

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 18, 2013

**TO:** T. J. Dwyer, Technical Director  
**FROM:** M. T. Sautman and D. L. Burnfield, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending January 18, 2013

**K-Area:** Several months ago the site established an exclusion area to protect personnel from causing a potential criticality. They correctly credited this control as a Technical Safety Requirement (TSR). While the potential for causing the criticality was low, SRNS did not perform the actual calculations to show that the exclusion area could be shrunk or eliminated until just recently and the barriers remained in place through last weekend. The extent of the exclusion area that SRNS established was large enough that it blocked egress from the facility. Therefore in order to allow personnel to exit the facility in case of a fire, SRNS posted the interior side of the barrier to allow workers to exit through the exclusion area in an emergency.

Last weekend, two security personnel violated the TSR when they entered the exclusion area to test door alarms. Following the SRNS fact finding meeting, the site rep discussed several weaknesses with DOE and SRNS managers. For example, SRNS established the TSR barrier using a rope and sign. The site rep questioned the use of a rope and sign for establishing TSR boundaries. The site rep also questioned the approach of exposing personnel to a potential threat of criticality as part of a planned egress route.

**Work Planning:** The site reps met with the responsible SRNS managers for work planning and control, maintenance and the Facility Evaluation Board (FEB) regarding work planning and control improvements that they are making as well as items discussed in the FEB's recent review of this area. They identified that the site has cross-walked the EFCOG work planning and control guide and criteria and review approach documents (CRADs) against the site procedures and CRADs. This review revealed few differences and they are working to resolve these. They also identified that they were working with SRR and that the URS corporate CRADs were now in agreement with the EFCOG CRADs.

The SRNS radiological controls organization held their periodic status discussion with the site reps. One of the items they discussed was an improvement to the radiological work permit suspension guides. The change results in a more systemic approach to define when work will be suspended based on unexpected radiological conditions. These changes should resolve several internal and external evaluation issues (including those performed by DNFSB staff) that identified inconsistencies between site practices and DOE guidance.

**Readiness Reviews:** The site reps talked to the contractor because the 235-F authorization basis strategy discussed in the SRNS Startup Notification Report differs from that in the Recommendation 2012-1 Implementation Plan. The site reps also talked to DOE about the scope of the readiness review plans for Tank 10 salt dissolution and the contractor's attempt to credit a similar activity from nearly 6 years ago activity.

**HB-Line:** The criteria review and approach documents (CRAD) for the upcoming HB-Line implementation verification review plan addresses the generic CRAD in the DOE guide, but does not appear to fully incorporate all of the criteria for specific administrative controls. Nuclear safety personnel are also revising time-to-lower-flammability-limit calculations to fix an error identified by the technical staff.

**299-H:** The site rep observed workers unload the failed 2F evaporator demister, inspect it per engineering direction, and decontaminate it. A hole was visible through the demister media, possibly due to the missing spray nozzle falling through the media.

**Defense Waste Processing Facility:** The operations manager took action to start maintaining the hot work permit log again and fix other documentation issues noted by the site rep last week.