

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 19, 2008

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 December 19, 2008

Joel Blackman and Outside Experts Jirsa and Stevenson were at SRS to review the Salt Waste Processing Facility's Quality Assurance and Quality Control programs for reinforced concrete.

Tritium Extraction Facility: The failure of a circuit board caused the control panel of an Uninterruptible Power Supply (UPS) to indicate several modes simultaneously. The correct response would have been to place the UPS in maintenance mode until the board could be replaced. This would have maintained power to critical loads. Instead the Shift Manager directed the UPS to be shut down in an attempt to reset it. The procedure background information, precautions and a note in a procedure all indicated that this would cause all power to critical loads (e.g., distributed control and facility ventilation systems) to be lost. The systems engineer was not consulted before the UPS was shut down via a red button protected by a plastic cover. The facility had no ventilation for one hour and only reduced ventilation a further two hours. A Limiting Condition for Operation was entered because two gloveboxes had high temperatures. Corrective actions address replacement of the circuit board (completed), procedure restrictions on shutting down the UPS, training on the UPS system, and the conduct of operations aspects of this event.

Fire Department: The Site Rep met with the Fire Department Chief and Fire Protection management to discuss the upcoming revision to the Baseline Needs Assessment. With funds very tight, management is trying to prioritize available funds amongst communications, aging equipment, and staffing needs. Current radios do not function in some of the large, concrete processing facilities. The site's water supply engine is 29 years old and the ladder truck and remaining four fire engines are between 15 and 18 years old. After recent examination and testing of the only aerial lift device at SRS, Underwriters Laboratories refused to certify it until a long list of noncompliances with the National Fire Protection Association standard were corrected. The contractor is also evaluating whether current staffing could support a timely search and rescue in certain large processing facilities. The Site Rep encouraged them to examine this during upcoming drills. (5/2/08 report)

F-Canyon: DOE told the contractor it was no longer necessary to maintain F-Canyon in its current state of readiness since it is no longer being considered as an option for the Global Nuclear Energy Partnership.

L-Area Fuel Storage: An evaluation looked at the impacts of not processing spent nuclear fuel in H-Canyon and not swapping fuel with another DOE site. Based on expected fuel receipts, new racks would be needed for High Flux Isotope Reactor fuel in 2011 and regular fuel in 2016.

F-Tank Farms: The Site Rep observed a successful mock-up for how the failed sand mantis could be retrieved from tank 19. Engineers are close to finalizing a design modification. (12/12/08 report)