

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 5, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending March 5, 2021

K-Area: After a multi-week pause following a violation of the Technical Safety Requirements (TSR) (see 2/12/21 and 2/19/21), K-Area personnel resumed operations in the K-Area Interim Surveillance (KIS) Vault. Prior to doing so, SRNS personnel determined that the control limiting radiological material in pressurizable containers was introduced in 2016 and several containers had been used in the KIS Vault since then without being analyzed. The additional control to not allow any pressurizable containers in the Destructive Evaluation Room while the hydraulic press is energized was introduced in 2020 with the optimized down blending process which eventually led to the discovery of the issue. K-Area personnel have also issued a report that clarifies which containers in the KIS Vault should be considered pressurizable going forward, as well as provides the justification as to why certain containers are not. The root cause analysis has not been finalized.

Savannah River Tritium Enterprise (SRTE): SRTE recently conducted safety pause briefings focusing on the importance of calling a time out (see 2/12/21 and 2/26/21 reports). This week, personnel from NNSA-SRFO and SRNS's Independent Evaluation Board had to call a time out when a pair of operators failed to call a time out when a procedure step could not be performed as written due to a field anomaly. The less experienced operator of the two raised the question of whether to stop the evolution and discuss the procedure step with management. The other operator, however, explained another way to get around the anomaly, which did not comply with the procedure, and decided to proceed until the observers stopped them. As a result of this event, SRTE management have established a temporary compensatory measure requiring management oversight of all operations in H-Area New Manufacturing.

H-Canyon: SRNS declared a Potential Inadequacy in the Safety Analysis when they identified that a vessel that could potentially reach the lower flammability limit within 96 hours after a loss of purge was inadvertently left out of the dose consequence calculation. SRNS personnel will perform an Unreviewed Safety Question Evaluation and determine the path forward.

Emergency Preparedness: The resident inspector (RI) observed in-person tabletop drills focusing on field responders at the Defense Waste Processing Facility (DWPF) and Tank Farms. In the Tank Farms drill, the players did most of the talking and the controllers provided useful advice to new workers at appropriate times. The RI provided some suggestions for improving the conduct of the DWPF drill. Both took place in large areas to allow social distancing.

Salt Waste Processing Facility: The RI discussed unplanned entries into Limiting Conditions for Operation with Parsons. SWPF had 13 in October and 5-6 in November, December and January. None involved operator error. Most of these involved ventilation transients due to workers opening doors or a reference leg that was susceptible to high winds. Design changes have addressed these. Three of the four entries in February were due to a single power surge and another design change to the variable frequency drives should reduce that vulnerability.