

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 23, 2020

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 October 23, 2020

Salt Waste Processing Facility (SWPF): Parsons started up the Caustic-Side Solvent Extraction (CSSX) process. During one of the CSSX startups, the process went into a hard shutdown after encountering a drive fault alarm with one of the extraction contactors. A resident inspector (RI) observed a transfer from SWPF to Tank 50 in H-Tank Farm. Prior to the transfer, the control room personnel noted during the pre-job brief that they would begin recording sump level data upon initiation of the transfer and thirty minutes thereafter. However, the procedure directed them to begin recording sump levels fifteen minutes after starting the transfer. Considering that a leak would not be immediately recognizable through the level monitors, it is appropriate that monitoring would not begin immediately after starting the transfer. The RI provided this feedback to SWPF management and noted the importance of procedure compliance.

A RI also observed the Startup Review Board meeting. The results of the shielding verification surveys led Parsons to fill up some empty pipes to reduce radiation streaming and to replace a filter when its whole body dose rate reaches 80 mrem/hr to avoid creating a high radiation area. Parsons approved increasing the feed concentration to 0.2 Ci/gal.

Emergency Preparedness (EP): The RIs observed three EP drills—a simulated red oil explosion at H-Canyon, a truck/waste drum fire in K-Area, and a mix tank glovebox deflagration at H-Area New Manufacturing. The first two drills were virtual tabletop drills. In K-Area, ongoing drills only include the shift operations manager, the incident scene coordinator and a Radiological Protection Division first line manager; additional players will be added to future drill cycles. The tritium release drill was a full-scale field drill and the RI observed the control room and later the Technical Support Room (TSR). To allow social distancing, the TSR players met in a conference room (equipped with telephone and a computer with WebEOC) rather than the TSR in the Emergency Operations Center. The RI participated in a discussion about logistics issues (e.g., computers, conference call lines, physical location) for remote TSR participation.

Defense Waste Processing Facility: SRR has begun exploring whether they could use their distributed control system to handle some of the tasks (e.g., calculations, monitoring, transfer volume control) currently performed manually during transfers. Engineering and operations staff are discussing what aspects they might automate while figuring out how to maintain operator engagement and proficiency. A demonstration may involve the floor drain catch tank.

Savannah River Tritium Enterprise (SRTE): The resident inspector observed the first of two training sessions for SRTE personnel on conducting and grading oral board examinations. The topics covered in the first training session included the process of becoming a board committee member, oral board preparation and conduct of boards. The resident inspector found the training session to be elementary considering the audience. The second session planned for next week will focus on questioning techniques and grading among other topics.