

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 2, 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 July 2, 2009

American Recovery and Reinvestment Act: Grout will be placed in R Reactor Disassembly Basin up to the ground surface. The Site Rep observed the placement of grout into the Maintenance Bay Pit and Sump inside a contamination area. The Site Rep also observed soil removal at Pad 1 at the Solid Waste Management Facility. Five concrete culverts containing transuranic waste have been uncovered so far.

H-Canyon/HB-Line: SRNS submitted their Conduct of Operations Improvement Plan (see 6/5/09 report). The plan focuses on improving shift crew involvement and accountability, shift management roles and responsibilities, senior management visibility, and clarifying second-person/independent verifications. The Site Rep observed the first cycle of shift crew training sessions that are focusing on team problem-solving skills and plant understanding.

Processing of Lawrence Livermore National Laboratory metals in H-Canyon was completed. In order to mitigate a seismically-induced loss of confinement event during transfers of radioactive material while processing spent fuel or low-assay plutonium, DOE may install a seismic shutoff interlock to the H-Canyon 150# steam supply. Three other seismic upgrades will support the disposition in HB-Line and H-Canyon of high Pu-238 waste from Pad 1: installing a blank with an orifice on the old HB-Line duct, backfilling around the 299-H duct, and increasing the credited fuel supply to the diesel generators to 96 hours. These were recommended in last year's Exhaust Seismic Vulnerability Alternative Study, but reinforcing the bottom of the exhaust stack is still unfunded. (See 1/25/08 and 6/27/08 reports).

Liquid Waste Operations: Savannah River Remediation took over as the new contractor on July 1. Last weekend, a Modular Caustic Side Solvent Extraction Unit operator, who was supposed to take four samples from one tank and one sample from a second tank, did them in reverse due to inadequate procedure placekeeping and valve verifications. The tanks were resampled and additional management field observations of salt processing activities were put in place.

Saltstone: While processing, the flow rate from the Salt Feed Tank to the mixer dropped about 15%, causing an automatic process shutdown. During the attempt to flush the equipment and process lines downstream of the mixer, a flow restriction developed that prevented a complete flush of the system, resulting in some of the grout mixture solidifying within the process. An analysis of the cause of the process upset is ongoing. Workers will have to enter the process room to chip out grout from the hopper and replace some pipe prior to restart.

Integrated Safety Management System (ISMS): SRNS issued their final report of their Phase II Verification of the SRNS ISMS that concluded that ISMS is adequately implemented. The assessment of Feedback and Improvement for Subcontract Management was the only rating of inadequate and Feedback and Improvement was identified as an Opportunity for Improvement for several other criteria.

Unreviewed Safety Questions (USQ): In response to a SRNS assessment, USQ originators and reviewers will receive additional training in order to: 1) improve the quality of the descriptions of proposed activities, 2) improve the justifications for the screening and evaluation questions, 3) explicitly consider interim configurations, and 4) better understand what is implicitly described in the Documented Safety Analysis.