

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 28, 2017

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox and D. Gutowski, Hanford Resident Inspectors  
**SUBJECT:** Hanford Activity Report for the Week Ending April 28, 2017

The contractor briefed members of the headquarters staff regarding the status of plans and preparations for removal of the contaminated soil located under Building 324.

**Low Activity Waste Pretreatment System (LAWPS).** The contractor and ORP started Part B of their concurrent 60% Design Review for LAWPS. This review includes civil, structural, and mechanical design media as well as nuclear safety calculations supporting the Preliminary Safety Design Report. Last week, DOE-EM performed a Project Peer Review of the LAWPS project.

**Plutonium Finishing Plant.** The contractor's progress toward the completion of Plutonium Reclamation Facility demolition was hindered by high winds, an unexpected contamination spread, and a radioactive work permit (RWP) void. Radiological Control Technicians discovered the contamination spread when a routine survey at the demolition HCA boundary found HCA level contamination in the neighboring CA. The release occurred during demolition of sections of the north and east walls of the facility. Wind patterns and speeds in this location are difficult to monitor and predict making contamination control fog and spray less effective. The contractor is working to improve their wind monitoring capability near the building to resolve the problem. The RWP void occurred when HCA level contamination was found on an ERDF can shuttle truck that had been moved to a CA for repair.

The contractor performed a management assessment to review their readiness to start demolition of the 234-5Z and 291-Z structures.

**Tank Farms.** The resident inspector observed field work in AW farm supporting the planned removal of the plugged transfer pump in AW-106 (see Activity Report 3/17/2017). The work team removed legacy equipment from the pump pit in preparation for installation of the pipe punch assembly and pump removal equipment.

**Sludge Treatment Project.** The contractor started performance acceptance testing of K-basin and K-basin annex equipment that will be used to support removal of sludge from the basin. Additionally, they started acceptance testing of equipment installed at T-Plant to support storage of the containerized sludge. The resident inspector observed the second day of testing at T-Plant. The team's work performance was professional and well controlled.

**Waste Treatment Plant.** ORP completed a surveillance of dispositions of vulnerabilities identified during the High Level Waste (HLW) Design and Operability review (see Activity Report 5/23/2014). With the completion of this review, ORP concluded that all vulnerabilities from the HLW Design and Operability review are being adequately addressed.

**DOE Headquarters Oversight.** A team from DOE Office of Nuclear Safety and Environmental Assessments (EA-31) started their latest quarterly review of safety basis development activities at ORP. Their scope for this visit includes Waste Treatment Plant and LAWPS.