DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 17, 2025

TO: Technical Director
FROM: Savannah River Site Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending October 17, 2025

Defense Waste Processing Facility: Crane operators were removing piping jumpers using the main process cell crane to access and utilize the flushing rig to flush the slurry mix evaporator sample pump. For one of the jumpers, they loosened two of the three connections. The crane operators realized they had failed to loosen the third connection and contacted management after damaging the nozzle at the third connection after several attempts to lift the jumper. During the issue investigation meeting, personnel discussed that the canyon equipment tagout and the drawing highlighting all the jumper connections were correct. However, the crane operators did not use the provided drawing and missed in the tagout that the second jumper had three, rather than two, connections. The facility has implemented compensatory measures requiring more management oversight for crane activities while they develop longer-term corrective actions.

Savannah River Tritium Enterprise (SRTE): At H-Area New Manufacturing, operators were restoring the thermal cycling absorption process (TCAP) from open glovebox maintenance (OGM). As part of restoration, the procedure requires sampling or disposition of gas from vessels during the OGM period that had a pressure change of greater than 10 torr to verify that no flammable mix had been created. When the operators sampled the gas in one of the TCAP columns, they verified that the oxygen was less than 1.5% by volume and believed they could transfer the gas to the nitrogen evacuation system for disposition. However, the sample showed approximately 7% hydrogen isotopes. While they had completed their post-maintenance leak testing successfully for coming out of OGM, they were still in standby mode, in which the Technical Safety Requirement (TSR) does not allow transfers of hydrogen isotopes above 3%. The following shift identified the issue, isolated the transfer, and notified management. The facility declared a TSR violation and management issued a shift order for the deputy operations manager or higher to be present for all gas evolutions that need to satisfy their explosion prevention program as SRTE develops corrective actions to prevent recurrence.

At the Tritium Extraction Facility, personnel installed a lockout/tagout (L/T) to deenergize a diesel generator (DG) to support preventive maintenance work. Maintenance personnel completed a portion of the required work but later that same day, an operator performing their daily rounds noticed that the control panel on the DG was illuminated, indicating it was not properly deenergized per the L/T. Upon further investigation, the operator determined that the wrong negative battery cable had been lifted for the L/T. The operator notified the shift manager, and the facility called a timeout. The issue investigation determined that the individuals involved had failed to use verbatim compliance with the L/T procedure and that component labeling should be improved. The resident inspectors noted that the step for the safe energy determination could be more specific as to where the voltage and/or current readings should be taken. The facility is performing an extent of condition on the other SRTE DGs and has implemented compensatory measures to increase management oversight of L/Ts.