

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 3, 2020

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 July 3, 2020

Solid Waste Management Facility (SWMF): SWMF receives and emplaces low-level waste inside containers (e.g., SeaLands™ and B-25 boxes) in shallow Engineered Trenches. Before performing excavation work in an Engineered Trench in order to place additional containers, a Heavy Equipment Operator (HEO) performed a walkdown of the jobsite and noted what appeared to be a puncture in one of the SeaLand™ containers already emplaced. The HEO immediately contacted the SWMF shift operations manager (SOM) who instructed the HEO to not begin work. The SOM and the HEO's first line manager then entered the Engineered Trench and confirmed the presence of a hole from a distance. The SOM informed the SRS Operations Center and dispatched radiological protection department personnel to determine if any radiological material had migrated out of the container. RPD did not find any spread of contamination and have concluded that no material had escaped the SeaLand™ container. Upon further inspection, SWMF personnel determined that four containers had actually been punctured. Based on the recent activities, SWMF personnel believe the punctures were likely caused during excavation performed the previous day. Among the corrective actions identified, SWMF HEO's will be briefed on lessons learned and the expectation of doing a post job walkdown. SWMF personnel have since sealed all of the punctures. The containers in the Engineered Trenches are not credited to perform any safety or confinement function.

Savannah River National Laboratory (SRNL): Upon exiting a radiological buffer area (RBA), an SRNL employee set off the personnel contamination monitor (PCM). RPD identified 4,000 dpm/100cm² alpha and 10,000 dpm/100cm² on their left shoe. As a precaution, RPD posted the area as a contamination area and airborne radiation area. Meanwhile, RPD escorted the individual to the decontamination facility, removed the employee's shoe and placed it in a hood. The employee was then able to clear the PCM twice (as required). After surveys and monitoring of the area the employee entered, RPD was unable to find the source of contamination.

COVID-19 Update: Between June 25 and July 1, the number of positive tests for SRS employees increased from 52 to 62. As part of a lessons learned, SRS issued guidelines for the use of personal fans in office spaces to reduce the risk of transmission between employees.

Building 235-F: SRNS submitted their draft Phase 2 Deactivation Plan to DOE-SR. Based on a review of an earlier draft, the Resident Inspector (RI) had questioned how this plan would address the spread of contamination and the degradation of seals. (See 10/18 and 10/25/19 weekly reports). The latest version states that 1) contamination outside process enclosures will be removed to the extent practical and 2) process enclosures and ventilation will be sealed to prevent migration of Material at Risk from these components during Long Term Storage. Four new related endpoints are also proposed. The RI also provided some questions about the subject matter expert walkdown reports and the fire hazards analysis.