

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 23, 2014

**TO:** S. A. Stokes, Technical Director  
**FROM:** M. T. Sautman and D. L. Burnfield, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending May 23, 2014

**Work Planning and Control:** A staff review of H-Canyon and HB-Line construction services work orders identified several cases where their format did not comply with the SRS Work Planning Guide. For example, hold points and action steps often did not require a printed name, signature and date. Notes and warnings routinely did not use the standard template, included action steps, and/or were split between pages. (Many of these requirements were formalized to address similar site rep observations – see 7/13/07 and 7/20/07 reports). While construction work planners have a desire to highlight hazard controls in their work orders, this needs to be integrated with site procedures to ensure consistency and avoid confusion. Construction services plans to perform an assessment to determine the extent of condition, to define a standard method for integrating hazard controls into work instructions, and reinforce expectations with their work planners. The staff plans to perform a more detailed review of work planning and control in June.

**Defense Waste Processing Facility:** After several weeks without a personnel contamination event (see 2/7/14, 2/14/14, and 2/21/14 reports), an electrician's shoe alarmed a personnel contamination monitor when he exited the crane maintenance area. A subsequent inspection of the work area and his personnel protective equipment found evidence that some curled metal shavings (he had been drilling into stainless steel) were not being captured by the containment bag and were falling to the ground, where one of them punctured his plastic suit boot and rubber overshoe. In order to prevent future shoe and foot punctures, SRR started using a puncture resistant shoe insert that they had previously ordered in response to an earlier puncture. The site rep also discussed with SRR various means to reduce the number of sharp items in the work area.

**Saltstone:** Due to outages, grout line damage, and a grout pump variable frequency drive (VFD) fault, SRR has only operated Saltstone twice since the middle of August 2013. This week SRR resumed grouting operations. In order to avoid future VFD trips when sending grout to the new Saltstone Disposal Units (SDU) 3 and 5, SRR developed a plan to optimize the operating parameters of the grout pump VFD runs using the old SDUs 2A/B (see 12/6/13 and 2/21/14 reports). SRR decided to pause after the third grout run this week when the grout pump stopped operating. Operators safely conducted a manual shutdown. A preliminary investigation indicates that a heat sink fan for the drive may not have been operating.

**HB-Line:** DOE completed field activities for their resumed Readiness Assessment (see 8/30/13 report). While the team identified some findings, the number and significance are much smaller than in previous reviews.

**Fire Department:** The site reps observed the operation of the new ladder truck that SRNS is leasing.

**Modular Caustic Side Solvent Extraction Unit (MCU):** SRR continues to troubleshoot and repair the three issues previously reported (see 5/2/14 and 5/9/14 reports). SRR rebuilt the first extraction contactor and was able to replace the drain hose and clean out the drain hole in the bowl. All rebuilt contactors surrounding the first extraction contactor have been rebuilt and reinstalled. The site rep attended a Facility Operations Safety Committee (FOSC) meeting where Tank Farms personnel discussed the safety implications of preparing MCU for a cell entry to allow sampling the salt solution feed tank for the presence of sodium oxalate. This would indicate that the solids that clogged the contactor had appeared before entering the contactor. Until SRR completes fixing the contactors, further troubleshooting of the wiring problem remains on hold.