

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 10, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Z. C. McCabe, Resident Inspector  
**SUBJECT:** Savannah River Site Activity Report for Week Ending September 10, 2021

**Defense Waste Processing Facility:** The Facility Operations Safety Committee convened to review proposed changes to the DWPF safety basis that are part of the 2021 annual update. Meetings have focused on updates to the Technical Safety Requirements (TSR) document and the Facility Safety Analysis Report (see 4/30/21 report). The annual update includes the glycolic flowsheet, new antifoam, and upgraded melter off-gas flammability controls. Flammability monitoring in the Sludge Receipt and Adjustment Tank has been removed but a condenser train purge flow requirement has been added. Once all comments are incorporated, the safety basis will be submitted to DOE-SR for review and approval (planned for later this month).

**H-Canyon:** Last month SRNS submitted a revision to the H-Canyon Documented Safety Analysis to DOE-SR for their review and approval. The revision incorporates several mission changes, a reduction to the material-at-risk for all non-seismically initiated event (previously implemented for the seismically initiated accident scenarios) and downgrading multiple controls. Notably, this revision incorporates the completion of the Target Residue Material mission and the proposed Accelerated Basin Deinventory project which will require the storage of dissolved spent fuel in additional tanks. Included in the control downgrades are the currently safety class H-Canyon Exhaust Ventilation System to safety significant, removal of the Seismically Qualified Vessel Air Purge piping and Specific Administrative Control (SAC) and downgrading of the safety significant vessel instrument air purge to general service based on reduced radiological consequences. DOE-SR expects to complete their review in the next 60 days.

**K-Area:** K-Area personnel discovered a small amount of hydraulic fluid in the K-Area Interim Surveillance (KIS) Glovebox. Upon discovery, K-Area personnel called a timeout and stopped all KIS activities. They determined that the fluid is from the hydraulic tool put in the glovebox wing cabinet as part of the KIS down blending optimization effort. K-Area personnel were able to clean up the fluid and compress a blank (i.e., without nuclear material) with the tool. They did not see any additional hydraulic fluid. Thus, they were able to exit the timeout and continue processing. As part of the KIS optimization process changes, K-Area personnel implemented multiple controls associated with the flammable hydraulic fluid including a SAC to not allow the hydraulic tool to be energized while a pressurizable container is present. However, the discovered amount of fluid was insignificant and there were no pressurizable containers present.