

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 12, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: M.T. Sautman, SRS Site Representative
SUBJECT: SRS Report for Week Ending October 12, 2007

DNFSB Activity: Board members walked down L-Basin, high-level waste processing facilities, and the Solid Waste Management Facility. The Board discussed several technical and safety issues with site management.

K Area: While workers were removing a concrete shield column in the Presentation Area, their diamond cable saw cut a conduit containing two cables, one energized at 109 volts AC. No arcing or injuries resulted from this. Ground-penetrating radar did not identify this cable beforehand nor was it shown on drawings. Similar work has been put on hold and the source of the cable is still under investigation.

Saltstone: While removing a temporary modification, 398 gallons of very dilute, but still contaminated, leachate were siphoned from the Clean Catch Batch Tank to the Salt Feed Tank. While the potential for a siphon had been identified during earlier engineering and operations reviews, this potential was not explicitly discussed in the work instructions nor was it mentioned during the pre-job briefing. As a result, maintenance workers were not sensitive to the need to lift a pump above liquid level right after a discharge valve was opened. While the valve was remotely closed as soon as the tank high liquid level alarm was triggered, the operator had not been monitoring the liquid level to detect a siphon beforehand.

Tritium: In response to unresolved concerns with equipment reliability (see September 14, 2007 and November 17, 2006 weekly reports), the Savannah River Site Office (SRSO) restricted the movement of irradiated Tritium Producing Burnable Absorber Rods within the Tritium Extraction Facility until the supply ventilation system has been restored to a normal configuration with all components operable. During this period of low potential consequences, SRSO is requiring the system, which has recently undergone significant modification and repairs, to be run in for 250 hours without upset. (See August 31 - September 14, 2007 weekly reports). The design requirement for the ventilation component availability is 99.98%.

H Area Material Disposition: The Effectiveness Review evaluated the performance of shifts last week. Failure rates for the observed shifts were 16% in H Canyon, 11% in HB-Line, and 23% for maintenance. Management is taking actions to address observed weaknesses.