

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 13, 2017

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox and D. Gutowski, Hanford Resident Inspectors  
**SUBJECT:** Hanford Activity Report for the Week Ending October 13, 2017

**PUREX Plant.** The contractor continued placement of grout into storage tunnel 1 (see Activity Report 10/6/2017). Another minor subsidence incident occurred in the area around the active grout lance early in the week. Workers used low slump concrete to fill the subsidence and then placed grout around the three trench boxes to ensure stability and provide additional support for ongoing grout placement operations. So far, the contractor has placed approximately 2400 cubic yards of grout into the tunnel. This represents about 60% of the total grout placement needed in order to complete the stabilization project. Grout flow to the south end of the tunnel, which is over 200 feet from the grout entry point, is achieving expected levels. No detectible radiological releases have resulted from the grouting operations.

**Tank Farms.** ORP approved a new standing recovery plan for the AY/AZ primary tank ventilation system. The new recovery plan replaces an earlier plan that was established when the ventilation system was unable to consistently maintain vacuum in the headspace of tank AY-102 during waste retrieval. The vacuum was required in order to comply with a TSR designed to maintain flammable gas concentrations under 25% of the lower flammability limit. The original plan was approved by ORP in March of 2016, but expires next week. The contractor recently determined that steady state flammable gas hazard resulting from the residual waste in AY-102 is greatly diminished and that ventilation is no longer required to maintain the tank in a safe condition. The new recovery plan establishes appropriate compensatory measures and provides time to complete the safety basis amendment that removes the flammable gas TSR applicability for AY-102. The expiration date for the new recovery plan is February 22, 2018

**Waste Treatment Plant (WTP).** The contractor submitted a change to the interface control document that defines characteristics for waste received from the Low Activity Waste Pretreatment System (LAWPS) to the WTP Low Activity Waste Facility. The change allows an increase in particle diameter to 10 microns and will allow removal of cross filtration components from the LAWPS design. The cross filtration components will be replaced with lower efficiency filtration components that are less costly to install and easier to maintain.

**Plutonium Finishing Plant.** During a routine site walk down, a fire protection engineer discovered that vehicle barriers for one of the transuranic waste staging areas did not meet the requirements established by a safety basis administrative control. The contractor promptly resolved the non-compliance by placing the necessary barriers.

**REDOX Plant.** The contractor completed installation of a new roof on the REDOX facility. The new roof significantly reduces water ingress concerns (see Activity Report 1/18/2013).

**Mission Support Alliance Contract (MSA).** Bill Johnson, current president of MSA, has accepted a corporate position with Leidos and will step down from his position on October 16. Bob Wilkinson, the current MSA Chief Operations Officer, will replace him as president.