

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 11, 2025

**TO:** Technical Director  
**FROM:** Savannah River Site Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending April 11, 2025

**Tank Farms:** Inspection and monitoring personnel pulled port plugs and took pictures at thirteen locations as part of Tank 35 annulus inspections. While this work is in a contamination area, the tank annulus and the camera equipment used were not contaminated. However, one of the workers alarmed the personnel contamination monitor when monitoring out of the radiological area after the job. Radiological Protection Department (RPD) personnel escorted the worker to the decontamination facility and found a particle in their hair that probed 100,000 dpm beta-gamma. RPD was able to remove the section with the particle, and the worker was able to successfully monitor out. The shift operations manager was notified, and they entered the abnormal operating procedure for radiological incident response. Personnel could not identify the source of the contamination. RPD conducted surveys around Tank 35, of personal protective equipment (PPE) doffed at the contamination area step-off pad, the worker's office, and the camera equipment, and found no contamination. During the issue investigation meeting, the worker discussed that they had on the proper PPE, including putting their hair up under the skull cap so that it was not exposed. RPD personnel discussed the extensive surveys done on the tank top after a previous contamination spread from pulling a pump from Tank 35 (see 1/31/2025 report). Though there is equipment overhead, they did not survey above eight feet, but they believe no contamination would have remained given the storms that had gone through the area in the time since.

**Plutonium Disposition Plans:** A resident inspector met with environmental management operations planning and nuclear nonproliferation program planning personnel to discuss their overall approach for plutonium disposition. Thirty-four metric tons of surplus plutonium owned by NNSA and six metric tons of plutonium owned by DOE-EM at the site will ultimately be sent to the Waste Isolation Pilot Plant for disposal. Currently, K-Area has one glovebox set up to dilute and dispose of plutonium oxide, and the Surplus Plutonium Disposition project will add three more gloveboxes. However, there are more difficult oxide materials that cannot be processed using the current process, such as the Fast Flux Test Reactor fuel. In addition, the necessary oxidation capabilities to disposition plutonium metal are not available at SRS. The plutonium disposition plans prioritize removing 9.5 metric tons of plutonium before January 2037. The second highest priority is to disposition containers with pressure and corrosion issues by 2030.

**H-Canyon:** The H-Canyon control room personnel received an alarm that the halon fire suppression system on a crane in the hot canyon had discharged and initiated the abnormal operating procedure. The SRS fire department responded to the facility and did not identify any visible smoke or fire. Operators moved the crane to the crane maintenance area and placed it out of service, but personnel could not initially access the crane cab due to issues with the docking door. After door repairs were completed, personnel entered the crane cab and found discoloration and charring on the transformer and associated wiring for the air conditioning unit. Maintenance personnel replaced the damaged transformer and returned the crane to service.