DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 7, 2011

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 January 7, 2011

Activity Level Work Planning: During the SRNS Readiness Assessment (RA) at the Solid Waste Management Waste Facility, the RA team noted that the SRS activity level hazard analysis tool had not been correctly used to analyze the hazards. The site rep agreed with this observation and noted that another unrelated hazard analysis planning meeting did not adequately demonstrate several aspects of integrated safety management (ISM). (See Dec. 10, 2010 report). This week, the site rep observed a fact-finding meeting for a glove puncture at HB-Line. While removing old equipment from a glovebox-like cabinet, a worker snagged his cabinet glove on a wire that was sticking out of an outdated and broken tool. The wire was not clearly visible to the worker and he was not wearing any special hand protection since he was not expecting to be working with sharps at that time. Although the worker's outer pair of surgeons gloves were contaminated (60,000 dpm α), he prevented the contamination from being spread by keeping his hands inside the cabinet glove until help arrived. A site rep review of the Radiological Work Permit and the hazards analysis identified ISM weaknesses similar to those noted previously. While the hazards analysis and pre-job briefing noted generic sharp hazards, a better walkdown may have noticed the loose wire so that the worker could have been better protected when he handled the tool. The procedure and RWPs also had conflicting requirements for Radiological Protection staff coverage of the activity. In order to address these and other work planning concerns, SRNS is assigning a work planning subject matter expert to the Facility Evaluation Board and requiring management oversight of SWMF work planning sessions.

F/H Laboratory: SRNS has proposed addressing their Rec. 2004-2 gap and the leak path factor issue (see Oct. 8 - 29 and Nov. 26, 2010 reports) with the following approach. Physical modifications would include installing a seismically qualified duct misting system, ember screens, programmable logic controller, and diesel generator and seismically qualifying existing main exhaust fans, motors, and interlocks. The safety analysis would also seismically qualify and credit a high-activity drain tank and oxide vials and more realistically reflect inventories of combustible and nuclear materials.

Saltstone: The site rep observed SRR's process for approving the corrective actions for the Operational Readiness Review (ORR) findings. No concerns were noted on the planned corrective actions. As part of this effort, the site rep also observed a training class provided to operations and engineering personnel to improve their familiarity with the new Technical Safety Requirements (TSR) and close a finding. Addressing previous concerns about excessive reliance on reference materials, the test on TSR fundamentals was closed book. (See December 10 - 24, 2010 reports).

Specific Administrative Controls (SAC): DOE and the contractors are reviewing their existing SACs to see how they handle recovery actions and TSR violations. (See December 17 and 24, 2010 reports). The site rep is also discussing the use of a SAC to address the planned container venting system at H-Canyon.