

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 16, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending June 16, 2006

Outside expert (OE) D. Boyd was on site assisting in the review of conduct of operations in the tank farms.

Tank Farms: The site reps and OE observed various activities in the tank farms this week, including the repair of a failed tank level detector, single-shell tank waste retrieval, and replacement of a leaking caustic addition line. The observed work was generally conducted safely with the appropriate level of formality, and worker feedback during the pre-job briefings was good. Areas noted for improvement included control and thoroughness of a pre-job briefing, the processing of alarms, and the creation of a formal conduct of operations improvement program.

A leak was discovered this week in a hose used for adding caustic to S-112 (see site rep activity report 6/2/06). The hose had apparently leaked at a cam-lock fitting during the caustic add two weeks ago. The hose was wrapped in two layers of thin plastic sheeting, which was intended to knock down potential spray leaks. Several feet of the outer plastic sheet appeared to have been degraded by the caustic material. CH2M Hill Hanford Group operators and managers responded appropriately to this discovery, including postponing the planned addition of more caustic to the tank and development of a recovery plan.

The site rep and OE attended a fact-finding for a missed safe-to-work check during activities to remove a jumper from a pump pit. The lock-out/tag-out was in place for the removal of the heat trace and a zero energy check had been performed, but the final check at the junction box was missed. Inaccurate shift turnover and/or incomplete pre-job briefing were causal factors. The site rep noted weaknesses in the formality of the fact-finding (time line not written, no work package present) but the salient facts were captured in the preliminary event investigation report.

Environmental Restoration Disposal Facility (ERDF): A waste container slid off the transportation truck while it was being loaded at the drop-off yard at ERDF. The waste-filled container, similar in size to a large construction dumpster, slid off the truck when the truck's hoist cable parted. No injuries or contamination release occurred. The truck had been inspected and the "run time" for the cable was being monitored. The exact cause of the cable failure is being investigated to determine appropriate corrective actions.

Annual Site-wide Emergency Exercise: The site conducted the annual field exercise which involved a bomb threat, a subsequent explosion with contamination spread off-site, and a hostage situation. The site reps observed actions in the field and in the Emergency Operations Center. There was poor adherence to and enforcement of the take-cover requirement in the 300 Area.