

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 28, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending February 28, 2014

Board staff members R. Kazban, P. Meyer, and A. Poloski were onsite to attend the Single High Solids Vessel Design Summit. The meeting evaluated the potential of using standardized vessel types for the Pretreatment Facility of the Waste Treatment Plant.

Waste Treatment Plant. ORP initiated a design and operability review for the Low Activity Waste Facility (LAW). The review team is also supporting the resolution of issues identified during the High Level Waste Facility review (see Activity Report 12/20/2013).

ORP requested that the contractor develop two new contract modification proposals. One covers completion of the LAW, Balance of Facilities, and Analytical Laboratory work scope through hot commissioning. The other is for initial planning and design to support direct feed of LAW.

Tank Farms. The Office of River Protection (ORP) approved an extension to the Justification for Continued Operations (JCO) that authorizes deeper sludge layers in double-shell tanks AN-101 and AN-106 (see Activity Report 3/1/2013). In their approval letter, ORP directed that the JCO expire no later than August 10, 2014 with the expectation that the ongoing deep sludge research efforts will support a safety basis amendment prior to that date.

Plutonium Finishing Plant (PFP). A criticality alarm detector module, part of the safety-significant criticality alarm system, in the Plutonium Reclamation Facility (PRF) failed and the contractor entered the appropriate Limiting Condition of Operation (LCO). The contractor concluded that the system was still operational because there were still two other operational detectors capable of detecting an unsafe condition and actuating the appropriate alarm. The contractor replaced the detector module, successfully tested the system, and exited the LCO.

The contractor discovered that someone had removed a criticality alarm horn from a former office area without authorization. They have not determined who removed the horn or when it was removed but know that it was in place six months ago. The contractor reported to the site rep that the removal of the horn did not degrade the rest of the system.

Emergency Preparedness. Richland Operations Office (RL) and Mission Support Contractor personnel briefed the site rep on proposed staffing level changes in the Emergency Operations Center (EOC). They plan to reduce EOC staffing by more than a dozen persons by eliminating redundant duties, allowing contractors to perform some tasks now assigned to federal employees, and only requiring some subject matter experts when they are needed for specific accident scenarios. The impact of these changes will be evaluated during the annual field exercise.

Waste Encapsulation and Storage Facility. The contractor entered a hot cell to replace defective lights. Entries into the hot cell are infrequent, and the work was performed in a controlled manner. The site rep provided the RL facility representative and the contractor several suggestions for improving the procedure used for controlling the entry as well as the procedure used to revise Radioactive Waste Permits.