

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 3, 2007

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending August 3, 2007

Tank Farms: The contractor continues to perform periodic surveys both inside and around the waste spill above single-shell tank S-102 (see Hanford Activity Report 7/27/07). A recovery plan was issued to decontaminate or dispose of contaminated equipment. The plan identifies seven phases of activity: 1) maintain control of contamination (current phase); 2) reduction of the source term by the removal of the failed dilution water hose and installation of necessary shielding; 3) removal of contaminated above-ground equipment; 4) excavation and removal of contaminated soil; 5) decontamination or removal of other equipment; 6) backfill with clean soil; and 7) final condition assessment. In addition, the contractor is developing plans to perform forensics on the failed hose to ensure that they understand the failure mechanism.

A potential inadequacy in the safety analysis (PISA) was declared because backflow of waste up the dilution hose was not considered in the safety basis. The contractor instituted a requirement for engineering to verify that all potential paths that the waste may enter are consistent with the documented safety analysis before the waste transfer pumps are operated.

River Corridor Closure Project: The site rep met with project management to review corrective actions from the discovery of missed fire system testing at buildings 324 and 327 (see Hanford Activity Report 7/13/07). The Hanford Fire Department (HFD) has been able to complete all delinquent testing and the project has developed a tracking system to verify compliance. In addition, quarterly and yearly assessments of the program are being planned. RL has identified other nuclear facilities with similar deficiencies and the HFD is working to establish compliance. Although HFD schedules and conducts the fire system testing for each facility, the responsibility for ensuring testing is completed at the required frequency resides with facility managers.

During disassembly of an abandoned tank in the 100 D Area, smoke was seen emanating from a pile of debris near the work area. The immediate actions taken by the workforce appeared adequate and included making notifications, calling HFD, and backing away from the area, but the response actions are not formally documented in a procedure. Without a formal procedure, the performance of all response actions for various anticipated events cannot be assured.

The site rep observed contractor training of the revisions to the Integrated Work Control Program. The training appeared adequate and the revised program will be implemented August 13, 2007.

Solid Waste and Disposal Project: The project has responded to a question raised by the site rep on the new drum venting station in the Central Waste Complex (see Hanford Activity Report 6/29/07). The project determined that an explosive-proof HEPA vacuum is required during drum venting.