

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 25, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending July 25, 2014

D. Gutowski was offsite. Board staff members M. Eskens, P. Fox, and J. Meszaros were onsite providing site rep support.

Plutonium Finishing Plant (PFP). The contractor sent a letter to RL addressing actions they are taking for recurring problems such as contamination spread, airflow reversals, and the implementation of criticality safety requirements. One improvement is linking procedure changes that were implemented as corrective actions to the initiating document so the reason for the change is not lost. Another includes process changes that should result in a more timely replacement of fouled roughing filters in the room ventilation exhaust system.

The site rep, staff, and contractor discussed the procurement, calibration, and use of new germanium detectors for Nondestructive Assay (NDA) of PFP gloveboxes, piping and ducts. The contractor plans to include safety system step-out criteria in a major revision to PFP safety analysis (see the Activity Report dated 6/13/2014) and hopes to eventually use the new NDA data to support, in part, the downgrade of all active safety systems.

River Corridor Project. The contractor held a fact finding after additional contaminated plastic escaped from the 618-10 burial ground (see Activity report 06/06/2014). The four pieces of contaminated plastic were found during a survey of the area outside of the burial ground boundary fence. The survey was conducted in response to a storm with high winds that occurred the previous day and before the contractor could fully implement corrective actions resulting from the previous event. The corrective actions from that event included application of a specialized spray fixative to burial ground areas not under active excavation. The final equipment required to apply the fixative was received the day of the storm. Since the event this week, the contractor completed applying the polymer based fixative to all planned areas. A causal analysis is being performed to determine if additional corrective actions are required.

Waste Encapsulation and Storage Facility. The staff observed the contractor's 30% design review meeting for the WESF Stabilization and Ventilation project (see Activity Report 5/23/2014). The project will replace portions of the K3 ventilation exhaust system with an existing spare ventilation skid and stabilize legacy contamination by grouting the existing K3 filter pit and ducts as well as most of the WESF hot cells.

The site rep observed the work supervisor, workers, and subject matter experts interact well during the workability review of a portion of a work package for entering the canyon and performing pre-job radiological surveys. Worker entries into the canyon, which provides overhead access into the hotcells, are infrequent. After completing the surveys, the contractor plans to remove combustible waste that has accumulated over the years as well as perform a structural evaluation and radiological characterization in support of the K3 ventilation upgrade.

Tank Farms. The contractor stopped retrieving waste from single-shell tanks C-105 and C-111 due to equipment problems. This allowed them to resume retrievals from C-102 and C-107.