

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 23, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
J. J. McConnell, Deputy Technical Director
FROM: R. T. Davis/ T. D. Burns
SUBJECT: SRS Report for Week Ending July 23, 2004

Mr. Davis concluded his tour of duty as a Board site representative at the Savannah River Site on Friday, July 23, 2004. He will begin his new duties as a Board site representative at the Y-12 site in Oak Ridge, TN on Monday, July 26, 2004. Mr. Davis' sound judgement and strong technical leadership have enhanced the safety of operations at the Savannah River Site and will be a valuable asset to the Board's safety oversight efforts at the Y-12 site.

HB-Line Neptunium Activities: Field activities supporting the DOE Readiness Assessment for the stabilization, packaging, and shipping of neptunium were completed this week. The six-member Readiness Assessment team assessed nineteen functional areas with a focus on integration of neptunium operations into the existing HB-Line facility. In addition, the federal team oversaw the contractor Readiness Assessment conducted June 14, 2004 through July 10, 2004.

Weaknesses observed during the review included lack of operations formality, over-reliance on operator experience vice clear and thorough procedures, deficiencies in the automated hazard analyses for specific tasks, ineffective hazard control implementation, and deviations from site procedure writing guidance. These observations will be captured in the final DOE Readiness Assessment report that will be finalized and issued next week. The significance level of these findings is not expected to cause delays to the facility startup which is currently scheduled for mid-August.

Tank Farm Hydrogen Monitors: The tank farms continue to experience reliability problems with hydrogen concentration monitors (site rep weeklies, 10/24/03 and 6/4/04). Depending on the specific tank in question, these pieces of equipment are functionally classified as either Safety Class or Safety Significant.

Most recently, the Safety Significant hydrogen concentration monitor on Tank 44 in F-Area Tank Farm failed on Wednesday. These monitors play an important role in preventing one of the highest-consequence potential accidents on-site— a hydrogen explosion in a waste tank. The in-service performance of these pieces of equipment has been underwhelming. Reliability enhancements are necessary

Salt Waste Processing Facility Project: The CD-1 package has been submitted to DOE-HQ for approval (site rep weekly, 6/11/04). The Energy Systems Acquisition Advisory Board (ESSAB) is scheduled to be briefed on the CD-1 package August 3, 2004. If the package is accepted by the ESAAB, EM-1 approval is expected shortly thereafter.