

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 23, 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 April 23, 2021

Savannah River Tritium Enterprise (SRTE): SRTE management have completed over a week of senior supervisory oversight (SSO) at H-Area New Manufacturing after a series of conduct of operations issues (see 4/9/21 and 4/16/21 reports). This week, each manager that completed the SSO presented their findings to the SRTE Management Review Board (MRB). The resident inspector found the observations presented to be appropriately self-critical. One of the four shifts will remain on SSO based on the feedback presented to the MRB. SRTE management also discussed the utilization of unannounced SSO in the future at SRTE facilities.

Savannah River National Laboratory (SRNL): During a recent Technical Safety Requirements Surveillance of material, SRNL personnel identified that the Limiting Condition for Operation (LCO) limit of 10% of the total liquid inventory stored in containers susceptible to flashing sprays had been exceeded by the recorded material in two containers. Upon discovery, the facility entered the applicable LCO condition. Upon further investigation, SRNL personnel realized that the containers in question did not actually exceed the limit, but rather that the data entered into the material tracking database was incorrect. Approximately one month earlier, an individual entered the incorrect isotopic makeup of a particular set of two samples which exceeded the limit. SRNL remained in the LCO until this data entry error was corrected.

Unreviewed Safety Question (USQ): Heavy water is stored in L-Area, K-Area and C-Area; however, the procedures regarding the heavy water storage and inspections are owned by L-Area. K-Area and C-Area personnel review changes to the procedures and perform an USQ when the changes impact their respective facilities. While reviewing a procedure revision, the operations manager at L-Area recently identified a USQ review by both K-Area and C-Area had not been marked as required and had not been performed. The design authority informed the manager that a previous revision issued in February 2021 of a different procedure also did not receive a USQ review from the other facilities. An extent of condition review revealed that was the only procedure that did not get the appropriate USQ review in the past four years. Additionally, L-Area personnel determined that only the K-Area USQ review was required for the procedure revision issued in February 2021, which had yet to be used.

F/H Lab: Electrical and Instrumentation (E&I) personnel were tasked with performing a 5 year preventative maintenance on a pair of breakers which they flagged prior to starting work. While wearing an arc flash suit the E&I mechanic attempted to trip the first breaker, but it failed to trip. After discussing it with operations and maintenance personnel, they made the decision to attempt to trip the second breaker, which also failed to trip. While investigating the issue, the mechanic attempted to transition back to the original breaker but ended up on a third breaker. In troubleshooting, the mechanic pressed the button again, this time on the third breaker which successfully tripped. Operations personnel then called a time out. Several issues were discussed during an issue investigation including the failure to call a time out after the first or second breaker failed to trip as expected.