

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 21, 2025

TO: Technical Director
FROM: Savannah River Site Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending February 21, 2025

Staff Activity: Member of the Board's staff was on site to provide resident inspector augmentation.

Savannah River Tritium Enterprise (SRTE): The staff team and resident inspectors observed an emergency preparedness (EP) drill involving a simulated tritium release along with injured personnel (see 2/7/2025 report). The facility workers and drill controllers demonstrated strong performances, which validated the significant effort SRTE, and site drill team personnel have put forth to improve the SRTE EP program following years of less than adequate performance.

Surplus Plutonium Disposition (SPD) Project: Workers performing construction activities for the SPD project damaged the safety class structure of building 105-K multiple times over the last month while using a radial saw to remove part of a concrete slab at ground level. This event, along with five other events over the past three years that caused damage to the existing facility as a result of SPD construction activities, drove SRNS to conduct an issue investigation meeting to identify and correct programmatic weaknesses.

SPD personnel completed their extent of condition review that was initiated after discovering issues with dowel lengths and hook bars (see 1/17/2025 report). The subject matter expert identified additional non-conformances with shorter dowel lengths and shorter and missing U-bars in the walls. The project has paused concrete and rebar activities and is releasing work on a case-by-case basis.

SRMC Emergency Preparedness: A staff member observed SRMC EP facility drills at Saltstone (a fire scenario) and the Defense Waste Processing Facility (DWPF) (a chemical spill scenario). The staff member noted that several of SRMC's emergency operating procedures and abnormal operating procedures do not reflect all recent changes implemented by SRMC. These changes include the addition of the Salt Waste Processing Facility, Effluent Treatment Facility control room relocation and combination with the Saltstone control room, and realignment of the emergency response structure between the various SRMC facilities. The approved drill guides utilized for the drill were generalized documents applicable to all SRMC facilities and did not contain the specific information necessary to run the drills observed. Instead, the drill team used supplemental slide briefings to identify the specific details of the drill. The staff member noted several conflicts between the approved drill guides and the supplemental information, such as phone numbers and procedure numbers. The staff member also observed that drill controllers relied almost entirely on verbal communication for player interaction instead of more realistic and reliable props, such as cards, pictures, or signs. In addition, the controllers' use of cell phones to communicate between team members at DWPF was not effective due to poor service inside the building. The staff member discussed these issues with the SRMC drill team manager.