

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 29, 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 October 29, 2021

Staff Activity: S. Seprish and D. Campbell of the Board's technical staff were on site this week at the Salt Waste Processing Facility.

H-Canyon: Last week, an H-Canyon operator discovered approximately 1 quart of liquid on the floor of the first level men's change room (a clean area) near an expansion joint. The operator informed the appropriate individuals, including radiological protection department (RPD) personnel who determined that the liquid was contaminated when it probed 20,000 dpm alpha. Later, a dry smear measured 6,000 dpm/100cm² alpha and 1.4E+06 dpm/100cm² beta-gamma. After further investigation, H-Canyon personnel determined that the liquid was leaking through the expansion joint from cell 6 in the warm canyon due to a cooling water leak from one of the Low Activity Waste (LAW) evaporator jumpers. The jumper gaskets for the evaporator had been previously replaced; however, H-Canyon had postponed any post-maintenance testing (i.e., a leak check) until they intended to use the evaporator again. Several months prior, H-Canyon personnel noticed leaking wall nozzles for the cooling water entering the cell and closed an upstream valve to prevent the leak per shift operations manager direction. The leaking wall nozzles and reason for the closing of the upstream valve were not tagged or documented such that an independent person would be able to realize there was an issue. Last week, H-Canyon personnel opened the upstream valve in support of operating the other LAW evaporator, which initiated the leak at the jumper. The cooling water leaked into the cell for approximately two days before the liquid made it to the first level change room. There were no personnel contamination or airborne activity discovered because of the leak. SRNS personnel will conduct a root cause analysis and are developing corrective actions.

Watchbills: The site Learning Management System (LMS), which is used to ensure personnel being populated across the 25 watchbills across the site have up-to-date qualifications, stopped working from October 18 to 25. Personnel populated on a facility watchbill fill Technical Safety Requirement minimum staffing requirements. During this time, the qualifications of site personnel was not updated in the database, which allowed 6 individuals with expired qualifications to be populated on watchbills (2 in a minimum staffing position). The affected facilities are the Savannah River National Laboratory, K-Area and Tank Farms. Site personnel are still investigating this issue, but suspect the error occurred due to a file permission change. During a fact finding this week, site personnel discussed several shortcomings, including poor communications and the lack of an automatic system response when it failed to update.

Liquid Waste Contract: DOE awarded the liquid waste contract to Savannah River Mission Completion, which includes BWXT, Fluor and Amentum.

Defense Waste Processing Facility (DWPF): A Resident Inspector (RI) observed a sludge transfer from H-Area Tank Farms to DWPF. The RI shared some observations with the DOE Facility Representative on the flow of procedure and the pre-job briefing.