

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 11, 2009

TO: T. J. Dwyer, Technical Director
FROM: D. L. Burnfield and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending December 11, 2009

H-Canyon: The Facility Self Assessment (FSA) for Phase I Transuranic Large Steel Box Resize/Repackaging Project was completed. A second dry run was conducted to demonstrate the size reduction of equipment and the response to liquids in the box. The amount of simulation in this mockup was significantly less. These mockups addressed concerns the Site Rep and others had with the original dry run. The first box was received on Friday and unloading will begin next week.

HB-Line: The Board highlighted concerns with Pu-238 drums at Hanford in their June 11, 2002 and November 7, 2003 letters. This material is being shipped from Hanford to SRS for storage and eventual processing at HB-Line. The contractor completed their Low Assay Plutonium graded Readiness Assessment. The Site Rep observed workers from Idaho National Laboratory unload the first drum from a radioisotope thermoelectric generator cask that is being used for transportation. SRS workers then transferred the drum to HB-Line.

F-Canyon: The Phase 2A Transuranic Waste Remediation Technical Safety Requirements will include a new Puncture/Laceration Wound Hazard Management Program. Program attributes will address work planning and safety reviews of personnel protective equipment, worker training on waste handling and size reduction techniques, requirements for manual and power tools, and medical response to injuries.

E- Area: The Site Rep watched the resumption of the removal of transuranic waste drums from the Pad 1 culverts. This follows corrective actions enacted following a spill (see 11/13/2009 report). The culverts are large concrete cylinders that hold several drums. They were sealed and bermed over with soil starting in the 1970s. The operation went well with four drums being removed with no significant difficulties.

Board Visit: The Board visited the site this week. They toured F-Canyon, viewing transuranic waste remediation operations and H-Canyon, viewing charging bundles into the dissolver, operating equipment in the lay-down yard, and video recordings of Transuranic Large Steel Box remediation. Individual discussions were held between Mr. Brown and SRNL on Nuclear Safety research and with tank farm operators on operational safety. The entire Board met with the site contractors on Nuclear Material Disposition and Storage including the K-Area Combination Project, site operations, and aging facility management; the American Recovery and Reinvestment Act implementation; Conduct of Operations and Safety Performance; Nuclear Safety; Liquid Waste Operations, including the Liquid Waste System and Risk Management Plans, and tank closure. A separate session was held regarding the construction and operation of the Salt Waste Processing Facility. DOE/NNSA site offices briefed the Board on their perspective of contractor safety performance and on site office performance and staffing.

F/H Lab: The Site Rep discussed the follow-on actions for an activity that went beyond the authorized scope of work planned for the 772-1F count room. (see 11/20/2009 report) SRNS management had reviewed and authorized the dismantling of instrumentation, but not the removal of the instrument cables. A radiological operations supervisor observed the activity and immediately called a time-out and stopped work. Surveys indicated that there was no contamination. Additional actions identified to prevent reoccurrence included issuing of a lesson learned and a review of RWPs/procedures for improvements.