

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 27, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Z. C. McCabe Resident Inspector
SUBJECT: Savannah River Site Activity Report for Week Ending November 29, 2019

Salt Waste Processing Facility (SWPF): Last Friday the contractor concluded the contractor Operational Readiness Review (CORR) and identified certain criteria that were not fully met. Notably, in their outbrief to SWPF personnel, the CORR team identified pre-start findings related to:

- lack of detail in the plan governing the startup of hot operations
- lack of technical basis for the radiological monitoring
- lack of plans and measures for applying the As Low as Reasonably Achievable concept
- improper Unreviewed Safety Question screening of changes
- lack of full implementation of activity-level hazards and controls as part of work planning and control

The demonstrations for the CORR did not include the Alpha Strike Process, Alpha Finishing Facility and transfers from SWPF to Saltstone or the Defense Waste Processing Facility. The issuance of the final CORR report is expected this week.

H-Canyon: H-Canyon personnel began work to remove and repair the surface concrete in the section 15 crossover tunnel on October 17. This area of the facility is typically within clean area limits, however, it is posted as a contamination area as it serves as a path for personnel to transfer from the hot gang valve corridor to the warm gang valve corridor without doffing and donning protective clothing. The task involved scarifying large portions of the concrete surface, which creates significant amount of silica dust. H-Canyon and construction personnel utilized high efficiency particulate air (HEPA) filter vacuums and donned respiratory protection for the silica hazard. However, the personnel involved failed to note that the HEPA vacuums were also required for the potential radiological hazard as a result of scarifying concrete in a contamination area. HEPA vacuums used for radiological purposes have additional requirements for testing and labeling compared to HEPA vacuums used for industrial hygienic purposes. Weeks into the task, a radiological protection department (RPD) manager at H-Canyon questioned the use of the HEPA vacuums for the radiological hazard, which led to the identification of the issue. Review of the assisted hazards analysis (AHA) after the fact revealed that personnel involved noted the potential for an airborne radiological hazard, which was to be controlled “as directed by RPD [first line manager].” However, those involved stated that they overlooked this hazard because they were focused on the silica hazard. H-Canyon personnel are drafting a lessons learned and evaluating the AHA process to determine if the questions regarding HEPA vacuums are appropriately robust.

Tritium Facilities: The Resident Inspector observed the overhaul inside of a valve in a load line glovebox in H-Area New Manufacturing. Maintenance personnel signed onto the appropriate lockout prior to going to work and were knowledgeable of the system and task. No issues were noted.