

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 24, 2017

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Resident Inspector Weekly Report for Week Ending February 24, 2017

F/H Laboratory: SRNS declared a positive Unreviewed Safety Question after a fire protection engineer identified a fire scenario not described in the Safety Analysis Report. DOE Headquarters had previously questioned why the Limiting Condition for Operation for the Building 772-F fire suppression system excluded the attic area. In response, SRNS recently inspected the attic, a confined space, from four access hatches. The inspection identified that the wood joist support system appeared to be constructed of 2" X 4" and 4" X 4" wooden beams and that the plywood used for paths in the attic does not appear to be fire retardant. Extension cords were found strung through the fire water pipe braces, draped on and around sprinkler piping, and may touch a pendant sprinkler's deflector. Some extension cords were taped (i.e., possibly damaged) and there were junction boxes with no covers. It is not known if any the cords or junction boxes are still energized. Furthermore, the inspection found combustible materials at each hatch including papers, rolls of tape, personnel protective equipment, tissues, paper bags, etc. Due to the above observations, SRNS believes that if a fire initiated in the area above the ceiling, the fire could propagate unless it was controlled by the fire suppression system. SRNS is developing a path forward and will be reviewing the extent of condition.

235-F: SRNS declared the diesel generator inoperable two weeks ago and entered a Limiting Condition for Operation. A leaking fuel injector is allowing excessive fuel oil to dilute the engine oil. SRNS has approved a response plan in case they are unable to procure, dedicate, install, and test the replacement parts within the 30-day required action completion time. Risk reduction work is on hold in the interim.

Defense Waste Processing Facility (DWPF): SRR declared the melter to be shutdown. Engineers evaluated hydrogen generation in the melter and determined that it is safe to secure the backup off-gas system. SRR has also been cleaning up the cell covers to prepare a route for removing the melter and checking out the cranes. Transfers and flushes from the Modular Caustic Side Solvent Extraction Unit to DWPF will support the upcoming Salt Waste Processing Facility tie outage.

HB-Line: SRNS approved a conditional release for the cracked containment glovebox panel until the panel can be replaced. The crack will be monitored and work restricted in the interim.

Readiness Assessments (RA): NNSA commenced their RA for the extraction system restart at the Tritium Extraction Facility. SRNS started their RA for transuranic waste loading and shipping operations at the Solid Waste Management Facility (SWMF). The resident inspectors observed level of knowledge interviews for both RAs.

Emergency Preparedness (EP): SRNS hired two drill scenario writers for their Consolidated Drill Team who will start developing scenarios for SWMF, K- and L-Areas to address previously identified gaps. The resident inspector met with the new SRNS Emergency Services manager to discuss observations with the SRNS EP program.