

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 24, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 24, 2014

Plutonium Finishing Plant (PFP). The contractor is continuing efforts to resolve recent problems with the failure of workers to comply with technical work documents as written (see Activity Report 1/17/2014). Following last week's safety pause, work teams reviewed their packages to identify errors, omissions, and ambiguities that were subsequently corrected. The site rep also reviewed management oversight program reports covering the latter part of 2013 and observed that few noted problems with procedure compliance. This is similar to an issue noted by the Board's staff when it reviewed contractor oversight reports at WESF in 2011.

The site rep observed a work planning walkdown for the final cleanout and removal of the six Miscellaneous Treatment gloveboxes in the Plutonium Reclamation Facility. These gloveboxes will be significantly more challenging than other gloveboxes at PFP because the large gloveboxes are made from thicker sheets of steel, are on the fourth floor of the facility, and are welded together rather than just bolted. Unless the gloveboxes can be size reduced in place, one or more of these gloveboxes may need to be treated as high mass gloveboxes (HMGs). They were not identified in the list of HMGs that was recently approved by the Richland Operations Office (see Activity Report 12/13/2013). The site rep noted that the walkdown team had the appropriate personnel involved except for a work planner.

Tank Farms. The site rep discussed plans to perform sidewall coring of single-shell tank A-106 with contractor personnel. The purpose of this activity is to obtain data regarding the condition of the concrete shell of the tank which has experienced both the highest peak temperature and the longest period of time at elevated temperatures. The last time sidewall coring was performed was for tank SX-115 in 1981. The contractor has completed most of the preparatory field work necessary to initiate the coring and performed cold testing of the coring system in 2011.

The site rep observed tall column testing at the Cold Test Facility supporting deep sludge gas retention studies (see Activity Report 9/27/2013). Initial observations show that crack formation and gas transport continue to the bottom of the column of simulated sludge.

Waste Encapsulation and Storage Facility (WESF). The site rep observed contractor personnel perform a workability review of a work package and related procedures that will be used to modify equipment in one of the WESF hot cells. The work will require a rare manned entry into the hot cell. They completed a detailed desktop review of the documents before the walkdown and identified a number of minor changes that were necessary to ensure the work could be performed as written. During the actual walkdown, a worker read each step to ensure that the work could be performed as written. The contractor expects the changes to be quickly implemented and the job will be performed next week.

618-10 Burial Ground. The site rep met with the facility manager to discuss planned work practice changes intended to prevent future cases of material in debris drums igniting (see Activity Report 1/17/2014). Specifically, the contractor plans to size reduce the debris drums in a bed of grout and suspects that this will prevent ignition of any pyrophoric material.