DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 13, 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 May 13, 2016

Technical Safety Requirements (TSR): DOE sent SRNS a letter expressing concern with the four TSR violations in a two week period (see 4/15, 4/22 and 4/29/16 reports). While recognizing that none of the events resulted in an unsafe condition and that SRNS self-identified the issues, DOE stated that this trend of non-compliances was unacceptable. In addition to the corrective actions already in place, DOE requested SRNS to conduct a root cause analysis and to develop a corrective action plan. The site rep observed a SRNS evaluation of how a team of facility personnel performed when faced with a hypothetical TSR scenario.

Additionally, the site rep observed control room operations and a fire watch at Savannah River National Laboratory (SRNL). The individual performing the fire watch appeared to have an appropriate level of knowledge of the associated TSRs and the fire watch procedure. Prior to terminating the fire watch, the shift operations manager personally verified that the vehicle requiring the fire watch was outside the facility boundary.

Defense Waste Processing Facility: SRR continues to troubleshoot why the software used to collect data from one of the Slurry Mix Evaporator tank's gas chromatographs (GC) keeps locking up. SRR has replaced the GC column, analyzer pump, Ethernet hubs, power supply, computer, and hardware cards trying to pinpoint the source of the problem.

Readiness Assessments (RA): The site reps observed the dry run and interviews for the contractor's RA for the Saltstone Salt Solution Receipt Tank #1, which will serve as the primary receipt tank of decontaminated salt solution from Tank Farms.

The H-Canyon First Uranium Cycle Solvent Extraction and Head End contractor RA has been suspended due to equipment issues. H-Canyon personnel are continuing to troubleshoot the variable frequency drives issues (see 5/6/16 weekly). Pending resolution of the equipment issues, the RA will resume next week.

Emergency Preparedness: The site rep observed a training drill involving a fire in H-Area Old Manufacturing and several dropped tritium reservoirs. Weak areas of the drill included the control of the initiating fire panel alarm, putting the wrong facility in evacuation mode, the initial responder not having radiological protection support, and assigning the wrong emergency action level. The site rep also encouraged that the periodic control room briefings discuss priorities, task assignments, and the verification that earlier tasks and abnormal operating procedures have been completed.

L-Area: In response to a DOE request, SRNS identified the following priorities for the Augmented Monitoring and Condition Assessment Plan (AMCAP): completing the baseline evaluation of the designated aluminum (Al)-based fuels, evaluating options for non-intrusive examination of selected higher-risk non-Al fuels and fuels in isolation cans, conducting non-intrusive examinations of selected higher-risk non-Al fuels and fuels in isolation cans, periodically removing "cobwebs" as needed, and completing galvanic isolation and installing covers for TSR fuel (see 12/16/11 report and DNFSB/TECH-38). DOE is looking for funds to pursue these in future fiscal years.