

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 5, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: L. Lin and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending November 5, 2021

Staff Activity: D. Brown, J. Heath, M. Helfrich, and D. Montierth of the Board's technical staff were onsite this week to support the staff review of the critical lift and traffic control safety management programs at the Savannah River Tritium Enterprise. Both of these programs have key attributes that have been elevated to specific administrative controls in the combined facilities safety basis revision that was approved by NNSA-SRFO in December 2019 and currently scheduled to be implemented in FY2025.

Savannah River National Laboratory (SRNL): BSRA personnel submitted revision 2 of the yet-to-be-implemented safety basis to DOE-SR for their review and approval. (see 10/22/21 report)

Last year SRNL personnel implemented a revision to the existing safety basis to which includes a new fire water supply system. The previously used tank (severely degraded) and pumps were classified as safety significant; however, the new tank and pumps are general service with a safety significant water level indication. This week the new tank began leaking a small amount of water. The level indicator remained above the required limit and there were no negative impacts to the facility. SRNS Site Services personnel are in the process of planning their path forward to stop the leak in coordination with the supplying vendor. As an interim measure SRNS Site Services personnel placed a sealing putty over the leak site.

A laboratory technician working in a radiological hood discovered a small spot of contamination on the chest area of their disposable white lab coat when surveying out of the hood. Once they identified the contamination, they were able to call radiological control department personnel for assistance through the closed laboratory door. The laboratory technician was able to doff the white lab coat and clear the personnel contamination monitor twice. Just before the technician found the contamination, they were working with a non-radiological quality control standard but had been previously working with radiological material. The exact cause of the contamination is unknown, but SRNL personnel suspect that a small amount of material flicked onto the individual's lab coat while removing a stopper from a sample vial during the work radiological sample work. SRNL personnel did not find any additional spread of contamination.

Saltstone: While doing a field walkdown of a lockout and performing breaker manipulations, an operator noticed a valve unexpectedly in the closed position and could not open the valve. The valve fault had no visual or audible indicators. The operator checked the alarm listing, noticed the fault in the log, and was able to clear it. However, there is no guidance to look at the alarm listing. Saltstone was not processing at the time. Had it been, the valve closing would have shut down the facility. Personnel identified several corrective actions, including doing an extent of condition review on similar components to see if any have no indication of a fault other than a log and if alarm indications should be reactivated for them.