

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 15, 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 15, 2016

Plutonium Finishing Plant (PFP). The contractor conducted an emergency drill to support their preparations for transitioning into the demolition phase of the project. The transition will result in substantial changes in work activities and the work force. The scenario, which included a dropped glovebox external to the facility, challenged the current practices used by the contractor and demonstrated that additional training is required for recently assigned workers. The contractor is using lessons learned from the drill to focus additional work force training and will run another drill next week to validate the effectiveness of that training.

The contractor completed a major milestone that supports demolition and substantially reduced the remaining hazard in the Plutonium Reclamation Facility by grouting the canyon floor.

222-S Laboratory. The site rep observed an evaluated field drill at the Lab. The scenario was a fire starting in a change room with impacts to an adjacent room containing hazardous chemicals. The entire facility did not participate in the drill, only the Facility Emergency Response Organization and a limited number of workers. The Emergency Operations Center, Patrol Operations Center, and Fire Department also participated.

Tank Farms. The site rep observed leak testing for safety-significant components in AP and AY farms that will support AY-102 retrieval and associated transfers. Last week, one jumper failed a leak test. Investigation found a retention ring that had not been fully tightened. The leak test this week was successful. The site rep notes that the pre-job briefing for the evolution was thorough and highly interactive.

Two of the three level detectors in the annulus of Tank AN-101 exceeded their alarm value (0.25”) last Friday. An investigation over the weekend found no radiological or visual evidence of a leak. The readings on these detectors indicated a rapid increase to over 1” on one unit and over 0.5” on the other. The peaks were followed by a slower decay back to baseline readings. The contractor is attempting to determine what could have caused this type of rapid increase.

Waste Treatment Plant (WTP). The Performance Improvement Review Board met to review the results of the final effectiveness review performed to support closure of key issues that caused previous misalignments between the design and the safety basis for WTP. The contractor’s review identified three issues and ten opportunities for improvement but determined that the corrective actions are effective and are preventing recurrence of unmanaged facility design misalignments with the PDSAs. Additionally, the review determined that the current project schedule provides adequate integration to help prevent future misalignments.

100K West Area. The contractor is completing preparatory work for installation of new lids on the engineered sludge containers that are located in the K-west basin (see Activity Reports 11/6/2015 and 12/11/2015). The first of six containers will be opened early next week.