

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 28, 2020

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** M. T. Sautman, Resident Inspector  
**SUBJECT:** Savannah River Site Activity Report for Week Ending August 28, 2020

**Salt Waste Processing Facility:** The resident inspector (RI) observed a coached emergency preparedness drill that simulated a worker inside an airborne radioactivity area falling unconscious. This training was performed in response to a finding in the DOE Operational Readiness Review. Most of the personal protective equipment was simulated.

The RI observed control room staff start up the contactors in support of the 3-batch run with simulant (see 8/7/20 weekly report). Shortly after startup, one of the extraction contactors experienced a HI-HI top rotator bearing temperature alarm. The operator shut down the contactor as directed by the alarm response procedure. Troubleshooting is in progress.

**Solid Waste Management Facility (SWMF):** DOE has not characterized transuranic waste at SRS since 2014. The Central Characterization Program (CCP) performs the actual characterization. This week SRNS conducted a readiness assessment (RA) focused on the interfaces between SWMF and CCP activities. The RI observed demonstrations involving real-time radiography, the Mobile ISOCS Large Container Counter, and flammable gas analysis. The RI also observed level of knowledge interviews conducted by the RA team.

**Tank Farms:** SRR declared a positive Unreviewed Safety Question with how the safety basis analyzes the impacts of trace organics in flammability scenarios where the temperature exceeds 100°C. The two evaporators are the two locations that are impacted.

**F-Area:** The F/H Laboratory's analytical mission will be ending in the coming months and the facility is undergoing deactivation. With the reduction of mission and inventory, all of the limiting conditions for operation (LCO) will be eliminated with one exception. The LR-56S loading station is outside the laboratory and is where material from the high activity drain (HAD) is placed in a shipping package. The LR-56S vapor space control LCO would be applicable when HAD Tank F is in service. A shift operations manager (SOM) would only be required for F/H Laboratory when a LR-56S is present and contains more than 100 gallons in a closed configuration.

**235-F:** SRNS submitted a grout strategy for in-situ decommissioning to DOE for approval. In Phase I, fixative would be applied to the Plutonium Fuel Form Facility cells and attached wing cabinets, Plutonium Experimental Facility gloveboxes, Actinide Billet Line, and Old Metallography Laboratory gloveboxes. Fixative would also be applied to rooms and ventilation ducts on the second floor with high potential for transferable contamination. In Phase II, locations below the process enclosures would be grouted and concrete forms would be placed for grouting/encasement of gloveboxes and cells. In Phase III, the process areas and underground ventilation tunnel would be encased in grout/concrete. The sand filter would shut down too. In Phase IV, the non-process areas would be encased in grout/concrete if required and the stack would be grouted and capped. An engineered roof designed to last for 750 years would also be installed.