

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 4, 2008

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending January 4, 2008

R. Quirk was out of the office this week.

Tank Farms: The Office of River Protection (ORP) completed an assessment of the events associated with the inadvertent startup of the slurry recirculating pump (PB-1) at the 242-A Evaporator (see Hanford Activity Report 11/16/07). The purpose of the assessment was to review the contractor's work controls, and practices for maintenance, testing, procurement, and electrical work. The assessment resulted in one concern based on five findings, three findings not related to the concern, and one observation. The concern was that "the contractor's work planning and implementation process for hazard identification and mitigation did not provide adequate protection of workers and facility equipment prior to 242-A Evaporator monitoring and control system (MCS) modifications." The findings supporting this concern include practices and procedures that focused on protecting the workers but lacked rigor in protecting the equipment, and workers did not isolate all the sources of electrical power while working on a cabinet but relied upon voltage-rated plastic sheeting to provide an electrical protection boundary. The contractor and ORP also discussed weaknesses in the lock-out/tag-out program, and that changes are being considered during the creation of the site-wide lock-out/tag-out program. The draft assessment report is expected by February 1, 2008.

River Corridor Closure Project: The site rep met with the contractor to discuss the plans to deactivate and decommission Building 327 (Post-Irradiation Testing Laboratory). The project is currently removing or stabilizing the material at risk, which is largely present in hold-up in the ventilation systems and the shielded hot cells. The plans include removing the ventilation ducts to the hot cells, filling the hot cell liquid drain lines with epoxy resin, cutting the hot cells free from the canyon floor, grouting them, and shipping them to the Environmental Restoration Disposal Facility. The building is a Hazard Category 3 (HC-3) facility but the project has proposed to DOE the following risk reduction activities as criteria to be met before re-categorization to below HC-3: 1) stabilization of the interiors of the hot cells with fixative; 2) removal of the hot cell ventilation up to the primary HEPA filters; 3) stabilization of the building ventilation ducts with fixative; 4) stabilization of the hot cell drain lines; and 5) cleaning, draining, and stabilization of the small fuel storage basin. The contractor is creating a new Final Hazard Categorization (FHC) document that will define the "step-out" criteria to allow the downgrade to below HC-3. The FHC is nearing completion and should be available for review by the end of this month.

K Basins Closure: The contractor declared that final pass vacuuming of sludge from K West Basin has been completed (see Hanford Activity Report 12/28/07).