

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 20, 2012

TO: T. J. Dwyer, Technical Director
FROM: D. L. Burnfield, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending July 20, 2012

Sanjoy Sircar was on site this week assisting the site rep while Mark Sautman was out of town.

Fire Protection: The Savannah River Site Fire Department (SRSFD) has experienced two similar failures of self-contained breathing apparatus (SCBA) within the past several months. The failure of the units allows the high pressure breathing air cylinder to fall from the harness. The SCBA appears to fail through fatigue of a metal nipple associated with the regulator. When the second unit failed this week, SRNS determined that they could not rely on the SCBAs. SRNS management took appropriate actions to ensure that the site remained safe while they procured new equipment and had trainers brought to the site to train fire department personnel. They coordinated the planned actions with DOE personnel and as part of these actions they contacted all control rooms and directed the facilities “to minimize fire potential, to include control of combustible material and hot work, which should be eliminated/ceased until this issue is resolved.” The shift operations managers took actions to control work that would have resulted in a potential fire. However, there was some confusion when not all levels of management received the appropriate communications nor understood the gravity of the situation. This was corrected and within a day the site had taken the necessary steps to allow the fire department to function, although not optimally, and to allow hot work to resume.

Solid Waste Management Facility (SWMF): SWMF personnel will repackage TRU waste in cell 11 (see 7/13/12 report). SRNS completed a Functional Area Manager review to assess their readiness to repackage this high dose rate TRU waste. The assessment team found that facility personnel had the knowledge, skills, and abilities to complete the task. The team evaluated the procedures, but because they had previously failed to adequately stipulate simulated conditions, they could not fully evaluate the full extent of these procedures. The team determined that additional actions are required to assess the readiness of the process before the facility begins the high dose casks. These actions include the review of any revised procedures and hazards analysis that result from lessons learned, the completion of another Facility Radiation Action Team review of the activities and additional assessments of the work to repackage one of the final low dose rate casks. In addition, additional calculations of the potential dose rates inside the supervisors viewing area will be conducted.

H-Canyon: SRNS conducted their Readiness Assessment (RA) for the processing in H-Canyon of Sodium Reactor Experiment and Ford Nuclear Reactor spent fuel. The planned evolutions included moving a cask car into H-Canyon, charging mock fuel bundles into the mock dissolver, taking a liquid sample, and transporting that sample to F-Area. Difficulties in moving the hot canyon crane delayed some of the exercises.

The contractor previously performed a RA in September 2010 that had overlapping scope. The RA team members and the DNFSB staff noted improvement in areas of weakness from the previous RA. The team members found that facility personnel had the appropriate knowledge to perform their tasks. In the level of knowledge interviews, the team members went beyond the questions provided by the facility so they could better assess the depth of the personnel’s understanding of hazards and controls. The personnel generally performed well in these interviews. Facility personnel also showed improvement in implementing a Specific Administrative Control related to the amount of transient combustibles in the railroad tunnel airlock.

The DOE RA is scheduled to begin on July 30.