DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 27, 2012

TO: T. J. Dwyer, Technical Director

FROM: M. T. Sautman and D. L. Burnfield, Site Representatives

SUBJECT: Savannah River Site Weekly Report for Week Ending January 27, 2012

L-Area: A site rep observed workers use a peristaltic pump, hose, and bag filters to collect the biological growth on top of several rows of spent fuel containers (see 1/13/12 report). The sample will be sent offsite for DNA analysis. The results of this analysis will be used to generate a path forward.

K-Area: SRNS hired divers to sample and remove sediment from the K-Area fire water tank and inspect the condition of the tank's interior and exterior. The site reps observed portions of this activity and discussed the criteria used for the inspections with site personnel (see 11/4/11 report).

Tank Farms: SRR is consolidating their F- and H-Tank Farms' control rooms and operations staff into one based out of H-Tank Farms. A site rep observed 3H control room activities during a coached emergency drill simulating an accident in F-Tank Farms. SRR is still familiarizing their H-Tank Farms-based operations staff with F-Tank Farms. In addition, the roles and responsibilities for the staff at each farm are being worked out along with some communications bugs. The site rep encouraged SRR to make sure they are keeping the F-Area emergency coordinators aware of their transition plans.

Nuclear Safety: Using satellite images of vegetation, tree canopy heights, and meteorological data, SRNL has used a variety of methods to calculate the surface roughness that would apply to colocated workers and the public for several release locations at SRS. SRNS has also developed a draft recommendation to use Eimutis and Konieck dispersion coefficients versus Briggs or Tadmor-Gur. DOE and SRNS are reviewing the above reports.

235-F: DOE has allocated funds to replace the entire roof and begin prerequisites for Pu-238 holdup removal. The latter includes funds to develop the safety basis to allow work inside the Plutonium Fuel Form cells, restore gloves and lighting in the cells, conduct non-destructive assays of the cells, and begin cell 9 deactivation work.

F-Canyon: A recent inspection of a fan used to protect electrical equipment from high temperatures found that the fan had catastrophically failed (i.e., all impeller blades sheared off). The fan failure did not result in personnel injury or significant property damage. The event revealed a configuration management discrepancy between the Master Equipment List (MEL), which identified this fan as safety significant, and the safety basis which made no mention of the fan. SRNS intends to look for other discrepancies in the MEL after the site rep asked when was the last time the MEL was rebaselined against the safety basis.

Solid Waste Management Facility (SWMF): Based on several incidents at SWMF, culminating in the identification that a key person was not adequately qualified to perform safety related assignments, SWMF management briefed the workforce on their expectations regarding conduct of work within the facility. The briefing focused on personal accountability for all work including management, engineering, safety, and operations.