

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 1, 2017

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending September 1, 2017

D. Gutowski was off site providing support at Los Alamos National Laboratory.

Plutonium Finishing Plant (PFP). The contractor and RL performed final walk downs of the 234-5Z facility. The facility has been transitioned from the pre-demolition phase to the demolition phase.

RL has notified the Washington State Department of Ecology and the U.S. Environmental Protection Agency that they will not meet the Tri-Party Agreement milestone to have PFP demolished to slab-on-grade by September 30, 2017. The most recent delay is primarily the result of a need to resolve recent concerns regarding contamination spreads during demolition. Since significant progress has been made on the demolition effort, and because work is expected to complete later this year or early next year, RL is not proposing to renegotiate the milestone.

A substantial leak occurred on the fire main system after excavating a section of the system to support mechanical isolation of the 234-5Z facility. The leak did not result in a contamination spread. However, as a result of this event, the fire main system has been taken out of service. Fire response plans for the facility have been modified to reflect the changed status and the contractor is establishing alternative water supplies to support demolition contamination control.

242-A Evaporator. A loss of vacuum signal on the evaporator system resulted in a safety trip and subsequent dump of the vessel contents back to the tank farm when an air purge could not be established on the vessel. The apparent cause of the trip is a failed card in the control system. An engineering evaluation determined that the safety system correctly performed its function and is operable. The contractor will restart the campaign after resolving the control system and air purge problems.

PUREX Plant. The contractor performed a dress rehearsal mockup for placement of the boxes that will be used to provide grout pipe and monitoring equipment access to Storage Tunnel 1 and a mockup for placement of grout into the tunnel. The setup for the activity was an accurate portrayal of the conditions at the site and the mockup was performed formally. The demonstration went smoothly and the methods appear to be adequate to safely support the tunnel grouting activity. However, the contractor still needs to finalize the grout recipe, and establish a grout lift plan and a radiological monitoring plan.

The contractor Hazard Review Board approved the work package for bulk soil removal at the subsidence fill location on Storage Tunnel 1 (see activity report 8/18/2017). The contractor mobilized to perform the soil removal and is expected to complete the work early next week.

Tank Farms. The contractor paused C-105 retrieval to add caustic to the tank. The caustic will be recirculated to soften remaining waste. Retrieval will resume after the recirculation period.