

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 13, 2015

**TO:** S. A. Stokes, Technical Director  
**FROM:** P. Fox and D. Gutowski Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending November 13, 2015

**Plutonium Finishing Plant (PFP).** While performing in-process personal protective equipment peer checks during HA-9A downsizing activities, a Radiological Control Technician identified a hole in the Level B protective suit worn by a worker. The worker egressed using normal procedures. No contamination was found inside the suit. Frequent peer checking is part of the suite of controls that the contractor has implemented to reduce the frequency of personnel contamination events involving workers performing high hazard work in Level B suits.

The contractor completed the causal analysis related to adverse trends in radiological and worker injury events (see Activity Report 8/15/2015) and the causal analysis team presented the results to the facility Corrective Action Review Board. The results of the causal analysis and proposed corrective actions will be presented to the Executive Safety Review Board next week.

**Site Wide Safety Programs.** The site rep attended a critique that was conducted to understand a stop work event that occurred when a worker determined that a lockout/tagout boundary was insufficient. The critique uncovered deficiencies including poor worker understanding of lockout/tagout procedure compliance, inadequate independent technical review of the tagout boundary, and an inadequate process for evaluating hazard controls for low energy liquids that may contain hazardous constituents. The facility representative covering the critique engaged facility management following the critique to ensure the above issues are addressed.

**Tank Farms.** The contractor added approximately 15,000 gallons of caustic to tank C-111 to improve their ability to retrieve the waste. They intend to resume tank C-111 retrieval operations next week after confirming that C-111 pump hydraulic power unit fluid leaks (see Activity Report 10/16/2015) are within operation limits. Initially, caustic will be recirculated to loosen remaining hardened waste.

Last week, individuals from ORP that were involved in oversight of AP-102 mixer pump removal (see Activity report 10/23/2015) met to collect lessons learned. This week, ORP tank farm managers met with contractor managers to discuss lessons collected by the contractor. ORP's intent is to implement appropriate process improvements from these lessons ahead of any upcoming evolutions involving the removal of long length equipment from tanks.

**Waste Treatment Plant.** ORP and the contractor met to discuss safety classification of the Low Activity Waste (LAW) facility C5V system. The system provides defense in depth for accidents associated with the LAW off gas system. The purpose of ongoing discussions is to determine whether the system should be classified safety significant and, if so, the actions necessary to ensure that the system performance adequately supports identified functional requirements.

ORP qualified an additional facility representative. The new facility representative will provide coverage for the WTP Laboratory and Balance of Facilities areas.