

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 9, 2016

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending December 9, 2016

Staff members B. Boser, M. Forsbacka, D. Grover, S. Thangavelu, and A. Velazquez-Lozada were on site to review the Low Activity Waste Facility's offgas treatment system. They also held a closeout meeting on Waste Treatment Plant technical issues with contractor and ORP personnel. R. Rosen was on site to attend a Tank Integrity Integration Meeting. D. Cleaves was on site providing site rep support.

Tank Farms. The contractor declared a TSR violation upon discovery of an instrument connected to a legacy waste intruding system in Tank AW-102 that is non-compliant with the current Specific Administrative Control (SAC) of ignition controls. This was found during implementation of the revised SAC of ignition controls (see Activity Report 9/2/2016).

The contractor attempted to resume retrieval of tank AY-102, but pit temperatures were too low and a water skid was partially frozen.

The contractor approved a work package for demolition activities inside of AX-801A. This is a legacy facility within AX farm that experienced a tank waste spill in 1966 after which it was partially decontaminated and lead shot was added for shielding. The AX-801B/C buildings, which had lower levels of radiological contamination and no lead were demolished recently.

Plutonium Finishing Plant. Upon completion of asbestos remediation work, workers found spray paint in the filtered side of one of their portable air purifying respirator (PAPR) units. Management issued a stop work on use of organic vapor cartridges with PAPR units until the failure could be investigated. Nasal smears on the four individuals were less than the decision level. Subsequent inspection of the mask, O-ring, and filter found no deficiencies. The most likely cause of the event was a cross-threaded or improperly seated filter cartridge. Management issued a special safety bulletin addressing installation of filter cartridges and lifted the stop work.

The project team is redesigning debris container staging areas and intends to implement a process for continuous container loading to improve efficiency and minimize uncontained debris.

REDOX Plant. The contractor's Hazard Review Board evaluated the work package to replace the REDOX roof. Their review was thorough and identified a number of changes that clarified required operations, eliminated redundant requirements, and improved hazard controls.

Waste Encapsulation and Storage Facility. The contractor stopped work on stabilization grout placement when contamination was found on the modesty clothing of four individuals involved in the work. Subsequent surveys found unexpectedly high airborne and surface contamination levels. An investigation determined that the contamination had escaped through an incomplete and abandoned core drill location leading into "A" cell. Negative ventilation in the cell was expected to prevent this type of event. The contractor has identified necessary system modifications and expects to restart work once the changes are complete.