

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 20, 2007

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending April 20, 2007

**K Area Interim Surveillance:** The contractor Operations Readiness Review (ORR) commenced this week. The initial emergency preparedness drill was revised when the Site Rep and others questioned the lack of contamination at the scene of a site area emergency fire involving a forklift and two transuranic waste drums. Furthermore, the Department of Energy ORR team decided not to observe this drill concurrently, which was the right decision considering neither their Plan of Action or Implementation Plan were approved. As part of a preventive maintenance activity for the diesel generator battery, the emergency stop button was engaged to prevent the diesel from starting. However, none of the expected alarms or indicators were received in the control room or at the diesel generator control panel. This condition is being fixed.

**Solid Waste Management Facility:** The high hydrogen drum reported on last week has resulted in a Potential Inadequacy in the Safety Analysis (PISA). The current safety basis for handling transuranic waste drums assumes once a vented drum is determined to be less than the lower flammability limit (LFL) the drum's headspace will not increase above LFL. The drum in question was first measured to have a hydrogen concentration of 0.36 percent. Approximately a month later, the hydrogen concentration had risen to 7.18 percent. An investigation is ongoing.

**Savannah River National Laboratory:** A Technical Safety Requirement violation and a PISA were declared after an engineer spotted a blank in a high-efficiency air particulate filter bank. This blank, combined with a second blank found a few months ago, prevented the filter efficiency of one of the bank's 3 filters from being tested. The filter passed the test after the blanks were removed.

**HB-Line:** While labeling a wire in preparation for a distributive control system upgrade, the wire was pulled loose, triggering an interlock. Normally, when the halon system is manually activated, this interlock reduces glovebox vacuum. In this case, all of the glovebox low vacuum alarms in Phase 2 and 3 were activated. The Shift Operations Manager was provided inadequate, informal information that resulted in the incorrect scope of work being evaluated. In light of recent events (4/13/07 report), all one-time-only procedures at H-Canyon and HB-Line have been suspended pending re-review.

**Contamination Events:** A F/H Laboratory technician was found to have 90,000 dpm alpha on his lab coat and 800 dpm alpha on his shirt after handling a high specific activity sample from HB-Line inside a radio bench. The exact cause for this contamination and several other drops of highly contaminated liquid on the bench floor is unknown, but the drops may have occurred while mixing the sample vial by hand. Two Saltstone workers also had their clothing contaminated while transporting a bottle of leachate.

**DNFSB Activity:** The Site Reps attended a SRS Citizens Advisory Board Waste Management subcommittee meeting. The Site Reps also attended a DOE public scoping meeting concerning the surplus plutonium disposition supplemental environmental impact statement.