

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 20, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** L. Lin, Z.C. McCabe, and E.P. Richardson, Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending September 20, 2024

**Staff Activity:** Members of the Board's staff, D. Brown, B. Caleca, D. Campbell, J. Flora, D. Montierth, and R. Wu were on site this week for the Defense Waste Processing Facility (DWPF) conduct of operations review following a teleconference last week (see 9/13/2024 report). The staff team and resident inspectors observed multiple evolutions including routine rounds, housekeeping walkdowns, lockout determinations, inter-facility transfers, internal transfers, and position turnovers. The team also conducted interviews with operators, first line managers, conduct of operations coaches, shift operations managers, training personnel, contractor assurance personnel, and representatives of DOE-SR.

**Defense Waste Processing Facility:** During a weekly seismic walkdown, a shift technical engineer (STE) noted concerns with the securing of a new portable air unit, shelf, and bench installed in a room at the Low Point Pump Pit (LPPP) building. The room contains piping for the safety significant nitrogen purge system, which is credited to provide nitrogen to maintain a non-combustible atmosphere in the LPPP vessels after a seismic event. The STE's concern was that the items were not secured in such a way as to prevent them from sliding or tipping into the safety significant piping in a seismic event. Construction personnel had performed the work to install the portable air unit, shelf, and bench using an SRMC procedure that allows low hazard, routine work to be performed without going through the work release process. This is contrary to requirements in the site manual and SRMC's work control process for work release. During the issue investigation, construction personnel noted that they had reached out to fire protection engineering to perform a walkdown, which they knew to do from previous experience, but they were not aware of the seismic requirements in that room. Personnel also discussed the ambiguity in the procedure for securing temporary equipment near safety-related structures, systems, and components. Two out of three STEs that had conducted the weekly seismic walkdowns thought that the air unit, shelf, and bench were adequately secured. DWPF personnel also discussed potential corrective actions, to include aligning their procedures and adding restrictions to pre-authorized work. As a compensatory measure in the interim, DWPF management will issue a standing order that any work performed inside a nuclear facility is required to go through the work release process.

**F-Tank Farms:** A construction worker was performing grinding operations on a steel beam in a contaminated area when the individual performing the firewatch alerted them to a hole burned through their protective clothing coveralls. Work was immediately stopped, and a radiological protection inspector (RPI) surveyed the area around the hole. The RPI did not find any contamination, and the worker had no injuries. The assisted hazards analysis and the work order for the job did not point to protective clothing requirements for grinding operations, such as the need to wear fire retardant clothing. SRMC personnel are developing corrective actions, such as revising the personal protective equipment (PPE) chart to include wearing fire-retardant Nomex PPE for grinding and sanding activities. This is another example of deficiencies in activity-level work planning and control in the past two months (see 8/30/2024 report).