

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 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 March 15, 2013

Waste Treatment Plant. The contractor resumed the hazards analysis for the Low Activity Waste (LAW) melter system. They are using a Hazards and Operability study (HAZOP) due to the higher complexity of this system compared to others in LAW. The contractor ended their operational pause (see Activity Report 11/9/2012) in mid-December and has been re-performing hazards analyses for the LAW and Laboratory facilities since January.

Plutonium Finishing Plant. Last Friday, the contractor identified that workers had relocated wood scaffolding materials into a pile that was larger than that allowed by Technical Safety Requirements and entered the appropriate Limiting Condition for Operation (LCO). The contractor took quick action to resolve the problem by moving some of the material into a pile 10 feet away, which allowed them to exit the LCO. A similar event occurred shortly after the control was upgraded to a Specific Administrative Control (see activity report 2/15/13, 2/22/13), but some corrective actions to prevent recurrence, including removing excess wood from the facility and reinforcing training on this SAC were not completed yet. The contractor directed that future scaffolding should be built using metal planking unless exempted by senior managers.

The contractor believes they are nearing completion of repairs to the bridge crane for the Plutonium Reclamation Facility canyon. They are repairing the hoist that failed when the electric brake malfunctioned (see Activity Report 3/1/13). They believe these repairs should be sufficient to keep the crane and hoist operating for the next few years.

Tank Farms. The contractor implemented the Justification for Continued Operations that applies to gas release events in deep sludge layers. This clears the administrative hold that prohibits retrievals into double-shell tanks that result in sludge levels greater than 170" (see Activity Report 3/1/2013).

The contractor completed their system health evaluation for the performance of the double-shell tank ventilation systems during the last quarter of 2012. Their conclusion was that the systems met their goals and showed an improving trend from previous assessments. During this evaluation period, the contractor was making upgrades related to the eventual upgrade of the systems to Safety-Significant (see Activity Report 2/22/2013). Potential issues impacting the functionality of the ventilation systems include maintaining inlet operability during cold weather, corrosion degradation of some sections of outlet ducting, and reliability of the site electrical distribution systems.

100K Area. An inadequate pre-job brief resulted in a worker transporting two radioactive check sources from the calibration facility in the 300 Area to the 100K Area without having the required transport documentation. Another missed opportunity to prevent this error was when the worker was asked if he had the required documentation when taking possession of the sources, but did not stop to call his supervisor for clarification. The contractor also identified weaknesses in the procedure associated with transportation of sources. This is another example of ongoing problems with the conduct of operations at the 100K Area.