

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 8, 2020

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 May 8, 2020

COVID-19: SRS personnel are preparing to begin a phased approach for resuming normal operations. DOE-SR management will brief DOE Headquarters (HQ) personnel early next week regarding the regional COVID-19 status relative to all of the gating criteria required by the Savannah River Site Recovery Plan, including the 14 day downward trend for regional COVID-19 cases. Once DOE-SR and DOE HQ agree that the gating criteria are met, SRS will slowly begin transitioning to Phase 1, which consists of low risk and/or high priority tasks essential for Environmental Management's primary mission. This would likely include a significant increase in personnel onsite, however, many would still be teleworking. Among the activities being considered for resumption in Phase 1 are Saltstone Disposal Unit construction and actions to address the DOE Operational Readiness Review findings at the Salt Waste Processing Facility.

Defense Waste Processing Facility (DWPF): Operations personnel were tasked with opening a breaker to isolate a diesel generator after the monthly load test was complete. However, the individual inadvertently opened the incorrect breaker which resulted in a loss of power for all loads on the B9 bus, including two Zone 1 exhaust fans. According to the discussion during the fact finding meeting, the operations team participated in a field walkdown, task preview, and a prejob brief where they discussed critical steps, including opening the correct breaker. The operator stated that he also touched the correct breaker before donning a 40 cal arc flash suit and hood and performing the step. The breaker the individual actually opened is identical to and only a few inches away from the correct breaker.

Once the B9 bus was deenergized, control room personnel began to receive multiple alarms and calls due to the loss of power. They initiated several abnormal operating procedures and entered multiple limiting conditions for operation (LCO), including one for three exhaust fans being inoperable (one was inoperable before this event occurred). Hours later during the next shift, DWPF personnel realized that they had failed to enter the LCO condition associated with two exhaust fans being inoperable (Condition A) in addition to the condition for three inoperable exhaust fans (Condition G). The immediate required actions for Condition G satisfy the required actions for Condition A except they do not include verifying that the sand filter inlet plenum pressure is below the required value. However, DWPF personnel were verifying the inlet plenum pressure every hour as a conservative measure. Discussions during the fact finding meeting revealed that several people were confused about the need for entering Condition A in addition to G for three exhaust fans being inoperable. Of note, six qualified individuals (shift operations manager, shift technical engineer, and control room manager on two shifts) independently concluded that they were in the correct LCO conditions before another individual questioned why the facility was not in Condition A. DWPF personnel have identified several corrective actions to prevent reoccurrence, including addressing this widespread knowledge gap. Due to the fact that all of the required actions for Condition A were met, SRR personnel determined that the failure to enter the condition did not represent a violation of the Technical Safety Requirements.