

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 12, 2010

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 March 12, 2010

Savannah River National Laboratory (SRNL): Laboratory personnel are trying to determine the source of contamination they found in rooms behind the E-wing hotcells. Contamination levels in the most heavily contaminated room (which has some wall damage) probed as high as 140,000 dpm alpha. Workers continue to decontaminate the affected rooms.

Transuranic (TRU) Waste: F-Canyon began using a can puncture device with a shield structure to protect a worker's hand from explosions. The functional classification of this device is indirect. A Specific Administrative Control requires that an engineering evaluation be performed prior to opening a sealed inner container. Although not formally classified as safety significant (SS) by the Documented Safety Analysis, engineers are treating it as SS. The actual unit was a prototype built from available parts so the quality assurance requirements for SS equipment were instituted after the fact. When the site rep observed the device being used, some difficulties were encountered. Many of these should have been resolved during the mock-up.

The Site Rep observed portions of the independent assessment for implementing higher plutonium limits at the Solid Waste Management Facility. A recent agreement for accelerating TRU waste shipments calls for potentially reducing requirements and raising limits even further at the TRU waste facilities, allowing handling of remote handled waste in F-Canyon, and developing a strategy for difficult waste.

C-Reactor: After encountering three melted plastic suits, welders will now use respirators and position themselves differently. In addition, workers will not perform welding concurrently with grinding. Grinding of contaminated paint was a major contributor to the radiological hazard. (See 2/19/10 and 3/5/10 reports).

F-Tank Farms: After workers cut a hose-in-hose transfer line, one of the spiral wires wrapped around the outer hose sprung free from the cut rubber jacket. This wire later poked through the surrounding glovebag and punctured a Radiological Control Inspector's hand, while he was swiping the exterior of the glovebag. Luckily, no contamination was found in the wound or outside the glovebag.

Integrated Salt Disposition Project: SRR expects that recovery actions to transfer, dilute, and process high organic strip effluent in the hold tank and transfer line could last through late April.

Department of Energy: Lack of coordination between the four offices that have facility representatives is leading to lopsided facility representative (FR) coverage. For instance, both of the qualified FRs assigned to H-Tank Farms were given new assignments this week. Now there will only be four qualified FRs to cover all of the SRR facilities, but three FRs are assigned solely to SRNL.

F/H Laboratory: In 1995, a generic National Fire Protection Association Code exemption request was submitted to DOE. This exemption affected some of the rooms in the laboratory that are not fully provided with automatic sprinkler coverage. Although this exemption was never approved, it is invoked in the current Fire Hazards Analysis and a Justification for Continued Operations. (This does not affect systems credited by the DSA). Control of generic fire evaluations was discussed in the Board's 1/20/10 letter.

Integrated Safety Management System (ISMS): SRR completed their external company ISMS Verification review this week. The review team was composed of senior personnel who have been involved in the implementation of ISMS for many years. The team found four items that require short term implementation as well as several other items that can be implemented over a longer period of time.