

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 22, 2016

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending July 22, 2016

Board Activities: Vice Chairman Jessie Roberson and Board Member Daniel Santos were at SRS this week to review safety issues across the site. Topics included flammable gas issues at the Defense Waste Processing Facility (DWPF), conduct of operations, Technical Safety Requirement violations, electrical safety, criticality safety controls, and the 3H Evaporator leak. The Board members visited F and H-Tank Farms and the DWPF.

235-F: In order to support maintenance activities on ventilation system interlocks and associated components, operations and maintenance personnel use two procedures. Each procedure has steps for making a planned limiting condition for operation (LCO) entry to support the maintenance and steps for later exiting the LCO when the work is complete and the system has been restored to normal. On the July 13, workers conducted the maintenance and calibrated a pressure switch. Management decided to stay in the LCO overnight and continue alternate monitoring. However, the operations point of contact (POC) did not notify the shift operations manager (SOM) that his procedure was still open, and did not discuss the procedure during shift turnover that evening or the following morning. The next day, the engineering and acting operations manager, maintenance first line manager, and SOM reviewed the paperwork generated during the calibration and concluded that system operation had been restored; no one discussed the open operations procedure which still had a safety significant interlock in the bypass position. The operations POC realized the mistake when he encountered workers preparing for a job and notified the SOM that his procedure was still open. The SOM re-entered the LCO to support the procedure completion. Neither the SOM logbook entry nor the LCO tracking database had indicated that the LCO was entered because of the two separate procedures. SRNS is pursuing corrective actions to better track when LCOs are entered for more than one reason and to improve shift turnovers.

Defense Waste Processing Facility: Two DWPF waste canisters failed to meet the acceptance criteria for the leak checks performed after the canisters are filled and capped. Although the leak rate was recorded correctly and double checked in the procedures, the canisters were not flagged as failing the leak checks. The canisters continued through the decontamination process, were welded to prevent leakage, and then placed in the Glass Waste Storage Building (GWSB) before the error was discovered. A non-conformance report was generated for both canisters. SRR personnel recognized that the procedure was flawed and have since revised it. There are no safety concerns associated with the nonconforming canisters in the GWSB at this time.

K-Area: In response to a Board's 2012 letter, SRNS replaced the degraded diesel fire pump (DFP) in 2013. Despite this, the DFP had one or more impairments for 335 days between May 2015 and April 2016. Only some of the impairments affected pump functionality or TSR operability. The DFP has been out-of-service since March 2016 due to a leak in a discharge pressure regulator valve. The DFP currently has four unplanned impairments that are between 120 and 190 days old although two of them will soon be closed. The sites process for performing commercial grade dedications has delayed three impairments. For example, the annual diesel engine preventive maintenance became delinquent on January 2, partly due to the CGD process.