

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 6, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending July 6, 2018

PUREX Plant: The resident inspectors met with the contractor project lead to check the worksite and discuss the status of ongoing preparations for stabilization of storage tunnel two (see 1/19/2018 report). The project team's engineers and planners have developed detailed plans for the grouting work. Additionally, the contractor work force has completed visual inspection and radiological characterization of the tunnel and has made substantial progress toward completion of the road and utility work necessary to support the project. The contractor anticipates starting the placement of grout in the tunnel late this fiscal year.

During a recent maintenance evolution, the ventilation system was restarted without ensuring that appropriate filter media was installed in the radiological emissions monitoring system. Facility radiological control (radcon) personnel noted the discrepancy and properly restored the systems the next day. A critique was held on the event but was suspended due to the unavailability of key players. Contractor management held a follow-up meeting after personal statements were taken from the maintenance team to solidify the corrective actions necessary to prevent reoccurrence. The primary cause identified was a missing step in the procedure to ensure the operability of the emissions monitoring system prior to ventilation restart. A field change to this procedure has been initiated and several additional corrective actions, including an extent of condition of all stack ventilation procedures, were assigned to the responsible managers. A similar procedural issue was noted during another recent event where workers entered the REDOX Plant silo without implementing appropriate controls (see 5/11/2018 report).

Effluent Treatment Facility: A resident inspector walked down the Liquid Effluent Retention Facility with the contractor project radcon manager and DOE-ORP Facility Representative. They observed ongoing work to replace the cover on basin 42. The contractor recently adjusted the contamination control practices associated with this activity. Rather than continuously wetting contaminated surfaces on the side of the basin, workers now decontaminate the exposed surfaces to a relatively low level as the cover is removed. This alternative reduces water usage and the need for ongoing removal of contaminated water. In addition, it reduces the slip hazard on the basin sides and the need for workers to use water resistant personal protective equipment (PPE). This lowers the heat stress hazard for the workers as temperatures rise throughout the summer months. Based on survey data, the contractor has also reduced the size of the contamination area. However, they have placed a three foot screen barrier around the worksite to further mitigate the potential for the spread of windblown contamination. So far, this method has been effective in preventing contamination spreads outside of the work boundaries. The contractor intends to implement more conservative controls when they remove the portion of the cover that encloses the wetter and more contaminated basin bottom.

Tank Farms: An unattended forklift in C-Farm rolled nearly 200 feet down a hill and came to a rest on top of tank C-111. No equipment was damaged. The contractor is performing an event investigation to identify causes and corrective actions to prevent recurrence.