

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 10, 2007

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending August 10, 2007

**H Area Material Disposition:** Board Staffer, B. Sharpless, observed shift turnovers, pre-job briefings, and various processing, crane, and maintenance activities this week at H-Canyon. The Senior Supervisory Watches continue to identify issues and they are being demanding before grading performance satisfactory. Two unit operations at H-Canyon have been released for normal operation. None of the shifts at H-Canyon and HB-Line have been released yet.

A manager identified that Technical Safety Requirement (TSR) inspections were not being performed on a Circulated Cooling Water nozzle because it was misidentified as a waste nozzle in the control room scroll and not listed in the applicable inspection procedure. All operations involving the 6.1D and 6.4D dissolvers have been suspended since solids were observed during a June inspection of an insert spacer. Recent analysis of the solids found  $\leq 0.25$  wt% uranium.

**Saltstone:** An agreement has been reached relating to the lawsuit concerning the modified permit for the Saltstone Disposal Facility (SDF) (Site Rep weekly 3/23/07). The Saltstone Production Facility (SPF) is currently in an extended outage to modify the flushing capability. The outage is expected to last until late October at which time SPF will be capable of resuming operations.

**Liquid Waste Operations (LWO):** In response to the recent Hanford spill, WSRC reviewed current waste transfer operations. LWO currently utilizes 3 positive displacement pumps (PDP), two of which are at the Saltstone facility and none of which are used for high-level waste transfers. One of the PDPs at SDF operates in both directions and currently has pressure relief valves on both the suction and discharge sides. The other PDP at SPF is the grout pump. The third pump is used for chemical cleaning activities at the 2-H Evaporator and is not capable of reverse operations (e.g., a diaphragm pump). The contractor also reviewed the applicable hazards analysis for treatment of flush water connections and piping over-pressurization. For all transfers within the tank farms (e.g., PDP and centrifugal pumps), an over-pressurization evaluation must be completed per the TSR.

**Tritium Extraction Facility:** In an attempt to correct a fault condition on a damper, the contractor performed a controlled shutdown of the ventilation system. During the restart of the system, faults were received on a supply fan and exhaust fan. As the restart continued, the building differential pressure exceeded atmospheric pressure. The contractor is currently evaluating the control logic used for ventilation restart as well as fan performance.

**Transuranic (TRU) Waste Transportation:** The Site Rep observed a training drill involving a simulated truck crash and breach of two high Plutonium Equivalent Curie drums. Traffic control requires improvement because two trucks from the Mixed Oxide Fuel Fabrication Facility drove through the plume, turned around, and drove back through it again. Other personnel from the convoy also lingered too close to the incident for a long time. The radiological survey data for this draft drill scenario was technically inaccurate, inconsistent, and appeared arbitrary. Additional drills are planned.