

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 9, 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 November 9, 2012

**Fire Protection:** Last week, SRNL declared a Potential Inadequacy in their Safety Analysis (PISA) because a revised backfit analysis (BFA) identified many discrepancies between the safety significant (SS) Building 773-A fire protection automatic sprinkler system and National Fire Protection Association (NFPA) 13, *Standard for the Installation of Sprinkler Systems*. This week, SRNL upgraded the PISA to a positive Unreviewed Safety Question. SRNS has begun reviewing the sprinkler systems in other nuclear facilities for similar code compliance issues. A PISA was declared for Building 772-F, part of F/H Laboratory, after engineers identified that sprinkler coverage and spacing issues called into question whether the fire suppression system could fulfill its credited SS function.

The Board's March 27, 2012 letter questioned the process SRNS used to review previous BFAs. The site rep observed portions of the multi-day Engineering Review Board's (ERB) review of the A and M-Area outside underground fire water supply system, fire pump, and fire water storage tank BFA. Like last week's ERB, SRNS used a team of engineers, nuclear safety analysts, and managers to thoroughly review the potential deficiencies with the proposed SS system and the proposed action items to address them.

**Defense Waste Processing Facility:** SRR declared a PISA because the recycle stream used in dose calculations does not reflect the potential presence of sludge solids from sumps, carryover events, etc.

**F-Canyon:** While performing maintenance on a motor control center (MCC), SRNS discovered that the wiring to a breaker bypassed a ground fault relay. This configuration has the potential to result in a loss of power to the MCC's loads because it could slow the opening of the breaker in response to a ground fault. While the breaker and ground fault relay are listed as SS, only general service equipment is currently connected to them. A preliminary investigation indicates that the wiring was incorrectly reinstalled after some construction work 5+ years ago.

**Tank Farms:** SRR continues its efforts to complete several major jobs in F-Tank Farms. On Tank 4, the pump was removed and placed in a box which was moved to the high radiation area in the N area radioactive material storage area. SRR continues their efforts to replace the 2F Evaporator demister pad. The failed feed pump was removed from Tank 26 and the new pump was installed. It will be tested when the evaporator is returned to service.

Personnel from SRR and their parent companies are performing an Integrated Independent Evaluation (IIE) of the tank farms to measure the effectiveness of the tank farms to conduct operations in a formal, disciplined manner and to ensure compliance with SRS procedures and requirements. Review criteria are based on site wide criteria from SCD-4, *Assessment Performance Objectives and Criteria*, and also covered assessment focus areas such Integrated Safety Management Evaluations, Voluntary Protection Program, and NQA-1. At the time of this writing, the team had reported no significant findings that were not already known by tank farms management.