DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 10, 2015

TO: S. A. Stokes, Technical Director

FROM: P. Fox and D. Gutowski Hanford Site Representatives

SUBJECT: Hanford Activity Report for the Week Ending July 10, 2015

Plutonium Finishing Plant (PFP). Bioassay evaluations directed due to a potential uptake that occurred when workers disturbed dust in the 242-Z tank room (see Activity Report 6/26/2015) were returned and activity levels were less than detectable. Additionally, the dose calculation errors that played a role in the contractor's initial response to the event were reviewed and the contractor has acted to correct the problem to prevent future occurrences. An extent of condition review did not identify any additional dose calculation problems.

Discussions between the contractor and the vendor for level B protective suits worn by workers in the facility determined that there are no reported boot failures similar to the PFP case (see Activity Report 6/26/2015). The vendor is performing some testing to determine if the failure can be duplicated. Facility management has reminded the work force of the need to perform a thorough inspection of the level B suits before use.

A site rep observed HC-9B glovebox in situ size reduction activities. The work team's performance was well controlled and professional.

Solid Waste Operations Complex (SWOC). RL approved the contractor's recovery plan for the TSR violation on combustible loading at SWOC waste storage buildings (see Activity Report 5/15/2015). Following an analysis by fire protection engineering, RL decided that existing friction mats can remain in the facility, but no additional mats may be introduced. The RL decision is based on a determination that work to remove mats to restore compliance with the existing TSR would create more risk than is introduced by the presence of the existing mats. The contractor will revise the DSA and TSRs to reflect this decision.

Waste Treatment Plant (WTP). The site rep attended the biweekly WTP Technical Discussion meeting. The contractor described a plan to improve performance of the Cathodic Protection System (CPS) which protects safety related underground piping at the site (see Activity Report 10/19/2012). ORP remains concerned regarding existing pipe condition because of previous CPS performance and corroded pipe uncovered during construction activities.

Tank Farms. The contractor is performing core sampling in double-shell tank SY-103. This is a Group A tank so the activity requires additional ignition controls.

242-A Evaporator. The contractor started evaporator campaign EC-02.

Building 324. Two weeks ago, workers in the cask handling area reported a strong odor. The contractor completed analysis of samples from this evolution and discovered a hazardous chemical that had not been accounted for in the work planning. The measured concentration was below exposure limits. The contractor is performing an extent of condition to determine where else they may encounter this chemical.

Office of River Protection. J. Vanderpol passed his final oral board and completed his initial qualifications as a Waste Treatment Plant facility representative.