

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 13, 2007

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending July 13, 2007

**HB-Line:** Following the swap of room exhaust fans, building pressure increased to the point that a credited interlock activated and shut down the supply fans. A hasp used to prevent the isolation damper from opening was inadvertently closed. The hasp is used during maintenance evolutions to ensure the damper remains closed thus preventing fan rotation. The installation date for the hasp is unknown, but likely dates back more than 15 years. Not only is the hasp not identified on the system drawings or labeled, but its position was not controlled by procedures or rounds. The hasp is believed to have been inadvertently closed during recent construction activities near the damper.

Following shift turnover the incoming crew determined that a tank sparge was not ongoing which contradicted the information presented at turnover. Further investigation revealed that an interlock had not been properly bypassed by the shift technical engineer. A second person verification did not catch the mistake. Shortly after the sparge was initiated, the interlock activated and the sparge was automatically terminated.

**H Area:** In light of the above, a lock out event at H-Canyon, and several other recent events, the contractor decided to enter a deliberate operations posture at H-Canyon and HB-Line and will impose a 3-day work pause next week to concentrate on conduct of operations.

**Tank Farms:** Two 10-gallon samples were pumped out of tank 23 into shipping containers in preparation for offsite analyses. The Facility Radiological Action Team objected to the original plan to fill the interior shipping containers based solely on the expected pump flow rate and time because there was no indication of the actual liquid level. The addition of a camera allowed the operators to monitor the liquid level and safely fill the containers to the desired level.

A review of some maintenance work instructions found that they did not exhibit a fundamental understanding of how to number procedure steps and clearly communicate what was to be performed. For instance, one step included 30+ unnumbered actions to be performed by three organizations, but did not specify which group was responsible for each action and only included one blank to sign off all actions. Another step started numbering individual actions in the middle of the alphabet (i.e., 12.k), then started up again with actions "a - d," and then finished with three more unnumbered actions. There was also little consistency with how they identified warnings and other safety precautions, hold points and special action steps.

**Facility Representative (FR) Program:** A recent staffing analysis concluded that approximately a dozen additional FR's are required to provide adequate facility coverage. DOE management is already starting to address this in their workforce management plans.

**Modular Caustic-Side Solvent Extraction Unit (MCU):** The Site Rep attended the pre-job brief and observed the startup of MCU. Operator proficiency is one of the current focus areas.