

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 14, 2025

**TO:** Technical Director  
**FROM:** Savannah River Site Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending February 14, 2025

**Saltstone:** A control room operator, while operating the cameras inside Saltstone Disposal Unit (SDU) 6, noticed visible light coming through where the top of the tank wall and the roof meet. Personnel performed additional inspections confirming the gap and noted additional areas where there seems to be degradation around the gasket, resulting in several gaps to the outside atmosphere. Saltstone is currently in an outage to replace equipment, but operations have also put the procedures for processing low-activity waste in SDU 6 on hold until they have evaluated the impacts of this issue. Radiological protection department personnel are determining locations for air monitoring and performing surveys to ensure no contamination spread. Personnel inspected SDUs 7, 8, and 9, which are of similar design to SDU 6, and did not find the same issues. Engineering has initiated a non-conformance report on SDU 6.

**Tank Farms:** Tank Farms uses chromate water (CRW) to keep waste tanks below a certain temperature, and the CRW cooling coils are maintained at a higher pressure than the tank waste to prevent radioactive material from contaminating the CRW system in case of a breach. A control room operator noticed an abnormal decrease in the CRW surge tank level at the far east pump house, indicating a leak in the CRW system. Operations personnel isolated the CRW supply and return headers to Tank 40 and performed a leak check on the Tank 40 CRW cooling coils. After completing the leak checks the next day, personnel determined only one coil was leaking and isolated that coil. Personnel then placed a camera into the Tank 40 annulus and did not find evidence of a leak external to the tank, indicating the leak was likely within the tank safety significant pressure boundary, which is when the shift operations manager began making reportability notifications. During the investigation, personnel found another issue in which the system alignment checklist (SAC) and cooling coil positioning procedure did not match the leak check procedures. A different coil had been previously isolated as a potential leaker and was removed from the leak check procedure. However, the SAC and coil positioning procedure did not make the same change, allowing that coil to be put back into service. While operations later determined this coil was not the one recently leaking, the procedures did not accurately reflect coil status. Tank Farms personnel are developing corrective actions as a result of these issues.

**F-Area:** F-Area personnel, with support from the site drill team, conducted their annual emergency preparedness exercise. The exercise scenario consisted of a fork truck colliding with a vehicle transporting radioactive material, resulting in a fire and medical injuries. SRNS and DOE-SR personnel will develop an after-action report to document their evaluation.

**H-Canyon:** The resident inspectors observed maintenance on the H-Canyon cooling water alpha radiation monitor, which has been experiencing spurious alarms. The activity monitoring system is credited to prevent an airborne release from the cooling tower by diverting potentially contaminated water to the effluent treatment facility instead if radioactivity limits are exceeded. All personnel involved in the evolution followed appropriate procedures, utilized correct personal protective equipment, and displayed a strong level of knowledge related to the work.