DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 15, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: L. Lin and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending October 15, 2021

Savannah River National Laboratory (SRNL): SRNL convened a fact-finding meeting to discuss the lack of facility specific qualifications for the personnel involved in loading the criticality control overpacks (CCOs) (see 10/08/2021 reports). The fact-finding meeting was paused as those involved were not able to agree on whether the facility specific practical factors for CCO loading was required or a good practice. They will continue the fact-finding meeting in the future. Additionally, SRNL management has directed each manager to perform a targeted management field observation per month through December on task previews or pre-job briefs based on previous feedback (see 10/1/2021 report).

Saltstone: The resident inspector (RI) discussed concerns with SRR management regarding the corrective actions identified to resolve the unsecured High Radiation Area (HRA) and subsequent entrance of the issue (see 10/08/2021 report). They are planning to develop additional corrective actions to address the concerns.

Personnel had successfully reconnected electrical power to the grout pump and operators initiated the procedure for recirculating the salt solution receipt tank. When the grout pump was started, it was discovered that a valve was left in the closed position that should have been opened. During the issue investigation, personnel noted that an attachment to the procedure for pump valve alignment was not performed.

Salt Waste Processing Facility (SWPF): Prior to starting the caustic side solvent extraction (CSSX) process, several limiting conditions of operation (LCO) required actions had to be completed. The control room manager logbook had a late entry that noted the LCO actions were completed approximately 8 hours prior, on the previous shift. The shift operations manager logbook had noted the LCO actions at the time they were completed.

Defense Waste Processing Facility (DWPF): Operators were realigning a drive gear on a crane in the crane maintenance area (CMA) while on breathing air. As an operator was exiting the CMA, a second operator's breathing air was mistakenly isolated instead. The second operator's breathing air was restored within 15 seconds and no detectable contamination was found. During the issue investigation, personnel discussed that the pre-job brief did not cover the method for the manifold operator to ensure the correct breathing air was isolated as personnel were exiting. The expectation was that the manifold operator would have line of sight, but the numbers on the personal protective equipment were painted over and the CMA was congested. The procedure states that the cut-out person should communicate the name and hose number to the manifold operator as the breathing air user is exiting using three-way communication, which did not occur in this case. A similar event occurred at DWPF a few weeks ago. Several corrective actions were discussed, including evaluating the corrective actions from similar events and developing a lessons learned.