DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 10, 2009

TO: T. J. Dwyer, Technical Director
FROM: M. P. Duncan and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending July 10, 2009

Fire Department: The latest revision of the Baseline Needs Assessment (BNA) increases the minimum staffing from 18 to 20 personnel during day shifts. The increase provides for a second search and rescue team while supporting a response at a nuclear facility and a simultaneous emergency medical service call. The BNA reiterates the recommendation to replace 4 fire apparatus over the next 3 years. A Baseline Change Proposal has been written to fund the replacement of a pumping engine, ladder truck, and ambulance. (See March 13, 2009 report).

Procedures: As part of their procedure standardization initiative, SRNS has developed formats for the four types of procedures used at SRS. SRNS also inadvertently cancelled a few dozen management policies without completing the required reviews by functional managers/subject matter experts and performing the desired crosswalk of requirements. The policies have been reinstated and an investigation is ongoing. (See April 3, 2009 report).

Systems Engineering Program: SRNS Engineering is developing guidance and an electronic tablet for system walkdowns and defining requirements for system notebooks. In addition, a matrix will be used to determine the level of system performance monitoring necessary for vital safety systems. The Site Rep also reviewed and commented on the draft training and qualification standard for SRNS system engineers. The standard provides a detailed list of practical factors that the engineer must demonstrate. (See February 3 and 17, 2006 reports).

Solid Waste Management Facility: Five remote-handled transuranic waste drums (dose rates around 100 R/hr) need to have their headspace gas resampled. The Site Rep observed a demonstration of a system that uses pressurized nitrogen gas to fire a non-sparking sample port/filter vent into a drum lid. A syringe is then inserted through a septum to sample the gas.

Tank Farms: In order to convert it to a 2F Evaporator drop tank, saltcake is being removed from Tank 25 in F-Tank Farms and being transferred to H-Tank Farms. Past transfers have been shut down due to low flow or encountered difficulty with flushes due to line pluggage. The Site Rep observed the start of the transfer with new specific gravity and flow rate requirements. So far, no problems have been encountered. (See August 1 - 15, 2008 reports).

H Area New Manufacturing: After a section of pipe was replaced, a control room operator performed a leak check. He then attempted to evacuate the line, but failed to properly align all to the valves, causing a rupture disc to burst. The procedure used for this activity does not require peer verification, independent verification, shift technical engineer approval, or shift manager approval of the proposed valve lineup. There are varying levels of review in several generic procedures where operators have the flexibility to perform non-proceduralized (i.e., the proper position of every valve is not explicitly specified in the procedure) gas transfers. Management plans to review whether or not changes to these procedures are necessary and as a compensatory measure is requiring peer checking for all non-proceduralized gas transfers that do not already have a built in review associated with them.

Defense Waste Processing Facility: A laboratory technician who had been working in gloveboxes and several hoods in a contamination area became contaminated on one side of his head, with a maximum of 12,000 dpm beta-gamma on the top of his ear.