

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 1, 2022

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** L. Lin, Z. C. McCabe, E. P. Richardson Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending April 1, 2022

**Savannah River National Laboratory (SRNL):** SRNL credits isolation valves on the flammable gas distribution system (FGDS) as safety significant to prevent flammable gas from entering non-authorized portions of the facility. During the facility self-assessment prior to implementing revision 2 of the Documented Safety Analysis (DSA), BSRA personnel identified that the existing backfit analysis did not evaluate the isolation valves' ability to stop the flow of flammable gas. The backfit analysis was issued in 2002 when the general service FGDS was upgraded to a safety class system (it was later downgraded to safety significant in 2007). The backfit analysis had evaluated the piping and determined it would prevent excessive leakage of flammable gas during normal operations, but it did not evaluate the isolation valves to meet their credited safety function. The FGDS flammable gas supplies have been physically isolated and BSRA has determined that a positive Potential Inadequacy in the Safety Analysis (PISA) exists. SRNL personnel re-wrote the DSA in 2015 but have never implemented any version. Due to ongoing implementation delays, including the resolution to the PISA, BSRA personnel are no longer planning to implement Revision 2 and are moving to Revision 3, which is currently scheduled for implementation in FY2024.

Last week, SRNL control room personnel participated in a facility operations drill. The scenario was initiated by a security event that required evacuation of the control room and relocation to the alternate control room in the 776-A complex. The controller organization took several coaching opportunities regarding the control room evacuation and the associated procedure checklist. Additionally, the controller organization noted several areas for improvement, including personnel taking a long time to evacuate the control room (i.e., approximately 20 mins). They also noted that the checklist for evacuating the control room may be improved through prioritization of steps that must be performed before physically leaving. Several of these issues can be partially attributed to limited or no field play over the past two years during the pandemic.

**H-Canyon:** During maintenance activities on 3/9/2022 to replace the 292-H Center Section Exhaust HEPA filter assembly, the workers identified that the safety significant gasket was missing from the inner cam level cap on the breathing air pass-through pipe. The gasket is credited as a confinement and fire boundary and was part of the initial installation of the pass-through pipe in 2014. At that time, the procedures only instructed operations to verify that the cap was in place and made no mention of the gasket. Since then, the pass-through pipe has been used periodically, and the inner gasket was inadvertently discarded during one of those evolutions. An engineering driven procedure revision in February added direction to replace the gasket. The event was declared an ORPS 4(A)1 due to degradation of a credited confinement boundary and a fact finding was conducted on 3/22/2022.

**Liquid Waste Contract Transition:** Savannah River Mission Completion, LLC took over as the contractor for the Salt Waste Processing Facility on 3/28/2022.