DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 15, 2016

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending April 15, 2016

HB-Line: HB-Line exited deliberate operations. All SRNS facilities are operating normally.

H-Canyon: Last week, SRNS performed a proficiency run for head end since it has been nearly 12 months since head end had last operated and they wanted to avoid a readiness assessment. The site rep pointed out that the DOE Order does not contain any provisions to circumvent this requirement and mentioned alternative approaches that comply with the Order.

Defense Waste Processing Facility: For the first time in years, SRR conducted a coached drill with the control room staff using their simulator. The scenario involved a chemical processing cell vessel deflagration and was the subject of a DOE performance incentive. The controllers periodically froze the drill to have the participants discuss their primary concerns, their priorities, procedure use, and planned actions. As SRR qualifies more control room staff for the day shift, SRR would be able to conduct more simulator drills with rotating shift crews, especially during outages.

Tank Farms: SRR conducted a visual inspection of most of the 3H evaporator pot interior. The inspectors noted a few suspect areas, but no obvious leak sites. SRR is planning to use a dye penetrant to enhance the next visual inspection.

Savannah River National Laboratory (SRNL): As part of the compensatory measures identified in the justification for continued operations for issues with the SRNL fire suppression system (see 9/23/2011 weekly), SRNL is required to maintain a fire watch while liquid fueled vehicles are in fire vulnerable areas. SRNL electronics and instrumentation (E&I) personnel required the use of a liquid fueled vehicle inside SRNL to perform routine maintenance. The shift operations manager (SOM) assigned an operator the role of fire watch to provide the necessary surveillance. The operator was fully qualified, but had never done a fire watch previously. The maintenance activity required the vehicle to travel through a locked barricade marking the fire vulnerable boundary, a truck dock, a roll up door, and into an inner room where the maintenance would be performed. The operator, unlocked and removed a barricade to allow the vehicle to enter the fire vulnerable area, and then replaced the barricade. The vehicle then entered the facility through the truck dock and roll up door. E&I experienced issues with the vehicle and terminated the maintenance activity. The operator maintained the fire watch as the vehicle left the roll up door and parked in the truck dock area. The vehicle was left unattended and the fire watch was terminated while the vehicle was still in a fire vulnerable area, which resulted in a technical surveillance requirement (TSR) violation.

After the vehicle was discovered unattended, it was removed from the fire vulnerable truck dock. The operator, despite walking down the area prior to beginning the fire watch, did not realize that the truck dock was a fire vulnerable area that required surveillance. The fire watch and TSRs were not discussed in the E&I pre-job brief. The fire watch operator did not participate in the E&I pre-job brief, but rather had an informal pre-job brief with the SOM that did not discuss specifics concerning the boundary of the fire vulnerable area. Additionally, the operator did not follow the fire watch procedure which dictates re-establishing the boundary of the fire vulnerable area.