

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 27, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending March 27, 2020

COVID-19: DOE-SR has issued a partial stop work order to SRNS, SRR, and Parsons. They directed the individual contractors to transition to limited operations while implementing maximum telework. This will include a facility-by-facility approach for determining the operations that will continue, each of which will be evaluated to ensure they can be safely and effectively performed. Any curtailment of operations or personnel on site will be executed such that impacts to resumption of full operations will be limited. To support NNSA's mission, the Tritium Facilities remains at full operation (with maximum telework).

Savannah River National Lab (SRNL): SRNL operations personnel erroneously replaced a safety class plug in the shielded cells with a general service plug. While material is present in a cell block, these plugs (along with the cell structure) are passive design features credited as a fire barrier and to shield personnel from radiation. SRNL is beginning the process of replacing the cell windows on this block and has de-inventoried one cell. They had planned to replace the safety class plugs with general service plugs temporarily during the cell replacement while they were de-inventoried. The cell in which these were erroneously replaced had been de-inventoried and the personnel involved believed that to be sufficient. This evolution (removing and replacing a safety class passive design feature) was governed by a technical reference procedure. However, the resident inspector was informed that the personnel doing the evolution were using the procedure as if it was a use-every-time procedure. During a fact finding meeting, SRNL personnel discussed the fact that there is no verification step with the design authority as a factor contributing to the error. Additionally, the resident inspector noted that there is no mention of these plugs serving a credited safety function. SRNL personnel recognized the error the following day during a discussion with an engineer. As a corrective action, SRNL personnel are doing a complete rewrite of the procedure to address several shortcomings.

235-F: Last weekend, portions of F-Area lost normal site power when a feeder failed. Normally, the area is redundantly fed through a second feeder; however, due to other ongoing work, portions of F-Area were only fed through a single feeder. F-Area operations personnel were unaware of the single feeder configuration. Additionally, the back-up diesel generator for the 235-F exhaust fans has been out of service since February due to a coolant issue. As such, when the feeder failed, 235-F lost ventilation. According to the discussion during a fact finding, F-Area operations personnel responded appropriately to the loss of power and dispatched personnel to confirm the condition. 235-F was without ventilation for approximately 2 hours before power was restored. Radiological Protection Personnel did not identify any contamination spread upon their re-entry and investigation.

Salt Waste Processing Facility (SWPF): Parson's has finalized and approved their corrective action plan in response to the DOE Operational Readiness Review completed in February (see 2/14/2020 report). DOE has reviewed and concurred with the corrective action plan and the timeline for completion.