

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 9, 2022

**TO:** Katherine R. Herrera, Acting Technical Director  
**FROM:** A. Z. Kline, L. Lin, Z. C. McCabe, and E. P. Richardson, Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending December 9, 2022

**DNFSB Staff Activity:** SRS Environmental Management Cognizant Engineer (COG) D. Campbell was on site for routine observations. L. Lin traveled to Los Alamos National Laboratory to support an ongoing review.

**Defense Waste Processing Facility (DWPF):** DWPF Construction personnel were performing crossbar cutting activities at the Glass Waste Storage Building when they unexpectedly found a glass log waste container in the storage position they were working on. Construction personnel initially identified three storage locations at which to perform the crossbar cutting activities but changed scope in the field to modify a different storage location. The construction foreman gave verbal permission to modify the storage location without confirming whether radiological glass log waste containers were present. Upon lifting the storage plug, Radiological Protection (RP) personnel measured the dose rate, which exceeded the work package working limit. However, RP personnel did not suspend the work, as required, and the glass log waste container was discovered when moving to the next step of taking a contamination smear. Facility management conducted an issue investigation and determined that a pre-job briefing was not performed that day. The last formal pre-job briefing covering crossbar cutting activities was conducted approximately two months prior. The resident inspectors questioned whether the measurement of dose rate was an action step in the work package requiring a sign off. This led the issue investigation team to discover that no work package action steps have been signed off for crossbar cutting activities, even though the evolution has happened dozens of times. Additionally, the tracking mechanism construction personnel use to determine which storage locations have radiological material present is not reviewed or approved by operations personnel. Facility management suspended crossbar cutting activities until the work package is revised.

**Salt Waste Processing Facility (SWPF):** SWPF personnel performed a Technical Safety Requirement surveillance to test operation of the safety shutdown contactors for the Alpha Finishing Process filter loop recirculation pumps. Upon removing the interlock relay from test mode, following successful confirmation of interlock actuation and observation of expected indications specified in the surveillance procedure, mechanics heard an abnormal noise from the panel attributable to relay chatter. They called a timeout and consulted the maintenance supervisor who concluded that the procedure could be safely continued and completed. The Shift Operations Manager (SOM) was informed of the abnormal condition, and concluded that the surveillance requirement was met. However, after the COG discussed the condition with the maintenance supervisor, they informed the SOM of the issue, who after discussions with the system engineer, reversed their conclusion and determined the surveillance to be unsatisfactory.

**Savannah River Mission Completion (SRMC) Oral Board:** Saltstone management successfully performed a Shift Manager board which included an in-depth line of questioning that sufficiently challenged the candidate. This demonstrates improvement from the poor performance observed during recent SRMC oral boards (See 8/12/22 and 11/4/22 reports).