

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 15, 2023

TO: Timothy J. Dwyer, Acting Technical Director
FROM: A.Z. Kline, L. Lin, Z.C. McCabe, and E.P. Richardson, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending September 15, 2023

Staff Activity: F. Harshman from the Y-12/Oak Ridge site resident inspector (RI) office was onsite for RI augmentation and to benchmark oversight practices. Mr. Harshman observed activities at the Solid Waste Management Facility (SWMF), Salt Waste Processing Facility (SWPF), Defense Waste Processing Facility (DWPF), and walked down the Savannah River Tritium Enterprise. Mr. Harshman also attended management meetings with SRNS, SRMC, and NNSA-SRFO personnel.

SWMF: SWMF personnel held an issue investigation for the puncture of a low-level waste container that occurred last week (see 9/8/23 report). The lift truck driver was working in a tight space and had been attempting to shift a B-25 container using one fork rather than the normal practice of positioning both forks under the container. The other fork punctured an adjacent B-25 container, at which point the driver backed up the lift truck, stopped work, and notified management. Management is briefing the E-Area rigging and heavy equipment organization on the event before releasing work.

SWPF: The RIs observed a pre-job brief for filter changeout and high efficiency particulate air (HEPA) filter testing on the process vessel vent system. The RIs discussed the equipment, processes, and procedures for in-place field testing with the filter test group. Maintenance personnel at SWPF change out the HEPA filters frequently due to high radiological dose rates at the filter. Facility personnel's efforts to clean the moisture removal train upstream of the filters have not resulted in lower dose rates, so engineering is currently investigating other options to lower dose rates and extend the time between filter changeouts.

DWPF: Since February, DWPF personnel have declared two Technical Safety Requirement (TSR) violations and two near misses to TSR violations due to improper conduct or implementation of operator rounds. After the most recent issue, DWPF personnel began an effort to conduct a management field observation (MFO) for every operator while performing rounds (see 9/1/2023 report). The RIs observed four instances of 3rd level operator rounds, which implemented numerous TSR surveillances. The RIs noted that the conduct of the rounds consisted of a wide range of formality depending on the operator. For instance, several operators did not consistently read the procedure notes associated with TSR implementing steps despite such behavior directly contributing to the most recent TSR violation. Further, the RIs observed varying degrees of other shortcomings, such as improperly reading analog gauges (i.e., from an angle) and failing to confirm which component they were reading prior to recording a TSR surveillance. These issues are largely consistent with DWPF management's MFO findings. As a compensatory measure after the most recent violation, DWPF personnel have implemented a management review of completed rounds to confirm the proper use of "Not Applicable" and "Out of Service" readings. However, this measure would not prevent errors associated with improperly reading gauges or reading an incorrect gauge.