

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 11, 2008

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending January 11, 2008

Board Members J. Bader, L. Brown, and P. Winokur and staff members D. Ogg, J. Troan, and S. Lewis were at the site to be briefed on the operations at DOE's Office of River Protection (ORP) and the Richland Operations Office (RL). The Board Members and staff held discussions with DOE and their contractors on the following topics:

- Proposed organizational changes at ORP, RL, and their contractors;
- S-102 spill recovery/corrective actions, waste retrievals, supplemental treatment, tank integrity, and interim pretreatment system at the Tank Farms;
- Design, testing, and quality control of the Waste Treatment Plant
- Sludge treatment and moving the remaining K Basin spent nuclear fuel to dry, interim storage;
- Deinventory and decontamination at the Plutonium Finishing Plant.

The Board and staff also performed walkdowns of the Analytical Laboratory, Pretreatment, High Level Waste, and Low Activity Waste facilities at the Waste Treatment Plant; K West Basin; Cold Vacuum Drying Facility; and the Canister Storage Building.

River Corridor Closure Project: A waste container was shipped across the site with contact dose rates exceeding that allowed in the Hanford Transportation Safety Document. The container in question had a surface dose reading of 500 mrem/hr when surveyed upon arrival at the Environmental Restoration Disposal Facility. The contact dose limit is 200 mrem/hr. Surveys prior to shipping the container from the 100 D/DR field remediation site were 7 mrem/hr, but it is believed that a high radiation source shifted position during transit creating the high on-contact dose. The contractor generated a management concern occurrence report with a significance category of recurring due to identified specific programmatic weaknesses within the project waste handling, shipping, and packaging activities.

Tank Farms: Despite the increased management focus to improve conduct of operations (con ops) subsequent to the waste spill at S-102, a number of con ops issues were identified this week, including the failure to perform an adequate hazardous energy check at the 242-A evaporator, and less than adequate communications during waste recirculation in a double-shell tank.

The work package to remove the soil contaminated by the spill of waste at S-102 was approved. Preparatory work, such as installing steel plates over the waste to reduce the area radiation levels, was completed, but soil removal was delayed due to adverse weather conditions. Removal of the contaminated soil should start within days.