

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 21, 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 21, 2011

Solid Waste Management Facility: SRNS conducted a Functional Area Management (FAM) assessment of operations in preparation for mining and dewatering concrete culverts in the new engineered fabric structure. In the site rep's opinion, the conduct of the FAM assessment was not rigorous and the mining and dewatering crews were not as proficient as they should have been. For example, the assessment team failed to adequately test the knowledge level of the facility operations manager and the team had an incorrect perception of the hazards facing an injured person inside an airborne contamination area. Meanwhile, the crews missed several radiological and safety best practices, did not demonstrate adequate performance during the drill, and needed additional practice to satisfactorily demonstrate that these operations could be performed inside the enclosure. In addition, the drill was also not adequately controlled. The facility manager agreed to take the necessary steps to correct the situation.

Defense-in-Depth Controls: The site rep observed SRNS and SRR meetings where the Consolidated Hazards Analyses for Saltstone, the Modular Caustic Side Solvent Extraction Unit, the Tritium Extraction Facility, and other tritium facilities, were reviewed to identify potential defense-in-depth (DID) equipment important-to-safety controls (EITS). The SRNS evaluations are identifying a mixture of monitors, interlocks, alarms, and primary/secondary containment/confinement structures, systems and components. The site rep provided feedback to SRR Engineering management to avoid a too narrow focus of potential DID EITS controls. (See July 16, 2010 Board letter).

Criticality Safety Program Description Document: DOE, SRNS, and the Board staff have been discussing criteria for functionally classifying criticality safety controls for some time (see July 9, August 13 and 27, 2010 reports). DOE's latest draft criteria clearly address Board concerns.

F-Canyon: The site rep reviewed the Plan of Action (POA) for the upcoming Truckwell Container Remediation Project Readiness Assessment. This POA reflects lessons learned from previous readiness reviews (see August 13 and 27, 2010 reports).

F-Tank Farms: Last week SRR inserted a crawler inside Tank 5, which later became stuck on a previously cut cooling coil. This week SRR continued planning ways to free the trapped crawler and inserted a second crawler into another riser. This crawler was able to traverse the tank and has been taking samples from select locations within the tank.