DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 14, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: A. Z. Kline, L. Lin, Z. C. McCabe, and E. P. Richardson, resident inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending October 14, 2022

Respirator Training: Previously, the resident inspectors (RI) discussed issues they identified with respirator training with SRNS and DOE and were told changes were being made to the program (see 9/9/2022 report). An RI observed a class and job performance measure (JPM) evaluations for plastic suit and hood. The RI noted improvements, such as the instructors offering a coached, on-the-job training (OJT) prior to the actual evaluation, which was not coached. Trainees who failed a critical step on the evaluated JPM were given an unsatisfactory score. After one failure, the instructor discussed the performance with the trainee and allowed the trainee to make a second attempt with a different instructor. The RI noted that further improvements could be made to the JPM. For example, there were several instances where one trainee would be performing the evaluated JPM right next to another trainee going through an OJT with the instructor coaching them. In addition, there was a poster with the JPM steps for plastic suit at the back of the room, fairly close to where some trainees were performing the JPM.

H-Canyon: While performing absence of voltage checks prior to performing work on the railroad tunnel shield door permissive switch on 10/12/22, workers found 120VAC on a circuit that should have been de-energized based on the installed lockout. The same voltage was originally found on 10/10/22, but poor communication (i.e., there was DC voltage that was expected, but not the 120VAC) prevented appropriate notifications from being made. The lockout was installed on 8/8/22 and the same junction box has been worked on multiple times prior to this event with no AC voltage noted. The source of the voltage has not been identified, and the facility is continuing to investigate.

Tritium: Operators performing glovebox waste removal activities inadvertently cut the index finger tip off an adjacent glove with scissors, causing an atmospheric breach. They did not initially notice their error. Later, after placing their hands in the damaged glove, another operator observed the severed piece of the glove at the bottom of the glovebox and saw the white glove liner exposed inside the glovebox. The operator immediately removed their hands from the glovebox, tied the glove off, and notified radiological protection personnel who performed surveys of the personnel and equipment and found no contamination. Both operators involved provided bioassay samples with results pending.

Defense Waste Processing Facility (DWPF): Personnel were setting up to perform non-destructive evaluations of a jumper. This involved rigging personnel positioning a portable hoist in place to remove a cell cover in order to inspect the jumper. When an operator went to reposition the trolley on the hoist frame, it would not move. When they pushed up on the trolley, the trolley dis-engaged from the frame and fell to the floor. It is unclear whether inspections of all the components are done by the rigging personnel or the operations personnel using the hoist prior to its use. Facility personnel believe it is a mechanical issue following up to determine the exact cause of the issue. In the meantime, compensatory measures will be put in place to ensure inspections are done on hoists prior to their use.