DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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

Emergency Preparedness: SRR is developing new drill scenarios to address previously identified gaps (see 12/24/15 weekly report). The site rep observed a coached drill involving a simulated seismic event causing a tank waste spill at H-Tank Farms. This was a fairly large tabletop drill involving the control room staff, field operators, radiation protection personnel, and the fire department. SRR will be conducting evaluated, field drills of this scenario in the future.

H-Canyon: Uranium bearing aqueous solution from the first cycle solvent extraction process (1CU) is concentrated in the 1CU Evaporator prior to entering the second uranium cycle process. The site reps observed the resumption of 1CU evaporator processing, which has not operated for about three years. While conducting interlock checks, a building operator identified a discrepancy between the valve number in the procedure and a temporary label in the field. Work was suspended until the procedure was revised to eliminate the inconsistency.

Actinide Removal Process (ARP)/Modular Caustic Side Solvent Extraction Unit (MCU): During ARP, SRR usually adds monosodium titanate (MST) to adsorb strontium and actinides in the salt waste. SRR has recently determined that the concentrations in the current batch of salt waste do not warrant the addition of MST. When SRR attempted to start up MCU for this batch, the startup was delayed when the decontaminated salt solution hold tank pump tripped. This trip was not related to the change in processing parameters.

Tritium: The site rep discussed with NNSA and SRNS management the actions being taken to determine why a fire suppression valve position indicator device did not alarm when the valve was in the incorrect position (see 1/8/16 weekly report). To date, no postmortem examination has been conducted although management indicated that they would determine how best to do this and provide feedback to the DOE complex.

Recommendation 2012-1, *Savannah River Site Building 235-F Safety*: SRNS recently identified that the current condition of the windows on the maintenance side of cells six through nine (e.g., opaque, difficult to remove) could make the removal of the material-at-risk from these cells more complicated. Since this discovery, project personnel have been reviewing alternatives for dealing with these challenges. The site rep attended a meeting where DOE provided feedback to SRNS on these alternatives. SRNS is developing plans to remove the shielded windows on cells three through five and use plastic sleeving to reduce the potential for spreading contamination when they check out the manipulators.