

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 17, 2016

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending June 17, 2016

Savannah River National Laboratory: The leak in the safety significant 782-A water storage tank worsened over the weekend to an estimated 20 gpm. On Monday, divers inspected the tank interior and found a 1" X ¾" hole. In order to temporarily reduce erosion around the hole and under the tank, divers placed a weighted plate with a gasket on top of the hole on Wednesday. This reduced the spray leak to a drip. SRNS is pursuing a permanent repair using an epoxy and a metal plate. Next week, divers will use ultrasonic testing to try to identify where there is suitable metal for attaching the epoxy. They will also sample around the tank bottom to identify other vulnerable locations. The staff has questioned how the current tank condition and planned repair are addressed in the safety basis. DOE and SRNS are also examining their options for replacing this tank since the current project to replace the tank and pumps is not scheduled for completion until September 2020.

F/H Laboratory: A shift operations manager (SOM) and a pair of operators conducted separate walkdowns of a planned fan lock out, but neither read the arc flash label and thus the wrong personal protective equipment was going to be used until an independent observer intervened.

Salt Waste Processing Facility: Corrective actions for the recent electrical event (see 6/3/16 report) include performance of a root cause analysis and having an internal/external team perform an Integrated Safety Management System assessment of work practices, policies, and procedures.

Training: The site rep has been reviewing the training and qualification of SOMs and control room managers. In many cases, these positions do not have a list of normal and abnormal operation tasks that the candidate is expected to know how to perform nor is there a matrix showing how the training provided addresses these tasks. The candidates are expected to learn how to perform many of their responsibilities by spending time in the control room, but the actual requirements for this vary across the site. In many cases, a SOM is only required to participate in one emergency drill as the area/facility emergency coordinator plus take some generic training on emergencies (e.g., categories of emergencies, types of protective actions) even though a facility like H-Canyon has 30+ abnormal operating procedures. Some of the SRNS facilities have developed or are developing lists of tasks a trainee under instruction watch must perform. While this is a positive move, having a trainee conduct these core responsibilities (e.g., enter and exit a limiting condition for operation, release a work package, approve a lock/tag order) a single time is unlikely to result in proficiency and relying on qualified SOMs to approve this may result in inconsistent standards. The number of recent Technical Safety Requirement violations and oral board failures indicate that more initial and continuing training involving realistic scenarios might be beneficial, especially for those candidates who have not already spent years in a control room. Even when a facility like the Defense Waste Processing Facility (DWPF) provides a list of normal/abnormal operations practical factors (e.g., direct response to a loss of XX), many of these have to be conducted as a tabletop exercise with an instructor because the facility does not have enough qualified simulator instructors to run the simulator. After the site rep and others questioned the adequacy of SOM training in light of several failed oral boards (see 3/11/16 report), SRNS Training and K Area Operations began implementing several promising corrective actions to improve integrated plant understanding and conservative decision making, to write a basic casualty control procedure, and to improve instructors' knowledge of plant operations.