

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 16, 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 16, 2021

Savannah River Tritium Enterprise (SRTE): Last week a control room operator (CRO) failed to follow a procedure as written. The CRO had less than a year of experience; but they had previously completed this specific procedure approximately five times. The incorrectly performed portion of the procedure involved manipulating a series of valves. Due to the uniqueness of the evolution, the procedure directed the CRO to manipulate valves 2, 3, 4, and 5 in a single step prior to manipulating valve 1 in a future step. Valves 2 through 5 each had a separate check box in the procedure. The CRO manipulated valves 1-5 in rapid succession and then checked off valves 2-5 all at once. Although rapid valve manipulation is necessary in some instances in SRTE, it was not necessary or appropriate for this evolution. Had the operator performed each manipulation individually (as trained), the CRO would have likely noticed the unexpected change in system parameters. SRTE personnel's corrective actions include several actions to prevent this specific error from happening again. SRTE continues to conduct Senior Supervisory Oversight in H-Area New Manufacturing.

NNSA-SRFO: NNSA-SRFO sent a letter of concern to SRTE on April 8, 2021. In the letter NNSA-SRFO states that they have observed an uncharacteristic "decline in Conduct of Operations performance" and reference eight specific recent conduct of operations issues (see above, 4/9/21, 3/5/21, 2/26/21 and 2/12/21 reports). NNSA-SRFO requested that SRTE take immediate action to curtail the observed drift, to develop a Conduct of Operations sustainability plan with an emphasis on seeking out subject matter experts and best practices, and to develop a plan or guidance that provides defense-in-depth for the cadre of junior personnel in SRTE.

H-Canyon: Site Services personnel attempted to notify (per procedure) the H-Canyon Shift Operations Manager (SOM) that they were about to stop a cooling water supply pump. They were not able to reach the SOM but continued with the procedure as if they had informed the SOM as required. Taking the pump offline resulted in an H-Canyon control room alarm and H-Canyon personnel responding accordingly before the pump was brought back online.

Building 235-F: SRNS submitted the revised safety basis that covers the deactivation work scope once the facility is in a cold and dark condition. DOE approved a baseline change proposal to move FY22 scope into FY21 and hopes to complete deactivation in September 2022.

Salt Waste Processing Facility: Parsons is working with the Savannah River National Laboratory, DOE, and SRR to address a number of processing challenges that have curtailed processing since March 24. These involve alpha strike process filter performance, high differential pressures with both coalescers, elevated Isopar-L concentrations in decontaminated salt solution (DSS) effluent. Parsons is chemically cleaning caustic side solvent extraction process equipment to remove solids and replacing the gasket and media in the DSS coalescer.