

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 25, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending September 25, 2015

P. Fox was offsite this week. D. Cleaves was onsite providing site rep support. B. Boser and R. Kazban were onsite to observe the Project Peer Review for the Waste Treatment Plant (WTP).

Tank Farms. The Mobile Arm Retrieval System – Vacuum (MARS-V) in tank C-105 had a failure during retrieval operations. Operators observed a waste spray in the tank near the MARS end effector. They rapidly shut down retrieval operations. Subsequent investigation revealed a failure in the slurry supply hose connecting from the MARS arm to the end effector. The investigation also identified significant wear, but no failures, of other hoses in the MARS-V. The contractor is evaluating repair options.

Plutonium Finishing Plant (PFP). Alpha contamination was found on a radiological survey instrument from PFP at the Instrument Calibration Shop. The instrument had been surveyed out at PFP and the contamination was in a location included in the release survey process.

Sludge Retrieval Project (SRP). A site rep and staff member observed worker familiarization activities using cold mock-ups of SRP equipment at the Maintenance and Storage Facility (MASF). The SRP is bringing work teams through MASF for hands-on practice performing draft processes and procedures. Lessons learned from this activity will be used to refine and optimize the final procedures and will feed into a formal training and qualification program prior to the commencement of operations.

Central Plateau Contractor. The contractor held a safety stand down for D&D work at ancillary facilities due to several recent incidents including several related to procedural compliance. The most recent event was a small spread of radioactively contaminated biological materials at a facility in the 100-H area during preparations for final clean demolition.

618-10 Burial Grounds. RL approved a new revision of the DSA for 618-10 that includes two new SACs and will authorize processing and disposal of waste/soil mixtures from Vertical Pipe Units that meet ERDF disposal requirements (see Activity Report 1/9/2015).

300 Area. The contractor removed the contaminated material discovered in a non-radiological burial ground and identified its probable source (see Activity Report 9/18/2015). They are currently surveying every bucket of material prior to shipping as opposed to the twice daily surveys performed prior to this discovery. Due to new sample analyses of material from this burial ground, the contractor plans to transition it to a radiological waste site.

242-A Evaporator. The contractor completed campaign EC-03 without incident. The campaign processed approximately 860,000 gallons of waste and removed about 375,000 gallons of water.

Office of River Protection. Two new WTP facility reps recently completed their qualifications.