

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 30, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: M. T. Sautman and Z. C. McCabe Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending August 30, 2019

Salt Waste Processing Facility: The resident inspector (RI) observed the incident scene response for an emergency preparedness proficiency drill. Coordination between the facility and the Fire Department (FD) continues to be poor. As has occurred multiple times in the past, there was confusion regarding at which gate the FD would be arriving and an operator sent from one gate to another walked through the plume. Although radiological control (RadCon) technicians (RCT) set up hot/warm/cold zones on the third level near the victim, the FD brought the gurney and patient through these zones and then after delivering the patient to the ambulance outside were ready to doff their bunker gear on the first floor without support. The RadCon Manager directed much of the RCT field response. This was inappropriate since he was the lead RadCon controller when the drill was conducted two weeks ago and thus already knew the scenario. Furthermore, having him direct the response versus his first line manager (FLM) is artificial since the RadCon Manager is not a watchbill position and may not be readily available in a real event. An example of how this biased performance is that when two contaminated victims arrived at the Decontamination Room, the RadCon Manager directed all decontamination activities. Meanwhile, the RCTs present could not find the Decontamination Room procedure and had not found it by the time decontamination was complete. Addressing previous RI feedback, RadCon controllers were more diligent tracking actions that could result in cross-contamination and provided contamination readings that reflected this. Although providing medical assistance to the victim is the priority, a few precautions and awareness of incident scene contamination could have easily prevented the wide-scale cross-contamination of first responders and the area around the incident scene.

Savannah River National Laboratory (SRNL): The RI observed an informal pre-job brief (PJB) for the task of replacing 10 glovebox gloves. The PJB adequately covered the simple work scope, radiological work permit, and limitations due to a Quality Assurance hold tag. However, discussions during the PJB revealed some unfamiliarity with the current configuration of the glovebox by one of the individuals involved. After the PJB, the FLM informed the RI that this evolution was routine and thus a formal PJB and task preview was not necessary despite it only being performed approximately every two to three months. While the technicians were changing the first glove, they noted some unusual resistance with the tool they were using. They finished replacing the existing glove, but realized when they were unable to install the locking ring that they had installed the glove inside-out. They then paused their work and contacted management and subject matter experts to discuss the path forward. Although the glove was not properly seated, a RCT was able to confirm that there was no spread of contamination. During a post job review it became evident that one of the technicians was not qualified to perform this task and was using this evolution as their practical factors (prac-facs). The PJB did not discuss the individual's qualification nor the fact that they were completing a prac-fac. Additionally, the fact that the unqualified individual was performing the evolution under-instruction was not discussed. SRNL personnel will utilize the issue investigation process to better understand this issue and identify corrective actions.