

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2013

TO: S. A. Stokes, Acting Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending June 14, 2013

R. Quirk was off site this week.

Site Infrastructure. The contractor repaired the failed 24-inch raw water line, which is one of two that supplies 200 West Area (see Activity Report 6/7/2013). The visual inspection of several hundred feet of pipe adjacent to the failed pipe section showed some areas of spalling downstream of the failure. The failed section and additional piping upstream and downstream were removed and replaced. The new joints and pipe sections have been leak tested and the system has been returned to service.

Environmental Restoration Disposal Facility (ERDF). An encapsulated waste container at ERDF was damaged by a bulldozer. The container originated in 300 Area and was internally grouted then coated with polyurea prior to placement at ERDF. This container and others like it are the first in this configuration received at ERDF. They were intended to be placed and covered with fill but not immediately compacted. These instructions were not adequately communicated to the worker who attempted to compact the fill over these containers with a bulldozer. Upon noticing an uncovered container, the worker stopped and reported the incident. The polyurea coating was damaged by the bulldozer, but the grouted container appears sound. Notifications to radiological control personnel were delayed, but radiological surveys detected no contamination spread beyond posted boundaries. The contractor is evaluating the container condition and plans to recoat it prior to final disposal.

Tank Farms. The contractor performed a leak test of components in the double-shell tank (DST) AN-106 pump pit (see Activity Report 5/31/2013). They determined that there were leaks into the pit coming from the braided anti-siphon lines which may have been damaged during installation. The contractor plans to replace the two anti-siphon lines with a new design.

The site rep observed field work for waste sampling of DST AY-101. The tank was sampled to ensure the supernate remains compliant with chemistry control limits. Additional analyses are planned to support long term planning for waste feed delivery to the Waste Treatment Plant.

Waste Treatment Plant (WTP). The site rep observed a safety basis training session attended by contractor management. The session used one control from the Low Activity Waste facility and walked through the process of control definition and development as well as documentation requirements in key sections of a Documented Safety Analysis and Technical Safety Requirements. Since many of the WTP senior managers came from a background in commercial reactors, open discussion during the training focused on the differences between how safety analyses are developed and used in DOE facilities versus in the commercial sector.

PUREX Plant. During routine radiological surveys adjacent to PUREX, the contractor discovered a concrete post with significant levels of fixed contamination. The post has been added to the fixed contamination database and an adjacent contamination area has been expanded to encompass it.