

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 31, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending March 31, 2006

River Corridor Closure Project: A potential inadequacy of the safety analysis (PISA) was declared for the Documented Safety Analysis (DSA) for the 118-K-1 Solid Waste Burial Ground. The PISA was declared because additional characterization work of the site revealed significantly higher levels of soil contamination and accidental worker exposures could be significantly greater than those addressed in the DSA. Remediation work at 118-K-1 has not started because the authorization to start has not yet been granted by DOE. The readiness assessment scheduled to commence last week was delayed to allow the subcontractor more preparation time.

Tank Farms: The site rep observed the continued operations of the 242-A Evaporator. This cold run is being performed to maintain operator proficiency and provide training. It was noted that the formality of communications and the control of trainees by qualified personnel were generally adequate. A problem was identified during one of the planned evolutions. During the pumping of process condensate to the liquid effluent retention facility (LERF), personnel observed that no flow was occurring. Although operators in LERF had aligned valves for receipt of the evaporator process condensate earlier in the week, they realigned the system to perform other work and did not inform the operators in 242-A. This situation demonstrates a weakness in the interface between the two facilities, which are operated by different contractors for different DOE field offices.

The first transfer between double-shell tank farms in more than a year was successfully accomplished this week when approximately 200,000 gallons were transferred from AN-106 to AW-106. This transfer was the first use of the new waste transfer piping in the 200 East area.

Waste Treatment and Immobilization Plant (WTP): The re-analysis using the revised ground motion of the Waste Receipt Vessels in the Pretreatment Facility revealed a number of areas that had stresses greater than allowable values. Tank internal piping and the tank skirt were noted as areas that had over-stressed conditions, which were discussed during the ongoing Army Corps of Engineers review of the WTP seismic design. The site rep requested a briefing from the contractor on the process being used to re-evaluate vessels for the new ground motion as well as the particular deficiencies noted with Waste Receipt Vessels.

Facility Representative Qualification Program: The site rep observed oral boards performed by the Office of River Protection and the Richland Field Office to complete the qualifications of two facility representatives. The review boards included an appropriate mix of qualified facility representatives and senior management. There were no significant deficiencies noted.