DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 9, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending October 9, 2015

Board member B. Hamilton was onsite with staff member C. Shuffler to visit RL and ORP facilities, observe operations, and meet with senior managers.

Plutonium Finishing Plant (PFP). Late last week, workers discovered that chemical reactions were occurring in waste removed from pan J of the Plutonium Reclamation Facility canyon floor. The reaction appears to be occurring between the waste located in pan J and the glycerin based fixative that the workers are using to control airborne contamination. The reaction is not immediate, but occurs after several days, and was noted by workers in trays of waste that had been set aside to dry before packaging. The contractor opened previously packaged drums containing pan J waste and identified two packages that may have been affected by reactions after packaging. The contractor has terminated work in pan J pending further analysis and development of a recovery plan. They also isolated the pan J waste that was staged in the canyon and restricted the use of glycerin based fixative in the vicinity of pan J waste. Drums that contain pan J waste are being returned to the canyon and a sampling of drums that contain waste from other areas of the canyon floor will be opened to determine if there are any other cases where reactions may be occurring.

Workers separating a duct flange in PFP encountered a dripping liquid. They contained the leakage, isolated the area, and exited. The liquid was not detected prior to starting the work even though the contractor had established measures to identify liquids following a similar previous event (see Activity Report May 22, 2015).

Tank Farms. The contractor installed the first sluicer arm into tank AY-102. The plan is to start sludge retrieval with two standard sluicers and then use two additional extended reach sluicers after retrieval is complete to the limits of standard sluicers.

The contractor issued a revised standing order reducing the scope for supplemental review of work packages (see Activity Report 8/7/2015) due to improvements in work package quality.

The contractor started retrieval from Tank C-111. Retrieval operations were halted due to exhauster issues. A second attempt to start retrieval stopped due to a Hydraulic Power Unit fault.

Waste Treatment Plant (WTP). ORP directed the contractor to evaluate the impacts of incorporating the 2014 revision of DOE-STD-3009 into the WTP contract.

Office of River Protection. An ORP facility representative candidate passed her final oral board. Once her qualification process is complete, ORP will have four facility reps covering all tank farms, the 242-A Evaporator, the Effluent Treatment Facility, and the 222-S Laboratory. There are currently four more candidates in training as part of ORP's effort to return to the desired staffing level of nine qualified facility reps in the Tank Farms Operations Division.