

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 14, 2023

**TO:** Christopher J. Roscetti, 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 April 14, 2023

**Staff Activity:** Members of the Board's staff R. Eul, D. Minnema, J. Jarvis, X. Jiang, B. Saltus, and B. Weathers were on site to support the ongoing DOE complex-wide nuclear criticality safety review. D. Montierth was also on site for resident inspector augmentation.

**Defense Waste Processing Facility (DWPF):** While sampling the Precipitate Reactor Feed Tank (PRFT), lab technicians observed intermittent spray at the sample station while attempting to fill peanut vials inside the shielded lab cells. Over the next day, they attempted to correct the issue by making small adjustments to the alignment of the equipment at the sample station and attempting to resample. This was unsuccessful, which led DWPF management to suspend all PRFT sampling activities and initiate a more thorough investigation into the issue. A small amount of the PRFT material flowed to the Recycle Collection Tank (RCT) after being washed from the sample station throughout sampling and troubleshooting. Engineering evaluations were conducted to ensure that this material did not challenge the waste acceptance criteria for transfer to Tank Farms. The investigation determined that mechanical issues with the operation of the mechanism that lifts the sample vials into the sample station along with a bent needle valve caused the intermittent spray from the system. Planned corrective actions include replacing the needle valve and the lift mechanism prior to resumption of PRFT sampling activities.

**Oral Board:** A Board staff member observed an oral re-board conducted for a Shift Technical Engineer (STE) at an SRMC facility. The oral board members were professional and adhered to the procedure that governs the conduct of the board, questions, and grading of the candidate. All three board members were part of the candidate's initial oral board. However, the procedure on oral boards recommends that the board members be different from those of the initial board to the extent practicable. The questions covered a variety of topics specific to the facility, including the operability of credited safety systems in the Technical Safety Requirements, work management and control, emergency management, radiological protection, and STE roles and responsibilities. The oral board concluded that the candidate was successful, but before issuing final qualifications, multiple formal lookups would be required. Overall, the staff member did not have issues with the conduct of the oral board.