

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 10, 2017

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Resident Inspector Report for Week Ending Nov. 10, 2017

Salt Waste Processing Facility: DOE concurred with Parsons commencing Phase III Stage 2, resumption of process system operational tests. This allows up to four testing field work activities, six operations activities, six corrective maintenance work orders, and six construction work orders to be performed simultaneously.

Tank Farms: SRR considered the demonstrations of the powder injection laser welding technique for repairing the 3H Evaporator pot leak to be successful. This week, SRR lowered the welding robot into the evaporator cell and began welding the new cap to the original evaporator pot. (See 2/19 and 2/26/16 weekly reports).

Technical Safety Requirements (TSR): The resident inspectors received a demonstration of SRR's Safety Requirement Management System (SRMS), which will be used to track Limiting Condition for Operations (LCO) entries/exits and surveillance requirements. This program is consolidating several individual tracking programs into one. SRMS is implemented at the Defense Waste Processing Facility and is being prepared for use at Tank Farms.

A DOE programmatic review of SRR's critical lift plan program implementation identified 11 findings. DOE found that the main TSR implementing document is not being maintained and is not in compliance with facility or site requirements and DOE standards. They also found non-compliance with procedural requirements in all seven work packages reviewed. DOE also found significant gaps between engineering requirements in the Documented Safety Analysis and TSRs and SRR's procedures and checklist. SRR concluded there was not a programmatic breakdown of the Critical Lift Program which would render the DSA summary invalid and constitute a TSR violation. While SRR's position is that critical lift work packages and detailed calculations contained the key attributes of the administrative control, they agreed more rigorous implementation of the critical lift program is required. SRR placed all critical lift work packages on hold. All active critical lift work packages are to be reviewed and revised as necessary.

H-Area New Manufacturing (HANM): Due to equipment failure, Tritium Process Control (TPC) personnel were tasked with replacing a general service power supply (PS). The TPC technician, although qualified was not experienced in HANM and mistakenly replaced the wrong PS. Later another TPC technician noted the error before the task was completed. Once, they realized the mistake, they placed the PS that was just removed into the originally intended location before calling a time out. The PS that was mistakenly replaced was safety significant (SS), although it was the same model as other PS. The component powered by the SS PS had a backup PS so it was never taken offline. Immediately after discovery, HANM personnel entered the applicable LCO. During a follow-up issue investigation, Tritium personnel noted multiple apparent causes including poor component labeling, lack of TPC technician proficiency in HANM, and failure to perform a task preview walkdown. Tritium personnel will meet at a later date to determine the appropriate corrective actions.