DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 13, 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 March 13, 2020

COVID-19 Preparations: The Infectious Disease Response Team is in place monitoring the situation, organizing preparations, and developing contingency plans. SRS conducted a tabletop drill involving the core emergency response organization and scenarios involving many worker absences, infected cafeteria workers, and efforts to maintain facility minimum staffing.

K-Area: The fire protection coordinator impaired several smoke detectors as intended for construction work, but either inadvertently missed a detector in the presentation room or reversed a previous impairment from another activity. During the activity, the detector activated and alarmed locally and in the control room. Personnel at the construction area called the control room to inform them that there was no fire and the alarm was due to the construction activities; however, this information was not conveyed to the shift operations manager or others in the control room. Meanwhile, a control room operator (CRO) dispatched the Incident Scene Coordinator (ISC) to the scene to confirm the situation per the abnormal operating procedure. The CRO had not heard back, yet continued on through the conditional if-statement step as if the ISC had confirmed the fire. The CRO announced to the area that there was a fire in the material storage area involving radiological material. The fire department arrived on scene and reported that there was no fire. Control room personnel then gave the "all clear" over the public address. However, they had not yet gotten to that portion of the procedure and had not completed the necessary recovery actions required after personnel crash out of the facility to the rally point. The resident inspector (RI) believes this inadequate response to the spurious alarm to have several similarities to the inadequate performance by K-Area personnel during a drill in January regarding procedure administration and communications during a drill (see 1/24/20 report). The K-Area management team has yet to develop corrective actions for the drill performance.

Defense Waste Processing Facility: The resident inspector observed the control room response to an actual leak of a small amount of formic acid from a pump into a diked area. As a very conservative protective action, a Remain Indoors was imposed until the Hazardous Materials team could flush the spill into a tank, measure airborne concentrations, and set up barricades.

A shift operations manager authorized a worker to troubleshoot an uninterruptible power supply (UPS) battery bank. The need to place the UPS in external bypass prior to turning a switch was not identified or discussed at the informal pre-job briefing. This resulted in a temporary loss of power which then caused the loss of two field operating stations and a switch to local controls. Furthermore, this also activated a safety significant hardwired interlock though there was not a Zone 1 high high Sand Filter Inlet Plenum Pressure condition. This then caused a loss of Zone 1 supply fans, Zone 2 exhaust fans, and the Weld Test Cell supply/exhaust.

Work Planning and Control: SRNS held issue reviews for two separate issues related to review of work packages for safety basis impacts. After the fact, appropriate review determined that there was no safety basis impact from either package.