

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 3, 2016

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending June 3, 2016

Work Execution: Although SRNS, SRR, and Parsons have implemented many corrective actions to improve conduct of operations, problems continue to occur across SRS.

- SRNS declared their fifth Technical Safety requirement violation since early April when operators missed a Limiting Condition for Operation (LCO) required action to perform hourly glovebox oxygen readings. The LCO tracking computer program in the control room had been inadvertently changed to display the LCO status for a different facility.
- At the Salt Waste Processing Facility (SWPF), a maintenance qualified electrical worker (QEW) performed work that was not authorized and without a single point lockout. His supervisor gave the QEW an incomplete work package (i.e., the work order and a request for permit to work) to review, but the QEW mistakenly believed he was to perform the work. The task involved adjusting the thermal overload potentiometers located in an electrical panel for two cooling water pumps. The QEW signed off that a pre-job briefing had been conducted and the work package was authorized although neither had been. Despite verifying that the motor control center that feeds the panel was still energized, he proceeded with the task without installing a lockout or verifying if one was needed. (The local disconnect on the panel was in “off” position). After he opened the panel and could not locate the overloads, he found a test engineer who observed him while he manually adjusted the overloads with a screwdriver. The QEW was wearing the proper personnel protective equipment and did not contact any energized equipment. Due to poor communications, the engineer mistakenly believed the work was authorized and he did not inquire about the status of the lockout. There was also confusion over who was fulfilling the role of the person-in-charge. When the engineer subsequently learned that this work package was not authorized, he notified operations management. This is the third electrical safety event at SWPF in six weeks. Previously, an electrician cut into a live cable and an engineer entered a 480 volt cabinet without proper hazardous energy control. Earlier this week, Parsons had stopped releasing electrical work per their corrective action plan and requiring continuous senior supervisory watches. All future electrical work was to have been observed via management field observations, but this job was not watched since it was not officially released. Parsons has shut down all electrical work at SWPF.
- A Defense Waste Processing Facility (DWPF) worker received skin contamination (300k dpm $\beta\gamma$) on his palm and finger while replacing a pump. The worker was wearing a respirator and two pairs of anti-contamination clothing. The original work scope was just to put a hose in a tank so they were wearing nitrile gloves, but the workers decided to expand the work scope while in the field without evaluating whether the use of leather gloves would be appropriate for the new scope.
- Workers inadequately secured a 12 metric ton crane counterweight on a flatbed trailer at H-Tank Farms. When the truck started to move, the counterweight slid off the flatbed and onto the ground.

Nuclear Safety: SRNS upgraded the K-Area Potential Inadequacy in the Safety Analysis (PISA) to a positive Unreviewed Safety Question (USQ) because the impact of high winds inside the Assembly Area building on important-to-safety equipment located outside the Performance Category 3 structure is unanalyzed. SRR declared a positive USQ because some valves in the DWPF Low Point Pump Pit transfer line jumpers may not be able to perform their safety function following an internal explosion. SRR also declared a PISA because they found an error in a transfer line jacket volume that caused a dose to increase, but this will likely be a negative USQ.