

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 4, 2016

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox and D. Gutowski Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending November 4, 2016

**DNFSB Staff Activity.** The staff and Board Member Santos discussed relief from DOE-STD-1195 for Low Activity Waste Pretreatment Facility design with ORP and the tank farms contractor (see Activity Report 3/3/2016). The staff also held follow-up discussions with ORP and the Waste Treatment Plant contractor on technical issues (see Activity Report 10/7/2016).

**Plutonium Finishing Plant.** The contractor commenced demolition of the Plutonium Reclamation Facility. So far, they have completed removal of exterior structures including auxiliary room 15A, stairwell #3, and the south canyon airlock. Although the demolition team has encountered some problems, their overall performance is good. Workers are identifying improvements, and they have been willing to pause work to resolve problems. Contractor management has been responsive to site rep observations and is providing resources necessary to improve work performance and to address issues identified by the demolition team. Both RL and the contractor have implemented effective enhanced oversight during the startup period.

The contractor continued efforts to identify facts related to improper assembly of Powered Air-Purifying Respirators (PAPR) (see Activity Report 10/28/2016). Use of the bumper guards that prevented proper seating of organic vapor (OV) cartridges was approved by the system manufacturer in April 2012. However, at some point, workers started using an alternative method to install the bumper guards that deviated from the approved procedure. This change resulted in the interference that prevented adequate seating of the OV cartridges. The contractor has replaced all PAPR units to ensure that units in use have no internal contamination.

**Tank Farms.** The contractor issued a new standing order defining compensatory measures needed to resume open pit work following the contamination spread in AX farm (see Activity Report 10/28/2016). The order states that pit work involving handling of uncontained contaminated equipment is not authorized until senior management has verified that the compensatory measures are in place.

**Waste Treatment Plant (WTP).** Representatives from the United States Geographical Survey, the National Oceanic and Atmospheric Administration, and the Desert Research Institute provided updates on their research to better define the magnitude of the ashfall hazard at WTP.

**222-S Laboratory.** Last week, the site rep observed an entry into the 219-S vault to perform an investigative survey and other preparatory work to support a pump replacement (see Activity Report 7/15/2016). The work team discovered crystals of an unknown chemical material, most likely sodium hydroxide, and the work scope will undergo more planning to determine whether additional controls are needed.

**Effluent Treatment Facility.** The contractor held a fact finding meeting for an event last week where workers opened a concentrate tank for inspection and contaminated material unexpectedly fell out of the breached system into a Radiological Buffer Area.