

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 11, 2014

**TO:** S. A. Stokes, Technical Director  
**FROM:** D. L. Burnfield, Site Representative  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending April 11, 2014

Mark Sautman was on leave this week.

**235-F:** After a planned entry into Limiting Condition for Operations (LCO) 3.3.2 to perform surveillance calibration, mechanics discovered the E1 (exhaust) fan low vacuum alarm pressure switch calibration was out of range non-conservatively. The mechanics recalibrated the pressure switch and correctly exited the LCO.

**H-Canyon:** While SRNS was conducting an integrated loss of power test for the 221-H diesel, the breaker that should have closed to provide back-up power did not. As a result, power was lost to the instrument air compressors. The system pressure dropped below the set point established to protect the Technical Safety Requirement (TSR) limit. SRNS intends to conduct a review of the conditions that led to this occurrence early next week.

H-Canyon remains in Warm Standby while performing work to support the necessary facility modifications to address the positive Unreviewed Safety Question regarding ground level release (See 12/13/13 report.) This week they began the initial work to seal the recycle vessel ventilation (RVV) tunnel. The work package called for SRNS to remove an access plug to the tunnel to allow construction personnel to construct a concrete form. This form would then allow construction to pour a new concrete plug. SRNS personnel correctly called a timeout when the plug, which was expected to have recessed lifting lugs covered with lead caulking was instead found to have grout encasing the lead. The work package was revised and work was resumed.

**Modular Caustic Side Solvent Extraction Unit (MCU):** SRR personnel attempted to start the facility over the weekend. The unit tripped on both strip effluent accumulator high level and strip solvent heater high temperature. SRR completed several different trouble-shooting efforts during the week including recirculating of the solvent hold tank, backwashing the strip effluent coalescer, and conducting a vibration check of the contactors. Extraction Contactors #1 and # 2 were noted to have high vibration readings. SRR plans to perform an acid flush on these contactors to remove any solids that had built up in the contactors, causing clarified salt solution to be carried over with the solvent and eventually ending up in the strip effluent hold tank.

**Nuclear Materials:** Post maintenance testing of the electric fire pump is on hold while the work package for this testing is under revision. SRNS placed the diesel fire pump in automatic, but remains TSR inoperable.

SRNS personnel correctly called a timeout during voltage checks on the Final Storage Vault HVAC unit when they determined that the vendor supplied electrical disconnect was wired incorrectly. Design engineering is developing a path forward to address the issue.