

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 9, 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 January 9, 2009

Saltstone: The Saltstone Facility has been undergoing modifications since last April to support the processing of salt solution with higher concentrations of organics later this year and improve equipment reliability. The Site Rep observed the resumption of processing this week and pointed out some improvements to independent verification steps in the procedure. Engineers are monitoring equipment performance because some of the data is not as stable as desired. So far, minimal contamination has been detected outside cell filters.

Tritium Facilities: The Implementation Validation Review (IVR) for updated safety documentation and controls restarted this week after being postponed last month (12/5/08 report). The Site Reps observed simulated loading of filled reservoirs in the Materials Test Facility, empty container verification, transportation of unloaded reservoirs between buildings, a fire patrol, main drain testing for sprinkler systems, and a simulated transfer of a gas mixture containing too much oxygen between buildings. The IVR team and Site Rep noted significant overall improvement. The issues that caused SRNS to postpone the IVR have been successfully resolved. The review is scheduled to continue over the weekend and finish next week.

Fire Department: National Fire Protection Association 1901, *Standard for Automotive Fire Apparatus*, states that because the changes and upgrades to this standard have been truly significant, especially in the area of safety, that fire departments should seriously consider the value (or risk) to fire fighters of keeping fire apparatus older than 15 years in first-line service. It recommends that apparatus greater than 15 years old that have been properly maintained and that are still in serviceable condition be placed in reserve status and upgraded in accordance with NFPA's refurbishing standard. The Board's staff questioned how the SRS Fire Department was meeting this guidance since all of their engines and their ladder truck are between 16 and 30 years old (three of which predate the 1991 edition with its significant safety upgrades), and none of them have been refurbished per the NFPA standard. In response, the contractor has initiated an effort to develop a replacement methodology for aging fire apparatus. (12/19/08 report)

235-F: DOE responded to SRNS' engineering evaluations to address residual risk at 235-F (11/7/08 report). DOE directed the contractor to 1) finalize the deactivation and decommissioning Basis for Interim Operations, 2) reduce the height of the abandoned 293-F ventilation stack, and 3) develop a deactivation project plan to achieve 93 percent risk reduction. DOE expects this work to be completed by the end of the fiscal year. No additional funding has been identified to begin removing the Pu-238 holdup.

Nuclear Materials Disposition Scoping Study: The completed study (see 12/12/08 report for scenario assumptions) identified that storage capacity limitations at SRS would impact planned receipts and consolidation efforts and that several metric tons of DOE complex-wide surplus materials and spent nuclear fuel would no longer have an approved disposition path. DOE is evaluating the study in order to determine their path forward.