DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 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 November 20, 2015

Staff members R. Eul, and S. Seprish were on site to review quality assurance and storage conditions for Waste Treatment Plant material. Staff member B. Boser observed the concurrent DOE and contractor 30% design reviews for the Low Activity Waste Pretreatment System.

618-10 Burial Grounds. The contractor discovered another contamination spread from the burial grounds (see Activity Report 7/17/2015) following a significant high wind event with gusts above 70 miles per hour. Contamination was found downwind of the concreted drum processing area where work was conducted the day before the windstorm. Surveys have determined that the contamination path crosses a public roadway. Surveys continue.

Plutonium Finishing Plant (PFP). Contractor management reviewed the results of a causal analysis that was performed to evaluate adverse trends in radiological and worker injury events (see Activity Report 8/15/2015). The analysis determined that the root cause of the adverse trends was inadequate management review and assessment of risks and consequences associated with change when planning for the current phase of deactivation work activities. The cause analysis team identified a suite of corrective actions to address the root cause, as well as the four contributing causes identified by the cause analysis team.

Last week, there was a fire alarm in 234-5Z leading to an evacuation. The subsequent critique determined that the alarm was related to recent maintenance on a fire main riser and identified a significant weakness in the recently modified accountability process.

Tank Farms. Contractor management approved two root cause analyses (see Activity Report 8/28/2015). One report addressed work integration issues and found that the contractor has failed to maintain an organizational culture that is intolerant of conditions and behaviors that reduce safety or operating margins. They also found that current processes for work scheduling and integration do not incorporate adequate safety and operational configuration control attributes. ORP is evaluating the scope and breadth of these causes with the contractor. The other report addressed a specific lockout/tagout violation and found that the root cause was less than adequate change management resulting in poor control of work interfaces between project and facility operations. The contractor has developed corrective actions to address the above.

The contractor revised the DSA and Functional Requirements Evaluation Document to match their operating procedure for performing independent verification of safety-significant valve positions. A discrepancy between requirements in these documents led to a TSR violation three weeks ago and a restriction on transfer operations until the discrepancy was resolved.

Waste Treatment Plant (WTP). The WTP Startup Joint Test Group met for the first time since September 2013. The purpose of the meeting was to review the startup test index that supports flushing of the fire main system that supports the Laboratory and Low Activity Waste facilities.