

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 29, 2017

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Resident Inspector Report for Week Ending Sept. 29, 2017

Salt Waste Processing Facility (SWPF): Parsons spent the week implementing corrective actions to support their four phase resumption of operations. Parsons completed Phase 1 by completing 1) an extent of condition review for existing lockout tagouts (LOTO) looking for configuration status problems and 2) by briefing personnel who will be conducting management field observations on the work release process and each work order prior to release. This allowed the resumption of inspections and compliance-related planned maintenance. In addition, Parsons shut down many facility support systems in preparation for hurricane Irma, which had not resumed operations due to recent events. Parsons is implementing additional corrective actions (procedure reviews, senior supervisory watch preparations) in Phase 2. This will allow the startup of the Basic Process Control System and other equipment. A resident inspector (RI) observed an all-hands meeting discussing recent hazardous energy events, lessons learned, corrective actions and management's expectations for what signing a document means. A RI also observed level of knowledge interviews of three shift operations managers.

F/H Laboratory: The resident inspector observed a drill simulating a fire involving a forklift and a breached waste box. This was a training drill and several individuals were in new roles. The Fire Department (FD) captain did not enter the gate he was told to use and thus drove the FD vehicles through the plume when they arrived. In addition, lack of coordination resulted in the Radiological Protection Division responders initially setting up their decontamination zones at a different corner of the building than the Incident Command Post.

Defense Waste Processing Facility: SRR has installed a new air compressor and dryer for the Chemical Process Cell (CPC) Primary Purge system and is repairing an existing compressor. Once SRR has two reliable sets of compressors and air dryers, SRR will resume operation of the CPC Primary Purge System and exit their response plan. This will also allow SRR to start replacing leaking valves on the Safety Grade Nitrogen system.

Surplus Plutonium Disposition (SPD) Project: SRNS submitted the safety design strategy for the K-Area Complex (KAC) scope of the SPD project to DOE-SR for review and approval. The SPD project is planned to be used for the dilution and disposition of 34 metric tons of surplus plutonium. The KAC activities supporting the SPD project (determined to be a "Major Modification" per DOE-STD-1189-2016) are planned to include down blending, nondestructive analysis, packaging, staging, and shipping of plutonium. The project would require modifications to the final storage vault, which was recently added as a material storage area to support the K-Area Material Storage mission (see 10/17/14 report). The modifications are planned to include several new safety systems. SRNS has proposed safety class fire suppression and detection, and safety significant active confinement ventilation and gloveboxes. NNSA has requested SRNS to submit a Critical Decision 1 package per DOE O 413.3B by June 29, 2018. The SPD project is also planned to include scope for the Solid Waste Management Facility in E-Area, however, the E-Area scope is not anticipated to be as impactful as the KAC scope.