

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 29, 2016

**TO:** S. A. Stokes, Technical Director  
**FROM:** M. T. Sautman and Z. C. McCabe, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending April 29, 2016

**HB-Line:** Operations had entered three limiting conditions for operation (LCO) to support facility fire system testing and then entered an additional LCO requiring the facility to enter warm standby mode to support purge alarm testing in two process vessels. During the next shift, operations exited three of the four LCOs. The condition to exit the fourth LCO (fire control panel battery charging) had been met, but, operations had not formally exited that LCO. Additionally, HB-Line personnel did not switch the two process vessels from warm standby to operations mode. While in this state, the shift operations manager (SOM) authorized operators to recirculate the solution in one of these process vessels (a plutonium concentrate tank) to prepare it for sampling. Forty-eight minutes later, the SOM identified that while preparation for sampling activities was allowed in process vessels while in warm standby, recirculation was explicitly prohibited in the Technical Safety Requirements (TSR) and terminated the activity.

**Safety Basis Violations:** SRNS has had four TSR violations in April and SRR had one in mid-March (see above, 3/11/2016, 4/15/2016, and 4/22/2016 weekly reports). To put that in perspective, this is the same number of Occurrence Reporting and Processing of Operations (ORPS) category 3A2 events (e.g., TSR violations) experienced at SRS during the 18 months prior to this group of recent violations (see 1/16/2015, 2/20/2015, 9/11/2015, and 9/18/2015 weekly reports). Recent events have involved workers performing activities that were prohibited by the current facility status, failing to enter a LCO, or improperly exiting a LCO. DOE and SRNS are reviewing these events to identify common causes and the need for any immediate corrective actions.

**Drills and Exercises:** To address many of the findings from a drills and exercise assessment conducted last year, SRNS proposed establishing a consolidated drill team to develop, conduct, and evaluate drills across SRNS to ensure consistent expectations and performance. SRNS has determined that they do not have the funds this fiscal year to staff this team as planned. (See 5/1/2015 and 7/17/2015 weekly reports). The site rep also observed the annual emergency preparedness exercise at K-Area.

**299-H Decontamination Facility:** The site rep observed a coached emergency preparedness drill at 299-H that tested the facility's response to a fire. During a walk down of 299-H prior to the drill, SRR personnel identified that there were no signs identifying the locations of the rally point and alternate rally point. Further investigation revealed that there was no facility procedure directing SRR personnel to ensure the signs are present and in good condition. SRR personnel identified additional areas for improvement with the facility equipment and the emergency condition response procedure (ERC) during the drill. The 299-H public address system was inaudible from the rally point, and the only windsock visible from the rally point was damaged and non-functional. Additionally, the ERC directed 299-H personnel to notify the Tank Farms SOM of the status of the facility as soon as possible. However, they had difficulty reaching the Tank Farms SOM with the only phone number listed in the ERC. SRR personnel have noted these deficiencies and have begun taking corrective actions.

**H-Tank Farms:** SRR completed grouting of Tank 12.