DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 19, 2016

TO: S. A. Stokes, Technical Director

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

SUBJECT: Hanford Activity Report for the Week Ending August 19, 2016

618-10 Burial Grounds. The contractor held a Fact Finding meeting to evaluate last week's smoking drum (see Activity Report 8/12/2016). The timeline of events showed timely response by the Facility Emergency Response Organization and the Fire Department. Further analysis of the limited data regarding the smoking drum led to the conclusion that the drum is most likely a partially filled "Black Uranium Oxide" drum similar to one that started smoking and was extinguished during drum punching earlier this month. The plan is to unbury this drum and process it by shearing it in a grout bath. This is not expected to occur until after the transition of the Burial Grounds from the River Corridor Contractor to the Central Plateau Contractor at the end of the month. The other six drums that were reburied with the smoking drum have been excavated and characterized without incident.

Plutonium Finishing Plant (PFP). The PFP Hazard Review Board (HRB) met to evaluate the work package that will be used to perform demolition of the Plutonium Reclamation Facility (PRF). The package was well presented by the Field Work Supervisor and his team. However, the HRB, the RL Facility Representative, and the RL Radcon subject matter expert identified a significant number of deficiencies resulting in overall rejection of the work package by the HRB. The HRB reconvened following re-planning and comment resolution and approved the package.

A worker cut an energized wire in a panel that was being air gapped for removal. Investigation determined that, contrary to expected practice, the wire used the panel as a pass through and was not terminated inside panel. The wire also did not show up in the facility electrical drawings. Project management held a critique and is evaluating their approach related to electrical isolation of the PRF to support demolition.

Radiochemical Processing Laboratory (RPL). RPL personnel received a shielded cask with a small number of Tritium Producing Burnable Absorber Rods (TPBARs). These were irradiated in a commercial light water reactor and will be analyzed at RPL. The evolution to move the cask into the facility was completed without incident. RPL personnel plan to move the TPBARs from the cask into a hotcell early next week. The tritium contained in this shipment has been added to the RPL Material at Risk (MAR) inventory, which is approaching the tritium MAR limit set in the safety basis.

Tank Farms. The contractor completed a self-assessment of TSR management for the Tank Farms, 242-A Evaporator, and 222-S Laboratory. The preliminary conclusion was that management of TSRs is satisfactory. Many of the observations from the review tied to qualification cards, integration between the tank farms and evaporator, and use of redundant checks and oversight. The final report from the assessment is expected on September 1.

Secretary of Energy Visit. Secretary of Energy Moniz was on site with other DOE officials. His visit included stops at the HAMMER training facility, the Tank Farms, the Waste Treatment Plant, as well as a site-wide employee town hall meeting.