

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 2, 2009

**TO:** T. J. Dwyer, Technical Director  
**FROM:** D. L. Burnfield and M. T. Sautman, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending October 2, 2009

**F-Tank Farms:** Although it was stated during a work window review call that a design change was not to be performed during a tank transfer, mechanics were instructed to perform the modification. During the Shift Operations Manager's (SOM) review of the planned work, he did not realize that the modification would isolate a ventilation flow transmitter and he released the work, even though it was not scheduled for that day. When the procedure required the mechanics to have the SOM evaluate entry into any applicable Limiting Condition for Operations (LCO), the mechanics signed off the step assuming their earlier discussion was adequate. After the modification was made, the SOM realized that this isolation had made the required ventilation exhaust flow indicator on a rapid flammable gas generation tank inoperable and the applicable LCO condition was entered.

**F-Canyon:** Transuranic (TRU) waste drum remediation was shut down in 2008 (see 9/19/08 report). The Site Rep observed mock-ups and interviews for the TRU Drum Remediation Restart Functional Area Assessment. While the procedures and equipment are mostly the same, many of the workers are new hires. Although tools are used for handling the waste, the Site Rep has a long-standing concern about the potential for punctures from utility knives, which are used to cut bags and other items (see 8/25/06, 9/22/06, and 10/26/07 reports). Workers are trained to hold the item with a tool and cut away from the hand holding the tool. The Site Rep believes utility scissors or shears would offer more control, but facility personnel stated they have not been able to find a pair with openings that can accommodate all the gloves worn.

**Savannah River Nuclear Solutions:** In response to a negative trend in safety performance, SRNS will start implementing safety improvement compensatory actions and measures next week to improve work planning and control at the activity level and more specifically execution of work. Multi-disciplinary teams will review all work packages meeting defined facility high hazard criteria to ensure: 1) adequate job scope definition, 2) the hazards analysis addresses "what if" scenarios for worst case conditions, 3) field walk downs are performed, 4) the controls address normal and off-normal conditions, and 5) the incorporation of feedback from other areas such as past lessons learned. Each Area Vice President will select authorized individuals to ensure the team's review met expectations. In addition, the authorized individuals will also be responsible for releasing all work packages after ensuring that the workers clearly understand the equipment, hazards, and controls associated with the work. Upon completion of the work, a post job review will be conducted for all high hazard work and for any work selected by the authorizing individual.

**Saltstone:** Following the last plugging event (see 9/18/09 report), workers cleaned out the hopper and implemented corrective actions. However, when operators tried to resume operations and perform post maintenance testing, the hopper plugged up again. At the time of the plugging, only inhibited water from the Clean Catch Batch Tank was being processed. The cause is unknown since the procedure was followed.

**Documented Safety Analyses (DSA):** A positive Unreviewed Safety Question was declared for the Defense Waste Processing Facility because the consequence analysis of a melter overflow event did not address volatilization. A Potential Inadequacy in Safety Analysis was determined at F/H Laboratory because the DSA does not discuss the natural phenomena hazard qualification of the Building 772-F abandoned stack cap, which provides a confinement barrier.