DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 13, 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 March 13, 2009

Fire Department (FD): The contractor committed to develop a replacement methodology for aging fire apparatus after the staff questioned how they were meeting the guidance in National Fire Protection Association 1901, *Standard for Automotive Fire Apparatus*. After benchmarking several DOE and municipal FDs, the contractor will consider replacing a vehicle if it meets at least one of the following criteria: 1) > 15 years old, 2) > 75,000 miles, 3) if the cumulative cost of maintenance or the cost of a single maintenance event exceeds 50% of the original acquisition cost, and 4) if time out-of-service exceeds 700 hours. The contractor has recommended immediate replacement of Engine-4, which is 30 years old and whose total maintenance costs are 137% of its acquisition cost. Furthermore, they recommended replacing a second engine in 2010 and the ladder truck in 2011. The ladder truck has been out-of-service more than 1800 hours, not counting all the repairs this calendar year. (1/2/09 and 1/9/09 reports)

Criticality/Nuclear Safety: A path forward for resolving the Board staff's comments on the proposed functional classification of criticality safety controls has been reached.

Solid Waste Management Facility: The Site Rep observed workers prepare the first payload since shipments to the Waste Isolation Pilot Plant were suspended (2/27/09 and 3/6/09 reports).

P Reactor: An investigation concluded that piping filled with stagnant oxalic acid, which was historically inhibited with ferric sulfate, does not pose a hydrogen accumulation risk (3/13/2009 report).

Oral Boards: The Site Rep observed DOE-SR facility representative and Saltstone Shift Operations Manager oral boards. Both were thorough and rigorous.

High-Level Waste: Annulus cleaning of Tank 6 commenced. Tank 18 cleaning was impacted because the rupture disc in the ultra-high pressure system had to be replaced twice. Workers also began replacing the nearly plugged secondary filter at 512-S with one having a different design.

DOE Staffing: Rejecting DOE-SR's proposal, the Office of Human Capital Management is terminating all retention allowances and is sending a team to review the position descriptions of every Facility Representative and Facility Engineer (i.e., Safety System Oversight) position that was upgraded to a GS-14 last year (2/20/09 and 2/27/09 reports).

K Area: The contractor submitted a revised safety basis to DOE-SR that would allow receipt and storage of unirradiated Fast Flux Test Facility fuel from Hanford within the next 6 months. The fuel would be stored for up to 15 years in 13 Hanford Unirradiated Fuel Packages (Type B shipping containers) placed in a small new K Area building currently under construction. The current disposition path is the upcoming Plutonium Preparation Project. Although the fuel contains ~1,000 kg of plutonium, the radiological consequences from a fire or handling accident would be low due to the minimal dispersibility of the fuel form (sintered oxide) and the protection afforded by the safety-significant containers. A line-management assessment is planned to confirm readiness to begin operations.