

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 30, 2010

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending April 30, 2010

Office of River Protection (ORP): DOE-EM directed the incorporation of the following activities into ORP system planning: elimination of the Aluminum Removal Facility from the baseline and incorporation of the Enhanced Waste Receiver Facility into the baseline; preparation of a justification for mission need for supplemental treatment by 9/30/10 and a technology down-select by 9/30/11; and completion of a justification for mission need for secondary waste treatment by 12/31/10. In addition, EM Headquarters directed that the baseline cost for the operation of the Waste Treatment Plant (WTP) to remain constant until completion of thorough cost analysis that includes information derived from closure of all WTP technical issues, and finalization of staffing and commissioning plans.

The site rep observed the final oral board for an ORP facility representative candidate, D. Hoffman. The examination was well-run and the candidate was well-prepared. The candidate passed with only a few weaknesses noted that will require additional study.

TRU Shipments: The site rep attended a critique at the Waste Receiving and Processing facility that was held to investigate why two TRU-pack containers had their loads swapped. Three containers were shipped, but upon delivery it was discovered that loads (standard waste boxes) from the middle container and end container had been switched. When the loads are placed in the TRU-packs, designated individuals are responsible for verifying the number written on the outside of the load matches the number on the container, but this didn't occur on this shipment either through inattention or distraction.

100K Project: An abandoned underground electrical line was displaced during construction excavation in the grounds around the 100K facilities. The excavation was being conducted to allow installation of a new fire water main. The area had been inspected with ground penetrating radar, but it is believed that the significant number of large rocks in the soil hindered the identification of the line that was embedded in concrete. In addition, an inspection of the facility design drawings had been conducted, but the abandoned electrical line spanned between two structures that had been removed and the drawing, which showed the line, had been archived and not readily available. Even though the line was de-energized, abandoned, and posed no immediate hazard, the project appeared to be aggressively pursuing actions to strengthen their ability to find subsurface structures and utilities prior to future excavations.

100N D&D: A worker was injured during D&D work in the 105N Facility when a 7-foot-long section of iron drain pipe fell onto the worker's shoulder, knocking him to the ground. The worker's shoulder was x-rayed and revealed no fractures, but significant bruising was evident. A 3-foot section of this vertical pipe had been removed near the floor to allow internal characterization; therefore, the workers were cutting to free it near the ceiling. Their plan was to cut almost all the way through the 4-inch-diameter pipe and then have two people mechanically agitate the pipe to break it free. The worker was injured when he applied slight movement to the bottom of the pipe, freeing it prematurely before others were ready to help support the weight. Contractor management conducted a fact finding and they are developing corrective actions.