

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 7, 2008

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: M. P. Duncan and M. T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending March 7, 2008

Savannah River National Laboratory (SRNL): The Site Rep met with the Radiological Control and Facility Managers to discuss the causes and management response to a sharp increase in the number of identified, non-reportable radiological control errors. New and existing staff qualified as Advanced Radiological Workers will be required to pass graded mockups. Other corrective actions address radiological work planning and the proper response to radioactive legacy items.

Emergency Preparedness: The Site Rep observed that the facility emergency response team did not have respiratory protection during last week's H-Canyon drill. Furthermore, while they became highly contaminated, personnel in bunker gear with respiratory protection were given a higher priority. The contractor now plans to provide respirators for the facility emergency response team and reinforce the need to give unprotected workers the higher priority.

The expected response to facility alarms and abnormal operations is well-defined and mitigation during a fire or a medical emergency is also relatively straight forward. However, the expected mitigative actions to be taken by the Incident Commander (IC) in other emergency scenarios are not always as clear which sometimes leads to inconsistent actions during drills. The Site Rep met with the Fire Department Chief and Emergency Services manager to discuss how the preferred response and issues to consider could be developed for emergency scenarios, communicated to the potential ICs, and then used when evaluating the adequacy of the drill/exercise response. The SRNL drill scenarios that are being revised might be used as a pilot for this.

Solid Waste Management Facility (SWMF): While performing a routine inspection and detailed survey of an empty concrete culvert which had been placed outside of a posted radiological area, radiological contamination was discovered. Contamination spread from the culvert to a vehicle used to transport smears as well as to a radiological control count room. This likely would have been prevented if the worker had probed the smears prior to removing them from the culvert, but he did not believe this was necessary due to prior survey results indicating that the culvert was clean. The contractor will examine possible changes to the culvert release protocol, and for now, all future culverts that may be contaminated will be disposed of as low-level waste.

Transuranic (TRU) Waste: The three TRU waste remediation lines in F-Canyon and SWMF could shut down this summer if additional funding is not provided. If that happens, resuming operations would likely take months to get the equipment ready and operators trained. There are also two drums inside concrete culverts whose elevated plutonium contents exceed the criticality limits for the existing remediation lines. There are another 28 bulged/pressurized drums inside culverts. (See March 16 and 30, 2007 reports). Once the new Documented Safety Analysis is implemented in May, the contractor intends to vent these and other noncompliant drums by the end of June.