

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 2, 2019

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 August 2, 2019

Board Activity: Board Member Jessie Roberson met with representatives from DOE-SR, SRR, SRNS and NNSA-SRFO. The topics discussed included Savannah River National Laboratory's (SRNL) path forward from the April 2018 and April 2019 pauses, timeliness of document requests from NNSA-SRFO, the Surplus Plutonium Disposition project, the proposed SRS Plutonium Production Facility, Board Recommendation 2012-1 issues at 235-F, Tank Closure Cesium Removal (TCCR), DOE-SR staffing issues and path forward for Salt Waste Processing Facility startup. Additionally, Ms. Roberson observed an ongoing Research and Development activity at SRNL and walked down 235-F, TCCR and SWPF.

Tritium Extraction Facility (TEF): A Board staff member attended a fact gathering on the loss of ventilation that occurred at TEF on July 26, 2019. Room alarms in the Tritium Process Building (TPB) went off for low exhaust flow. The TPB ventilation system went to reduced flow (i.e., supply fans off, exhaust fans running), as programmed. TPB building pressure continued to increase and the differential pressure transmitters went into a fault condition, shutting off the ventilation system. It was noted during the fact gathering that personnel responded appropriately by pulling the associated abnormal operating procedures and evacuating all non-essential personnel. The ventilation was restarted shortly after, in the same configuration, without any issues. The cause of the loss of ventilation remains unknown. SRNS plans to continue investigating.

H-Area New Manufacturing Facility: A Board staff member observed an annual surveillance requirement to calibrate tritium air monitors in the environmental conditioning room. Two qualified operators were training a third operator. During one of the steps to test the HHHI alarm, the alarm did not show up as expected and the operators decided to re-perform the steps. The facility representative suggested that they contact the shift operations manager and get permission prior to re-performing the steps. After the operators completed the procedure, the facility representative gave feedback on the evolution. He noted that, although it didn't negatively affect the work performed in this case, procedure control could have been better from a conduct of operations standpoint.

Salt Waste Processing Facility: The resident inspector observed portions of the Loss of Ventilation off standard test. The purpose of the test was to demonstrate: 1) the ability of the Process Building Ventilation System to maintain critical differential pressures with the air handling units out of service, 2) secure the exhaust fans and document the critical differential pressures as the air handling units shut down, and 3) to start the air handling units with the exhaust fans out of service and document the critical differential pressures.