

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 29, 2016

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 29, 2016

Staff members A. Battaglia, D. Cleaves, and L. Lin were on site to observe the emergency preparedness exercise at the Plutonium Finishing Plant (PFP). In addition to fulfilling site requirements, the scenario supported the contractor's upcoming readiness assessment.

Plutonium Finishing Plant. A worker exceeded the local administrative control limit for extremity exposure, but remained below 35% of DOE's extremity dose limit. The worker's finger ring dosimetry was being read quarterly and dose was tracking as expected during the first three quarters of 2015. The individual's dose more than doubled in the last quarter. The worker handled high dose rate Plutonium Reclamation Facility canyon floor pan residue and other waste during this time period. The change in dose rate resulting from this activity was not recognized as a factor in work assignment. Infrequent reading of extremity dosimeters and a lack of understanding regarding the estimates provided in daily dose reports exacerbated the problem.

A worker called for a stop work for most activity within the facility because of safety concerns. Management resolved the concerns by verifying recent implementation of compensatory measures that were put into place to increase safety at PFP, including additional oversight and task specificity for asbestos abatement and product transfer line work activities.

Tank Farms. Last week, a worker performing hand digging in AX farm fell into an abandoned septic tank when the ground collapsed beneath him. The work scope was to precisely locate said tank to prepare for demolition. The worker was immersed to just above his waist in liquid and was rapidly extracted by other members of the work crew with no additional collapse. The workers had no radiological contamination. The work package for this job did not include the potential hazard of a tank collapse and did not require an emergency shower, which was available and used during this incident. The contractor is evaluating other areas throughout the tank farms with potential for collapse.

Waste Treatment Plant. ORP modified direction to the contractor for startup of the Laboratory (Lab) facility (see Activity Report 10/02/2015). In the revised direction, the contractor is instructed to startup the Lab as a radiological facility after conducting a readiness assessment. The contractor will continue development of the PDSA to support operation as a hazard category (HC) 3 facility. The PDSA will be maintained and the facility will eventually transition to a HC 3 status after obtaining approval of the DSA and conducting an Operational Readiness Review.

ORP notified the contractor that they will perform an audit of the adequacy, implementation, and effectiveness of the contractor's quality assurance (QA) program. This is the first comprehensive audit of the contractor's QA program since significant issues were identified in 2013 (see Activity Report 11/29/2013). ORP temporarily curtailed comprehensive QA programmatic audits while the contractor implemented corrective actions to resolve the issues. However, targeted QA audits and field surveillances continued throughout this period.