

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 17, 2017

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending February 17, 2017

D. Cleaves was on site to observe Plutonium Finishing Plant (PFP) activities and the quarterly emergency preparedness exercise. R. Kazban was on site to observe the 60% design review of the Low Activity Waste Pretreatment System.

Tank Farms. The extent of condition review from the ignition control TSR violation (see Activity Report 12/9/2016) uncovered additional components without a basis or with a questionable basis for complying with ignition control requirements. The contractor has restricted use of these items until evaluations have been completed. Most of this equipment is inactive, out of service, or infrequently used.

The contractor is installing flow bypass lines in AP farm to support installation of safety-significant flow monitoring (see Activity Report 12/16/2016). Upon breaching a ventilation duct, workers encountered contamination levels that voided their RWP. The work crew responded appropriately, and the recovery plan is complete.

There was a management directed stop work on issuance of respiratory equipment from one mask station after it was determined that a worker had removed cleaning water from masks using a non-approved method. Subsequent inspections identified damage to some masks. The stop work was lifted after all potentially impacted equipment had been returned and segregated.

Solid Waste Operations Complex. A RCT performing routine surveys discovered unexpected material on the outside of several drums of grouted transuranic waste. Work was stopped and the facility isolated. Working with RL, the contractor developed a recovery plan, entered the facility, and sampled the material which was determined to be the result of corrosion caused by the waste contained in the drums. The contractor is working with RL to identify actions necessary to remediate the 24 drums determined to be associated with this waste stream.

PUREX Plant. The site rep and staff observed the site's quarterly emergency preparedness exercise. The scenario was a single-engine aircraft crash into one of the PUREX tunnels causing a breach and radioactive release.

Waste Encapsulation and Storage Facility. Workers entered the canyon and mechanically agitated the flexible ventilation duct that contains the material that is the source of the existing high radiation field (see Activity Report 12/23/2016). The duct interior was subsequently coated with fixative. The work was accomplished as planned and practiced by the work team. The radiation field is reduced, but additional remediation efforts are required.

Plutonium Finishing Plant. Demolition team activities were focused on recovery from recent adverse weather and from the recent contamination spread (see Activity Report 2/3/2017). Ground level debris from that event will be loaded into IP-2 containers for transport to the Environmental Restoration Disposal Facility, where the material will be grouted.