

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 1, 2018

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman, Resident Inspector
SUBJECT: Savannah River Site Activity Report for Week Ending June 1, 2018

Tank Farms: A Technical Safety Requirement violation occurred when SRR initiated a Tank 49 to 512-S transfer with a conductivity probe along the transfer path in alarm. Prior to the start of the transfer, control room operators (CRO) verified that none of the conductivity probes along the transfer path were in alarm. However, between that verification and the start of the transfer, the 96H Valve Box conductivity probe alarmed. The CRO pulled the alarm response procedure (ARP). The ARP required them to determine if the alarming probe was on a transfer path. The Control Room Manager (CRM) and CRO decided that the alarm was not on the upcoming transfer path, but did not verify this with the Transfer Route Diagram. Another step in the ARP was to evaluate entry into a Limiting Condition for Operation (LCO) and the CRM decided that no entry was needed. The Shift Technical Engineer (STE) was aware of what was going on, but was not formally part of this decision. The LCO required action is to stop the waste transfer immediately so the transfer should not have been initiated. During the next shift, a CRO preparing for another Tank 49 to 512-S transfer noticed the alarm and consulted the Shift Operations Manager and STE, who recognized the need to enter the LCO. They also realized the previous shift had conducted a transfer with the alarm, which was prohibited. There is no evidence that the alarm was discussed during shift turnover. SRR has not assigned a CRO to the responsible watchstation due to an extended process outage. SRR did not actually find any liquid in the valve box sump and is investigating the cause of the alarm. SRR also placed all tank farm transfers on hold and is conducting an extent of condition review.

H-Area Old Manufacturing: A shift manager (SM) authorized the removal of a lockout/tagout (L/T) for an air handling unit while the maintenance work was still ongoing and two L/T holders were still signed on the L/T order. The SM then instructed a first line manager (FLM) to remove the L/T, which was completed by an operator. Later on, the FLM heard that work was still being performed on the system and realized the mistake. Luckily, workers were not actively working on the equipment at the time or they could have been exposed to hazardous energy. The L/T procedure requires the SM to verify/determine several items prior to authorizing the removal of a L/T. At this time, it is not known how many of these were performed. SRNS is requiring senior supervisory watch for establishing and removing L/T's at the tritium facilities. SRNS is also providing briefings on L/T requirements for operations staff and conducting field observations.

L-Area: As it was exiting the transfer bay, a trailer containing an empty spent fuel shipping cask became disengaged from the tractor after it was pulled about 50 feet. The trailer came to rest and neither the trailer nor the shipping cask were damaged. The trailer was coupled to the tractor inside a contamination area. Although workers made visual and audible checks of engagement, workers did not perform a visual inspection underneath the trailer to confirm the trailer was fully coupled with the tractor. Furthermore, the pull test was not as hard as normal due to a desire to avoid tearing the contamination control paper underneath the trailer landing gear. The trailer may have been sitting a bit too high when the tractor pulled underneath it, thus causing the trailer to sit on the fifth wheel rather than fully engaging it.