

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 27, 2013

TO: S. A. Stokes, Acting Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending September 27, 2013

Deputy Technical Director R. Tontodonato was on-site observing site rep activities. Board staff member R. Rosen was on-site observing a Double Shell Tank Structural and Leak Integrity workshop.

Waste Treatment Plant. The contractor announced that they will develop a Safety Design Strategy (SDS) for the High Level Waste (HLW) Facility. The SDS is intended to be similar to the document defined in DOE Standard 1189, *Integration of Safety into the Design Process*.

The Department of Energy released a framework document defining their proposed approach to begin stabilization of tank waste through direct feed to the Low Activity Waste Facility while working to resolve technical issues with the HLW and Pretreatment facilities.

Plutonium Finishing Plant (PFP). The contractor determined that a small HEPA filter was significantly beyond its qualified life and could not be credited to perform its safety function. They entered the appropriate limiting condition for operation (LCO), which was to terminate all activities in the facility except those associated with maintaining the minimum safety posture. This filter was on the air sample vacuum (ASV) system that is used to collect airborne radioactivity samples in PFP. In order to exit the LCO, the contractor replaced the ASV system with small vacuum pumps at each continuous airborne radiation monitor. The HEPA filter is the same filter associated with a PISA for soot loading last year (see Activity Report 6/8/2012).

Tank Farms. The contractor's parent company completed a review of the implementation of work control processes and concluded that the process was adequately implemented. At the outbrief, the review team identified a number of issues and opportunities for improvement.

The Office of River Protection (ORP) completed an audit of the contractor's quality assurance program. The audit determined that the elements of the program within the review scope were adequately implemented but noted several findings and opportunities for improvement.

The site rep and a staff member walked down test equipment for deep sludge studies at Pacific Northwest National Laboratory (see Activity Report 5/31/2013). The experiments are intended to answer whether there is a change in gas retention properties as sludge depth increases and what kinds of gas releases can occur from deep sludge layers.

242-A Evaporator. ORP approved the contractor Plan of Action for 242-A Evaporator startup.

Waste Encapsulation and Storage Facility. The site rep and staff observed workers perform the annual calibration of a pool cell beta monitor. Workers performed the TSR-required test in a precise manner and followed the procedure step-by-step. However, the complex procedure was categorized as reference use. The site rep discussed the categorization with the work supervisor and facility manager who agreed that the procedure should be upgraded to continuous use.