DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 17, 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 17, 2015

Deputy Technical Director R. Tontodonato was on site to evaluate site rep work performance.

Radiochemical Processing Laboratory. The contractor declared a positive unreviewed safety question following evaluation of the potential inadequacy in the safety analysis related to the safety-significant criticality alarm system (CAS) (see Activity Report 7/3/2015). They determined that the ability of the CAS to detect a criticality inside the High Level Radiochemical Facility (HLRF) hot cells is indeterminate and it cannot be relied upon to detect such an event. The contractor plans to update the supporting analyses and DSA to demonstrate adequate protection from criticality accidents inside the HLRF hot cells.

618-10 Burial Grounds. RL issued a letter to the contractor stating their concern regarding the effectiveness of contractor actions taken to prevent recurrence of recent contamination spreads from the 618-10 burial grounds. RL requested to be informed of actions being taken to improve contamination control during remediation of the 618-10 burial grounds prior to the resumption of concreted drum stabilization activities (see Activity Report 6/26/2015).

Office of River Protection. ORP and DOE HQ held an Integrated Project Team Meeting this week to improve alignment of ORP and DOE HQ on Waste Treatment Plant (WTP) and Tank Farms activities. The meeting included presentations from DOE HQ personnel on topics such as impacts of the 2014 version of DOE-STD-3009, volcanic ashfall impacts on WTP, and their perspective of the Board's issues with WTP and the Tank Farms.

Tank Farms. The contractor is performing the hot operational acceptance test (OAT) for the new exhauster attached to tank T-111 (see Activity Report 3/6/2015). Several findings from the OAT need to be resolved before the exhauster is released for unrestricted operations.

The contractor completed their TSR surveillance of the Waste Accumulator Tank high temperature control system and resumed C-105 retrieval operations.

242-A Evaporator. The evaporator continues reducing waste volume as part of EC-02.

Plutonium Finishing Plant. The site rep observed a Hazard Review Board (HRB) evaluation of a work package that was developed to support entry of personnel into the Plutonium Reclamation Facility canyon to accomplish final cleanup, contamination stabilization, and characterization of the canyon. The HRB identified a number of necessary work package improvements and appropriately withheld approval of the work package pending revision of the work documents.

105 KW Annex. Electrical testing work was stopped when a Field Work Supervisor determined that a subcontract electrician had installed and started a portable generator without using the required startup checklist or lock and tag. The contractor held an effective critique which uncovered weaknesses in the execution of the site electrical safety and lock and tag procedures by the subcontractor and revealed shortcomings in the control of work at the interface between the contractor and subcontractor.