

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 6, 2010

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 August 6, 2010

Board Member Visit: Ms. Roberson and Mr. Bader visited K and L Areas, the Salt Waste Processing Facility, H-Canyon, and Saltstone to discuss current and future operations.

Solid Waste Management Facility (SWMF): Workers spent several shifts applying layers of fixative and plastic/paper sheets throughout Pad 16 to reduce loose contamination levels. (See July 30, 2010 report). Meanwhile, additional workers conducted mockups to develop a method for safely overpacking the leaking containers. On Wednesday, workers slowly tilted the leaking 55-gallon drum/85-gallon overpack onto their sides and slid them into a 110-gallon overpack, which was then turned upright and covered. To date, no workers have had skin or clothing contamination nor have surveys detected contamination outside of the Pad 16 weather enclosure. While it was initially feared that the other 400+ containers in Pad 16 would need to be repacked or overpacked, only low contamination levels have been found in the front portion of Pad 16 as well as on the other side (upslope). SWMF personnel are currently developing their Phase II Recovery Plan. The site reps began discussions with SRNS about the need to have trained personnel and respiratory equipment available for radiological events at SWMF.

HB-Line: SRNS performed graded demonstrations of the operations associated with retrieval and processing of the Low Assay Plutonium (LAP) canisters in HB-Line. Operations conducted the demonstrations in a professional manner. The site rep had two observations that warrant SRNS attention. First, SRNS selected personnel to receive additional training and to perform the demonstration so that they could be used as lead operators during the actual processing of the LAP material. Thus, they did not specifically evaluate each of the crews during this demonstration. Second, the operators failed to adequately remove practice pieces and scrap in the glovebox prior to beginning the graded demonstration.

R-Reactor: While workers were cutting lead shielding off a process line, highly contaminated liquid began to leak out. Until the source of the leak is inspected, engineers can't determine if the pipe was breached by the reciprocating saw blade (designed for cutting wood and nails) or if corrosion caused a hole or thinning. The workers were protected since they were in anti-contamination clothing and already had a respirator for lead dust. Most of the leak was caught in a can.

Waste Disposition: After spending weeks recovering from a pluggage caused by foreign material (see July 2, 2010 report), Saltstone briefly resumed operations before shutting down due to a tornado warning. Operators were unable to restart during the week because of screw feeder clogging. In F-Tank Farms, the first feed and bleed transfer between tanks 6 and 7 began. The site rep also watched a demonstration of the crawler that will be used to remove sludge mounds in Tank 5. While sand was vacuumed up, the crawler had difficulty moving over simulated cooling coils.

Emergency Preparedness: Last week a major thunderstorm struck the site causing local power disturbances as well as a wildfire. On the same day, the courtesy notifications for the E-area spill were made by the EDO. (See July 30, 2010 report). The power fluctuations in H-Area caused an anomaly with the stack monitoring equipment, which resembled an actual event. Because of the large resource demand, the EDO did not always apply the right prioritization and failed to notify all facilities to remain indoors.

The site rep observed training on the new seismic air purging system at H-Canyon.