DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 5, 2017

TO: S. A. Stokes, Technical Director

FROM: P. Fox and D. Gutowski, Hanford Resident Inspectors **SUBJECT:** Hanford Activity Report for the Week Ending May 5, 2017

DNFSB Activity. Board Chairman S. Sullivan visited the site. He observed operations with the resident inspectors at the Plutonium Finishing Plant, Tank Farms, T-Plant, Waste Encapsulation and Storage Facility, and 618-10 Burial Grounds. He also observed construction progress at the Waste Treatment Plant, walked down the mockup facility for Building 324 soil remediation, and met with senior ORP and RL management.

Tank Farms. A contaminated piece of respiratory equipment was discovered at the Hanford Fire Department. The equipment was contaminated during HCA work for the removal of the AP-02A mixer pump (see Activity Report 3/3/2017). It had been bagged and tagged as radioactively contaminated while awaiting a beryllium survey prior to disposal. Upon receipt of a negative beryllium result, the equipment was returned to the fire department rather than properly disposed. An event investigation is in progress. Release of contaminated equipment to the Hanford Fire Department is a repeated issue for both the Tank Operations Contractor and the Central Plateau Contractor.

B-Plant. A worker entered a radiation area without dosimetry. Although the duration of the entry without dosimetry was short and did not result in any significant unmonitored dose, contractor management has noted that that there has been a number of similar events within this work group over the last six months. A critique was held to better understand the cause of the event and to identify causes that may contribute to the undesirable trend.

Sludge Treatment Project/T-Plant. Acceptance testing of support equipment for sludge storage at T-Plant was interrupted when workers discovered a spill in the canyon that resulted from a leaking inactive waste transfer pipe. Upon discovery, the work team backed out of the canyon. A recovery plan was developed to clean up the spill and contain future leakage.

Waste Treatment Plant (WTP). As a follow-up to the Technical Issue Review Board's conclusion that electrical installations in the Low Activity Waste Facility were code compliant (see Activity Report 4/14/2017), ORP provided additional direction to the contractor regarding future installations. ORP stated that installing open-run cables from cable tray to electrical distribution equipment is not the optimal configuration to support future WTP operations and directed that conduit or raceways will be used for all Pretreatment and High Level Waste facility designs, and for all other new electrical design work at WTP.

Building 324. The resident inspector observed an emergency preparedness drill at Building 324. The scenario was initiated with a simulated seismic event that resulted in damage to the facility and injury to one individual. The drill provided useful training for personnel located in Building 324 and for individuals located in facilities that were recently expanded to support removal of radioactively contaminated soil from beneath Building 324.