

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 21, 2013

**TO:** S. A. Stokes, Acting Technical Director  
**FROM:** D. Gutowski and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending June 21, 2013

Board staff members F. Bamdad, R. Raabe, and J. Troan were onsite to review planned remediation activities at the 618-10 and -11 Burial Grounds.

**Tank Farms.** Workers detected higher than expected contamination levels during pump out of the double-shell tank AY-102 leak detection pit. This may indicate a leak in the secondary containment of AY-102.

The contractor temporarily prohibited flammable gas sampling of all Waste Group A tanks, which are tanks with the potential to spontaneously release enough retained gas to create a flammable headspace. A worker questioned whether a piece of non-conductive plastic tubing used during gas sampling needed to be electrically bonded in order to comply with ignition control requirements. The contractor removed the prohibition by issuing a standing order that requires the application of a static dissipative coating to the tubing prior to sampling. This order is intended to ensure compliance with the TSR administrative control for ignition.

**Site Infrastructure.** The site experienced an electrical power loss to much of the 200 West Area due to a 13.8 kV power line coming off of a pole and grounded. This is the second significant loss of power in six months (see Activity Report 12/21/2012). Later the same day, electrical storms caused additional grid disruptions. All but one of the double-shell tank farm ventilation systems unexpectedly shut down. These systems were all restored within 24 hours.

**Waste Treatment Plant (WTP).** The contractor held a critique to assess the response to the discovery of contaminated bird droppings at the High Level Waste facility. Discussions during the critique indicated that WTP is not well integrated with other site contractors if they need support or supplies to respond to radiological events.

**Liquid Effluent Retention Facility (LERF).** The site reps and contractor management discussed the efforts to remove accumulated mud and vegetation from the covers over the LERF basins (see Activity Report 8/31/2012). This material is one likely source of biologically spread contamination to other areas on site.

**Emergency Planning.** The site rep observed an emergency response drill at the Waste Encapsulation and Storage Facility. The scenario was a strong seismic event and the contractor evaluation team identified many opportunities for improvement. The team noted that there were a significant number of new Facility Emergency Response Organization team members and believed this may have been a cause for some the issues noted.

**Plutonium Finishing Plant (PFP).** The contractor determined they will need to replace the festoon cables for Plutonium Reclamation Facility canyon crane.

**242-A Evaporator.** The Office of River Protection's Safety Review Board approved the new Documented Safety Analysis for the 242-A Evaporator (see Activity Report 1/11/2013).