

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 20, 2011

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending May 20, 2011

Board staff members T. Hunt and J. Troan, and outside expert D. Boyd were on-site reviewing the conduct of operations at the Plutonium Finishing Plant.

Tank Farms: The Office of River Protection (ORP) and the contractor's Joint Review Group (JRG) reviewed the plans to absorb the waste that is in the bag around the waste transfer pump that was removed two weeks ago (see Activity Report 5/13/11). The JRG and ORP identified substantial problems with the revised package, such as the implicit assumption that the plastic sleeve around the pump was leak-tight. It is unclear why the issues were not identified prior to the JRG review.

This week, the contractor briefed their workers on the need to completely comply with the site lockout/tagout (LOTO) procedure. This briefing was conducted because last week there were two occasions where tank farm workers did not follow the LOTO procedures, including one where a 480-Vac circuit breaker was locked in the closed (energized) position when the required position was open (deenergized). Fortunately, the field work supervisor noted this error before work commenced. Subsequent to the briefing, the contractor identified another LOTO procedure compliance problem and instituted additional administrative controls. The corrective actions for the recurring occurrence report in August, 2010, related to LOTO failures have not been totally effective.

118-K Burial Ground Remediation: The contractor completed the clean-out of the six silos that contained reactor debris (see Activity Report 4/8/11). Last week, they were able to remove the obstruction in Silo 6 and this week they completed emptying it. They did find some anomalies but did not find an irradiator that could have been in the silos (see Activity Report 1/5/07).

618-11 Burial Ground: The site rep and project management conducted a walkdown of the burial ground and observed the non-intrusive characterization of the vertical pipe units (VPUs). Detector probes are being inserted into pipes adjacent to the VPUs to gather data on the radiological conditions that can be expected during remediation. The work instruction had radiological controls integrated into the steps and were observed being used in the field. The project has completed getting readings from six of the VPUs and the highest readings so far were about 2.4 R/hour read at the probe. The same process was used during the characterization of the 618-10 Burial Ground, but at this burial ground, they are gathering data to a depth of six feet below the bottom of the VPU to get an estimate of the soil contamination.

Plutonium Finishing Plant: The site rep noted that the contractor has implemented significant changes to the radiological controls program since the Richland Operations Office started their extensive review (see Activity Report 2/25/11). In addition, the contractor has assigned new managers, supervisors, and work planners to the program.