

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 20, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending February 20, 2015

Tank Farms. Senior contractor management approved the common cause analysis and corrective action plan for the series of conduct of operations problems in the tank farms late last year (see Activity Report 12/12/2014). The analysis determined that the influx of new personnel into the tank farms led a knowledge gap in the workforce. Additionally, the pace of work in the tank farms has been increasing while the operations model of the tank farms is not set up to properly address parallel work. Contractor processes were not adequate to address these challenges. The contractor is implementing a suite of corrective actions to attempt to resolve these issues and prevent future conduct of operations problems.

The contractor pulled another pump out of tank AY-102 to support installation of future retrieval equipment (see Activity Report 12/26/2014). Flushing the interior of the pump proceeded smoothly, but waste on the exterior of the pump was difficult to remove resulting in high radiation levels. The crew was eventually successful in dislodging enough adherent waste to meet dose limits for removing the pump.

A site rep observed installation of a new Extended Reach Sluicer System (ERSS) into single-shell tank C-102. The work crew was successful in the installation despite problems caused by a bend in the tank riser which resulted in interference between the ERSS and the riser. Although this was a known problem, the contractor did not establish a clear contingency plan in case the ERSS became jammed. The workers mechanically agitated the ERSS to complete the installation.

Plutonium Finishing Plant (PFP). The site reps walked down the PFP duct level to observe work in progress and the status of system removals, as well as to gain a better understanding of an upcoming facility modification that will affect the confinement boundary. The modification will remove an interior door that is part of an existing airlock and its removal supports efficient handling of material that is being packaged for disposal. The contractor's maintenance of general order and housekeeping in the duct level work area is good. However, the overall work environment remains difficult because of the congestion and interferences that exist in the duct level.

The airborne radioactivity void limit for ongoing work was exceeded during removal of a component from glove box WT-2 in 242-Z. This is the second time that there has been an unexpected increase in airborne radioactivity concentration levels in the last month due to conduct of work (see Activity Report 01/30/2015).

618-10 Burial Ground. The site reps met with the facility manager and discussed corrective actions related to the repeated occurrences involving the spread of contaminated debris from the trenches (see Activity Report 2/6/2015). Since the corrective actions from a previous causal analysis have not been fully effective in preventing contamination spreads, the contractor is performing a new causal analysis to further evaluate the problem.