

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 21, 2017

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending July 21, 2017

Waste Treatment Plant (WTP). The Resident Inspector met with contractor and ORP representatives to review progress in addressing problems identified by the Board in an April 4, 2016 letter to the DOE, Assistant Secretary of Environmental Management regarding inadequate storage of safety systems, structures, and components awaiting installation in WTP facilities. The contractor outlined completed and ongoing actions to address the problems. The Resident Inspector noted that storage conditions in the main laydown yard have improved.

ORP and the contractor are evaluating potential new controls for the Low Activity Waste Facility resulting from process hazards analyses and other PDSA development activities (see Activity Report 3/24/2017). Some proposed controls already exist but are currently uncredited; others would be new installations if selected. They are also determining the appropriate level of risk acceptance for toxicological hazards for the mitigated post-seismic scenario.

Plutonium Finishing Plant (PFP). The contractor completed an apparent cause evaluation of the contamination spread that occurred while removing a section of a Plutonium Reclamation Facility gallery glovebox (see Activity Report 6/9/2017). The evaluation determined that the work package hazard control set needs to be strengthened and that water and fixative application methods should be improved. The evaluation also identified several contributing causes and proposes a set of corrective actions to address both the apparent and contributing causes.

The contractor felled the PFP stack (see Activity Report 6/30/2017).

Tank Farms. ORP approved a safety basis amendment that addresses resumption of retrieval in Tank C-105 using extended reach sluicers rather than the Mobile Arm Retrieval System – Vacuum (MARS-V) (see Activity Report 3/31/2017). The amendment eliminates controls specific to the MARS-V and includes additional unrelated changes, notably modification of the TSR that was missed in the recent Ignition Controls amendment (see Activity Report 6/23/2017).

Sludge Treatment Project. During a review of a work package for construction acceptance testing of continuous air monitors in the annex, the planner and responsible manager noted that pen and ink changes were made without proper authorization. This type of change required responsible manager, release authority, and USQ reviewer approval at a minimum. The contractor will reperform the testing.

PUREX Plant. RL and the Washington Department of Ecology (WA-DOE) held a public workshop to discuss planned action to stabilize PUREX Storage Tunnel 2 to mitigate the potential for a collapse similar to the one that occurred at Storage Tunnel 1 (see Activity Report 5/12/2017). RL described nine options and provided an initial subjective evaluation of each options. Members of the public were provided an opportunity to ask questions and provide feedback regarding the proposed options.