

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 24, 2009

TO: T. J. Dwyer, Technical Director
FROM: M. P. Duncan, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending July 24, 2009

Staff members Butch, Eyer, Fortner, and Gutowski were here to review a variety of subjects, including the Salt Waste Processing Facility (SWPF), the Modular Caustic Side Solvent Extraction Unit (MCU), the Actinide Removal Process (ARP), and the status of Integrated Facilities Aging Management. The staff observed operations at H-Canyon, HB-Line, MCU, ARP, and reviewed Positive Material Identification and ultrasonic testing at the SWPF construction site.

Integrated Facility Aging Management: The Site Rep and staff met with contractor and DOE personnel to review the status of the 14 action items identified by the H-Canyon Cooling Water System Evaluation. In the five months since the report was issued a significant number of actions have been taken including: ongoing replacement of cooling water return headers exterior to the canyon, scheduling inspections of several components through the Structural Integrity Program, and obtaining necessary reserves of spare parts. While the staff was generally impressed with the actions taken it was noted that several big ticket items including switchgear and valve replacement are currently on hold pending receipt of funding.

H-Canyon and HB-Line: Corrective actions to improve Conduct of Operations continue. Today, H-Canyon and HB-Line personnel get about 4 hours of continuing training every 4 weeks. DOE and the contractor are evaluating a proposal to significantly increase the number of operations personnel to allow for up to 40 hours of training every 5 weeks.

Team training sessions began for shift operations personnel that used simulations and role playing to practice proper response to abnormal conditions. These are intended to reinforce Conduct of Operations fundamentals, including formal communications, procedure use and compliance, and pre-job briefings. The staff observed the first session and discussed several issues with DOE and the contractor.

Tank Farms: The purge ventilation system for high-level waste tanks is used to ensure the concentration of flammable gas remains below the lower flammability limit. A routine operation to replace some test plugs on the ventilation system for Tank 25 required entry into a Limiting Condition of Operation (LCO) due to the potentially impaired functionality of the system. Which LCO is entered depends on the operational mode, but the personnel involved forgot about a rarely used LCO they are supposed to enter when the tank is a "rapid generation" tank and in "gas release" mode. They entered the incorrect LCO. The error was later discovered by good oversight by the DOE facility representative. Subsequent review determined that the surveillances and actions performed happened to satisfy the requirements of the correct LCO, and therefore there was no actual degradation of safety or Technical Safety Requirement violation.

Solid Waste Management Facility: A large waste box fell off of a forklift truck during relocation from a low activity vault cell to a trench. Unlike last week's event, there was no damage to the box and the forklift truck operator properly stopped work.

Salt Waste Processing Facility: Inspection and repair of all faulty basemat drain pipe welds has been completed.