DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 10, 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 June 10, 2022

Savannah River Tritium Enterprise (SRTE): While observing a drill in H-Area Old Manufacturing involving a capsized cart of reservoirs, the resident inspectors (RI) identified some deficiencies. Maintaining proper drill control was a repeated issue (see 4/29/22 report). At one point, the assigned controller left the control room to observe field activities while the players continued navigating the drill with no controller. The field terminated drill play without the knowledge of the lead controller. Further reducing effectiveness, the Incident Scene Coordinator left the drill when they were called to assist with a non-emergent facility issue. On a positive note, the controller organization capitalized on a training opportunity immediately following the drill to teach several personnel how to recover from dropped reservoirs.

Savannah River National Laboratory (SRNL): SRNL personnel conducted a drill that consisted of a fire that spread into the control room, prompting control room evacuation and activation of the alternate control room. Communication between the facility and the SRS Fire Department (SRSFD) was lacking during the early stages. SRSFD believed it to be a small electrical fire. Two firefighters entered SRNL to extinguish the simulated multi-room fire involving radiological material with only a fire extinguisher. When RPD personnel arrived, they were not dressed out in protective clothing with respirators donned and did not bring air monitoring equipment or step-off pads for the hot, warm and cold zones. Further, the bunker gear doffing would have likely resulted in cross-contamination of personnel and modesty clothing, but the controller organization did not identify this and missed a coaching opportunity. The response at the alternate control room was lacking command and control. Personnel poorly prioritized entering the Limited Condition of Operations before classifying the event, and critical information was not properly communicated. The first briefing from the Facility Emergency Coordinator (FEC) to the control room was 40 minutes after relocating. Proper drillsmanship was lacking with the FEC never stating, "This is a drill." SRNS facility management noted these items and communicated improvement items to the drill players and controllers.

L-Area: Prior to returning the last of the foreign shipping casks, one of six drain cover bolts on a 20-ton cask galled and could not be re-installed. The operators re-installing the bolts were not aware that they had to be returned to their original locations, as the Safety Analysis Report for Packaging (SARP) nor procedure specified this level of tracking. Upon consultation with the cask owner and SRNS management, the procedure was revised to allow the cask to be shipped back with only five bolts installed. Following resolution, the final two casks of this campaign were shipped out of L-Area.

The RIs observed a drill simulating a high radiation alarm in the Disassembly Basin. Overall drill conduct and control were satisfactory. For the third consecutive drill in over a month, the accountability tracking system was malfunctioning and required the team to complete manual accountability, which they did successfully (see 5/6/22 report). Facility personnel had discussed the issue with the accountability tracking system at all three drills.