

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 2008

**TO:** T. J. Dwyer, Technical Director

**FROM:** M. P. Duncan and M. T. Sautman, Site Representatives

**SUBJECT:** Savannah River Site Weekly Report for Week Ending October 10, 2008

F. Bamdad, D. Eyler, J. Galaska, R. Kasdorf, C. March, and outside expert L. Miller were at SRS this week to review the Salt Waste Processing Facility and the Plutonium Preparation Project.

**H-Canyon:** A first line manager and operator were disqualified after they violated several requirements for a transfer between two outside facilities tanks. An informal pre-job brief (PJB) was conducted although Shift Orders required a formal one. The Shift Order also specified a certain Radiation Work Permit (RWP) be used because the Radiological Control Organization (RCO) wanted to post the area as a High Contamination/Airborne Radiation Area during the transfer based on contamination surveys. The crew did not discuss any RWPs at the PJB, but looked at the current Contamination Area (CA) posting later on and chose a RWP applicable only to CAs. No one from the RCO was present during the transfer although the RWP required continuous coverage. Performance of the procedure steps was not rigorous and the operator skipped two steps that required them to request the RCO to conduct a survey and approve work to continue. There is no evidence that the workers released any contamination or had an uptake.

**F-Canyon:** A Lockout/Tagout Order for the emergency diesel generator annual preventive maintenance required a notification that 5 fuses were reinstalled during restoration, but did not include a step to actually reinstall them. Because this was not identified during the review of the Order and workers did not wonder why the fuses were still in a lock box during restoration, a breaker later tripped. This caused a loss of power to the canyon supply fans, the canyon fire alarm system, and control room monitoring.

Although transuranic waste drum remediation has been permanently shut down, there were three contamination events involving remediation personnel, who are still working in the crane maintenance areas, which are Radiological Buffer Areas. In the first case, contamination on a worker's shoe was tracked around (up to 3k dpm  $\alpha$ ) the crane maintenance area before being detected by a Personnel Contamination Monitor on the south dock. Although the affected areas were decontaminated and repeatedly surveyed as clean, a speck of contamination (12k dpm  $\alpha$ , 10k dpm  $\beta$ - $\gamma$ ) was detected on a second worker's shoe later that week. During the subsequent surveys of all potentially affected areas, fixed contamination (2k dpm  $\alpha$ , 1k dpm  $\beta$ - $\gamma$ ) was found on the wood floor of an outside trailer used by these workers. Isotopic analyses are being conducted to see if any of these three events are likely connected and a Radiation Control Stand Down was put in place.

**Housekeeping:** Site Rep walkdowns of H Tank Farms and the outside areas of F- and H-Canyons and Tritium found cases where hazard barricades had been improperly set up and posted, contamination area and hot zone signs were on the ground, weeds were growing over equipment in a contamination area, and expired respirators were being stored in an unlocked shack without any controls. Facility management took quick action to fix these observations.

**Facility Representatives:** A facility representative's interim qualification was revoked after the Site Rep determined that his interim qualification card was inconsistent with the DOE standard.

**Tank Farms:** Testing of the Tank 49 high-efficiency particulate air filter, which was affected by a steam reheater coil failure a few weeks ago, determined that it no longer provided 99.5% efficiency.