DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 7, 2025

TO: Technical Director
FROM: Savannah River Site Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending November 7, 2025

Surplus Plutonium Disposition (SPD) Project: Construction activities for dowel installation have resumed at SPD, and the resident inspectors (RIs) observed some of the changes implemented in the field following the thumb injury incident that occurred during dowel drilling activities (see weekly 8/15/2025). Noteworthy improvements include the required use of shorter drill bits, ensuring that only one worker is needed to operate the drill, the use of barricades around a defined exclusion zone during drilling, and the use of a second worker to verify that the drill has been unplugged by the operator prior to changing drill bits, to prevent inadvertent exposure to rotating equipment. The RIs also noted that construction supervision was actively engaged in the pre-job brief and throughout work execution. Facility personnel are in the final stages of implementing corrective actions following their root cause analysis process, but the immediate actions put in place appear to have led to overall improvements in the safety of field work execution.

Savannah River National Laboratory (SRNL): SRNL declared a potential inadequacy in the safety analysis for one of their specific administrative controls (SAC). The Conduct of Research and Development SAC requires performing an evaluation or verification of pressurizable closed research systems and chemical processes to identify and implement controls to prevent or mitigate nuclear material explosion hazards. The DOE safety basis approval authority approved the documented safety analysis (DSA) and technical safety requirements that should identify the hazards and the controls necessary to provide adequate protection for the workers and the public. However, the controls required to protect the facility workers and safety systems from potential explosions from new research systems and processes are not currently specified in the DSA. Additionally, the SAC allows for development of those controls outside of the safety basis approval process. This SAC has not been utilized by the facility, and they have instituted compensatory measures to put the SAC procedure on hold. The facility plans to de-implement the SAC from the current approved safety basis.

Savannah River Tritium Enterprise: At H-Area New Manufacturing, a construction design engineer (CDE) and a pipefitter were tasked with the correction of isolation kit washers on two chiller flange connections. There was a system lockout/tagout (L/T) in place and the pipefitter who was to perform the work was signed onto the L/T. The CDE, who was neither signed onto the L/T nor authorized to perform any work, loosened a nut on one of the flange bolts while the pipefitter was working on the other flange. The CDE heard a sound indicating pressure and immediately retightened the nut. The CDE informed construction supervision and work was stopped. During the issue investigation, personnel determined that a formal timeout was not called and there was no immediate notification to operations of the unexpected condition or that unauthorized personnel performed work on a system under an L/T. The RI noted that the pre-job brief failed to communicate sufficient details regarding the L/T-authorized collocated maintenance leak test being performed on the system that included the manipulated flanges.