

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 16, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending November 16, 2018

L-Area: In past drills, the RIs had observed that the L-Area emergency response was slowed because workers at the scene initially contacted the SRS Operations Center and the K-Area control room prior to contacting the L-Area shift operations manager (L-SOM) and the L-SOM had to get approval from the K-Area Area Emergency Coordinator (AEC), who may only be a control room operator, for all decisions. (See 8/10/18 report). In order to allow the L-SOM to direct more of the response, SRNS decided that the L-SOM will now be the facility emergency coordinator (FEC). K-Area personnel would still act as the AEC. This week, the L-SOMs completed the FEC classroom training. SRNS is modifying their emergency response procedures and emergency drill scenarios to reflect this change and provide opportunities for the L-SOMs to act as the FEC. SRNS hopes to complete this training in early 2019.

H-Area: SRNS plans to transfer the resin from two anion exchange columns in HB-Line, formerly used for plutonium oxide production, to a resin catch tank and then to a tank in H-Canyon for digestion and eventual transfer to tank farms. While this activity was included in the Documented Safety Analysis (DSA) and Technical Safety Requirements, the controls were listed as exceptions on the safety basis list and this scope was excluded from the HB-Line Readiness Assessment performed for the DSA upgrade and start of the plutonium oxide mission. Resin removal has not been performed since 2010. This week, SRNS conducted a dry run using process water to verify the condition of the equipment, transfer path, and to validate procedures. The RI observed two pre-job briefings and the transfer of solution from HB-Line to H-Canyon.

Tank Farms: The Tank Closure Cesium Removal demonstration project will use an ion exchange process to remove cesium from liquid salt waste in Tank 10. The contractor Readiness Assessment began this week. The RIs had previously reviewed the RA Plan of Action and Implementation Plan and observed level of knowledge interviews with SOMs and a shift technical engineer.

Tritium Facilities: Tritium personnel completed an open glovebox maintenance evolution to replace a failed glovebox recirculation fan in a load line glovebox in H-Area New Manufacturing (see 11/9/18 report). The resident inspect observed radiological control practices, disassembly, assembly, and installation of the new recirculation fan without any significant issues. During the evolution, the mechanics in the hut noted that the junction box had four wires as opposed to the expected three wires. The mechanics appropriately paused the evolution and consulted the subject matter expert who identified it as a ground wire that was not included on the system drawing.

Contractor Assurance: The SRR Integrated Independent Evaluation identified two core issues. First, numerous non-compliances with facility procedures across multiple functional areas indicate more work is needed in conduct of operations. Second, an integrated strategic approach to staffing and training is needed that is prioritized based on risk.