RBA while performing surveys to expand a work area in the canyon airlock. Work was stopped and workers inside the RBA were surveyed. Contamination was found on the shoes of two workers. The contractor currently believes that the most likely source of the contamination is migration from the canyon resulting from canyon ventilation being secured earlier this month to support replacement of an electrical breaker. Post work surveys for that task were conducted at the entrance to the airlock, but not inside the airlock.

The contractor continues to plan the work necessary to support recovery after grouting activities resulted in a high radiation field in the canyon (see Activity Report 12/23/2016). This week, the contractor conducted a high fidelity mock up to allow the work team to evaluate the adequacy of the work procedure and to practice work activities necessary to safely remove the contamination that is causing the radiation field. The mock up activity was well supported by both contractor and RL subject matter experts.

**Plutonium Finishing Plant.** A previously isolated ventilation duct that requires special handling because of internal plutonium contamination was prematurely separated at a flange while performing demolition activities on the fourth floor of the Plutonium Reclamation Facility. The damaged item was placed in a safe condition and fixative was applied to the open surfaces.

**Tank Farms.** The contractor completed piloting a public address (PA) system in AP farm (see Activity Report 9/30/2016). They considered the test a success and are expanding the program to provide PA coverage for all tank farms. In addition to the PA system, they are adding permanent reader boards to provide information to people approaching the area. They will also use scroll boards in tank farms change trailers and will have portable radio speakers for locations that may need additional coverage. The central shift manager will control information flow for these systems. The site reps believe these are positive developments for communications and accountability.

AY-102 retrieval efforts with the extended reach sluicers are seeing diminishing returns. Sluicing operations during one shift targeted material near the suspected primary tank leak site. As expected, this caused an increase in the waste level in the annulus and the annulus pump was activated to draw the level down when it exceeded 12 inches. The level is currently rebounding.

The contractor's Joint Test Working Group approved a revised sub-test plan and the first of two operational acceptance tests supporting the tank farms automation project. The sub test plan was revised to reflect recent design changes (see Activity Report 8/12/2016).

**Sludge Treatment Project (STP).** The site reps performed a walk down of the 105K west basin and the associated annex. Most engineered container removal and transportation system equipment is in place. Construction acceptance testing is in progress.