

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Z. C. McCabe and M. T. Sautman Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending May 7, 2021

Salt Waste Processing Facility (SWPF): SWPF personnel continued to troubleshoot the cause of the high Isopar™ downstream of the decontaminated salt solution (DSS) coalescer after restarting Caustic Side Solvent Extraction. Initially, SWPF personnel believed the cause of the high Isopar™ in the DSS coalescer was a damaged gasket. They replaced the damaged gasket, but the Isopar™ downstream remained elevated. A subsequent hypothesis by SWPF personnel was that the elevated Isopar™ could be due to not flushing the sample loop from the previous run. As such, SWPF personnel recirculated the sample loop and resampled to no avail. Continuing to trouble shoot, SWPF personnel then developed a procedure to allow them to sample at the DSS coalescer (something that had only been performed during cold commissioning) in addition to sampling upstream and downstream of the DSS coalescer to see if they could discern a difference. The three samples revealed that the DSS coalescer was now removing the Isopar™ as expected. The cause of the high Isopar™ levels is still being determined. SWPF personnel are planning to resume normal operations within the next 24 hours.

SWPF personnel are conducting an annual assessment of their lockout/tagout (LO/TO) program. This week, the assessors identified that an individual had served in the role of a lockout determiner for a completed mechanical lockout without being formally qualified. The individual is an experienced mechanic with LO/TO training; however, they were not a qualified mechanic per SWPF's program. The resident inspector discussed this issue with Parsons. They informed the resident inspector that the individual has since been qualified. Further, they believe that the LO/TO qualification may have led the individual's supervisor to believe they were qualified to perform the determination although the mechanic qualification is also required. The assessment is not yet finalized. SWPF management have determined that an issue review meeting to discuss and learn from this error is not necessary.

Savannah River Tritium Enterprise (SRTE): A construction engineer and a trainee were walking down the ice plant to assist in planning an upcoming job. In doing so, they passed through a posted barricade (requiring hearing protection when chillers are operating and to control area access) without receiving permission from personnel that placed the barricade or the shift operations manager (SOM). They were attempting to look at a 480 volt disconnect to determine if it would accept a hasp to support a lock out. Directly above the handle is an arc flash and shock hazard warning label. While inspecting the disconnect, the engineer inadvertently moved it to the open position. This caused the operating chiller to power down and other to come online. The engineer and the trainee then reported to the remote monitoring station (RMS) in H-Area Old Manufacturing to inform the SOM of the issue. As they arrived, the RMS received the alarm associated with the chillers swapping. The engineer was not wearing the required personal protective equipment for the arc flash potential nor were they a qualified electrical worker. SRTE personnel are planning to hold a fact finding meeting next week.