

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 17, 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 October 17, 2014

**Steam Outage:** The site steam outage began last Friday. As a result, many facilities have shut down processing and are conducting maintenance outages. The outage should continue through late next week.

**K-Area:** SRNS conducted a Readiness Assessment (RA) of the Final Storage Vault and a recent safety basis revision. The site representative observed a dry run and four operations interviews. SRNS repeated some of the other interviews after a facility representative identified that an RA team member used questions written by facility personnel and previously provided to the interviewees. One of the RA findings was that not all the shifts were completing the required minimum four conduct of operations drills a year. The team also had several nuclear safety and training program findings.

**Emergency Preparedness:** The site representative met with DOE senior management and Defense Waste Processing Facility management to discuss his observations with their drill program (see last week's report). He also discussed his observations with the person that will be assessing the extent of condition and significance of any gaps in the drill program for SRNS.

**Savannah River National Laboratory:** Following the declaration of a Potential Inadequacy in the Safety Analysis and a positive Unreviewed Safety Question (USQ) for a trap in the acid drain system that could impact criticality safety, SRNS conducted an extent of condition and identified six additional component types that had not been evaluated (see 9/12 and 9/19/14 weekly reports). SRNS downgraded the USQ to negative this week after a revised nuclear criticality safety evaluation determined that a criticality due to material buildup was not credible for any of these traps, tanks, and other components.

**Recommendation 2012-1, Savannah River Site Building 235-F Safety:** SRNS discovered that ventilation supply system dampers D-1 and D-2 did not properly close during performance testing of the Building 235-F Exhaust Tunnel and D3 Damper Interlock. Facility personnel entered the limiting condition of operation (LCO) associated with the technical safety requirements and suspended the interlock test. This LCO requires that unnecessary work within the building be suspended while SRNS conducts troubleshooting to determine failure mode and makes the necessary repairs. SRNS is still working through the necessary troubleshooting but believes that the problem is related to the electrical signal to the solenoid valve, which controls instrument air to the control valves that enable plant air to be delivered to the supply dampers. The facility remains in the required LCO actions pending repairs. Facility personnel have executed several electrical modifications during the last six months in conjunction with the implementation plan for Recommendation 2012-1. An error during this work could have resulted in the failure of the dampers to operate. In parallel with the repair work that is on-going, SRNS is processing the necessary changes to the safety basis to clarify that the supply dampers are not important to safety and that the LCO should not apply. This action will allow SRNS to continue with other work related to the fire detection and alarm system modifications, which are also associated with Recommendation 2012-1.

**Tank Farms:** The Tank 37 transfer jet is encased in the surrounding saltcake (see 9/5/14 weekly report). SRR plans to hydro-lance the surrounding saltcake to allow movement of the jet. This week the SRR Facility Radiological Action Team (FRAT) reviewed the steps necessary to hydro-lance the saltcake as well as the necessary radiological controls. The FRAT demonstrated that the SRR work force had planned the work effectively with only minor corrections necessary at this time.