

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 6, 2001

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending April 6, 2001

Tank Farms: While preparing to remove an over ground transfer (OGT) line between tank BY-103 and a transfer line, an estimated 3-5 gallons of contaminated flush solution was released after drilling a small hole in the line to do contamination surveys. About half the solution spilled onto the ground; the rest was captured in a plastic bag. The ground as well as the worker's gloves and shoe covers were highly contaminated (>1 million dpm β - γ) with dose readings of a couple millirad/hr. There were no uptakes or skin contaminations. Mr. Sautman, along with Department of Energy (DOE) personnel, expressed concern with the conduct of the first critique and this activity's work planning. Work planners relied heavily on the fact that the OGT had never been used to transfer waste and that 3 years ago when the OGT was installed, only minor amounts of liquid and contamination were found. However, a subsequent flush allowed water from contaminated parts of the transfer line to drain back through the OGT and get held up in a low point between the sloped ground and a berm. The actual field conditions were not verified. This resulted in workers breaching a contaminated line under a generic radiation work permit with no containment other than the plastic bag. Mr. Sautman also expressed concern that the automated job hazards analysis process used at Hanford is often just a point-a-click exercise that is not augmented with a review of what could go wrong during an activity. (1-C)

Plutonium Finishing Plant (PFP): Mr. Sautman observed dry runs and interviews associated with the standard startup review of the 3013 outer can welder. The team identified pre-start findings associated with the qualification cards of the crew and trainer. PFP modified their corrective actions after Mr. Sautman questioned the adequacy of the initial plan for addressing a trainer who had signed off crew qualification cards when her own technical qualifications were incomplete. In general, the contractor's performance during the review and the conduct of the review itself were good. Unfortunately, hot operations could not begin because construction workers accidentally set off a criticality alarm in the vault building. Mr. Sautman was in PFP when the alarm occurred. PFP's response to the alarm went pretty well. Due to this and recent false fire alarms, PFP is trying to improve how work near safety systems is controlled. (3-A)

DOE Directives Review: The Fluor Hanford (FH) contract required DOE Richland and the contractor to evaluate the current list of directives for value added, efficiency of operations, redundancy with other laws and regulations, and conflict with Fluor Corporate and best commercial practices. The contractor is to provide a request to eliminate selected directives by April 30, 2001. The site reps have been following this effort and observed that directives are being recommended for elimination based on redundancy with regulations that are not yet fully implemented, local directives, or DOE directives that do not properly apply. The site reps will continue to monitor this initiative and the DOE-RL's evaluation of the FH request. (1-A)

cc: Board members