

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 15, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending August 15, 2025

Surplus Plutonium Disposition (SPD): While drilling concrete for horizontal dowel installation at SPD, a construction worker's glove was caught on the drill bit, causing severe injury to their right hand and resulting in detachment of the thumb. The employee was transported to the hospital to receive medical attention. SRNS management conducted an immediate hotwash with personnel involved to gather preliminary information on how the injury occurred. At the initial hotwash, personnel discussed that leading up to the injury, two workers were operating the drill. The injured worker was attempting to guide the rotating bit with their hand while the other worker operated the drill. SRNS management acknowledged that this method and means of operating a drill is not industry standard and that an issue investigation will be held to document cause and corrective actions. NNSA headquarters appointed an accident investigation board (AIB). Upon arriving on-site, the AIB directed SRNS management to stop their internal investigation pending completion of the AIB's investigation. SRNS and SRFO have both communicated their intention to resume the internal issue investigation once the AIB releases them to do so. Even though the issue investigation has been delayed, SRNS management communicated initial lessons learned in a site safety alert. They have performed multiple management field observations of the safety stand-down meetings that have been held across the site to discuss the injury and to refresh expectations for safely operating rotating equipment on site.

Defense Waste Processing Facility (DWPF): SRMC is conducting a Contractor Readiness Assessment (CRA) for a safety basis change to allow the Salt Waste Processing Facility (SWPF) to send strip effluent (SE) to the DWPF lag storage building, 512-S. The repurposing of two tanks for lag storage allows SWPF to continue processing by sending SE to 512-S, even if DWPF is not processing, and it allows DWPF to continue processing waste batches using the SE in lag storage even if SWPF is not processing. In addition to the deficiencies and opportunities for improvement the assessors identified, the resident inspector (RI) identified several opportunities to improve procedure quality, utilize available human performance tools, and document the basis of the acceptability for component operation to satisfy Specific Administrative Controls (SAC). Of particular note, the RI determined that new SACs to support the Strip Effluent Feed Tank (SEFT) flammability control—intended to limit the temperature of SE to below 38.4°C prior to transfer from the lag storage tanks to the SEFT—were not adequately controlled. Specifically, the temperature of the SE was measured prior to running the agitators (minimum of 2 hours) in the lag storage tanks that would add heat to the SE. The RI also identified that there was no quantitative basis for how much heat would be added from the agitators and transfer pumps following SE temperature verification and during transfer from lag storage to the SEFT. Throughout the CRA, the contractor was open and receptive to the RI's observations and indicated that these will be documented in the CRA and that procedural changes to measure SE temperature just prior to starting the transfer, along with a basis to support the SAC temperature limit during the SE transfer to the SEFT, are currently being developed.