

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 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 August 21, 2020

Salt Waste Processing Facility: DOE approved Critical Decision-4 and granted Authorization to Operate. A second attempt to restart the extraction contactors was unsuccessful due to high vibrations and Parsons encountered additional contactor issues during the week. The resident inspector observed two inter-facility transfers conducted on the simulator.

L-Area: An Electrical and Instrumentation (E&I) mechanic accompanied by a first line manager (FLM) opened three disconnect switches in support of a lockout without authorization from the shift operations manager (SOM) and without the lockout work order in the field. The applicable components had been disconnected the previous day, thus, the mechanic was not exposed to any hazardous energy. On the day of the error, the SOM informed E&I personnel that the aforementioned lockout was a priority and proceeded to hold a pre-job brief for the operations personnel with the intent of holding a separate one for the E&I personnel prior to starting the work. Later the E&I mechanic and FLM reported to the control room, reviewed the lockout and proceeded to the field to complete the task. The FLM did not voice their understanding of the situation/tasking, nor did the SOM explain that they intended to hold a pre-job brief prior to authorizing the work. After they completed the work, they returned to the control room and offered to sign the corresponding steps in the lockout work order which alerted the SOM to the error. After some discussion with facility management, the SOM called a time out. During an issue investigation, L-Area personnel identified several contributing factors that led to this error. Specifically, they cited poor communications, not meeting management expectations for the conduct of the pre-job brief, and the failure to follow the site hazardous energy control requirements. L-Area management have discussed this issue with facility personnel and will temporarily require additional management oversight for all lockouts.

Savannah River Tritium Enterprise (SRTE): An E&I mechanic inadvertently shut down the power to both (redundant) glovebox oxygen monitors in a 233-H glovebox rather than securing power to one of the monitors as intended, which resulted in an unexpected entry into a limiting condition for operation. Corrective maintenance had been ongoing for several days after the oxygen monitor failed a functional check. The mechanic that made the error is fairly new to their role and is more familiar with the oxygen monitors at the Tritium Extraction Facility which are designed differently and do not have the same redundancy. During an issue investigation, SRTE personnel pointed to complacency, lack of experience with this equipment and failure to utilize human performance tools such as “point-read-operate” as contributors to the error. Although, it did not contribute to this specific issue, SRTE personnel identified inconsistencies in the procedure as well that will also be addressed.

Emergency Management (EM): DOE-SR and NNSA-SRFO agreed to cancel or postpone all EM drills and exercises until January 5, 2021. NNSA facilities are allowed to perform drills that have minimum impact to site operations. Conduct of operations drills are not affected by this.