DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 2, 2007

MEMORANDUM FOR:

J. Kent Fortenberry, Technical Director M.T. Sautman, SRS Site Representative

SUBJECT:

FROM:

SRS Report for Week Ending November 2, 2007

Dropped Items: A number of items were dropped this week during nuclear operations:

- At the Materials Test Facility, a reservoir assembly slipped into a gap in the environmental chamber rack and fell to the floor. Rather than immediately evacuating in case there was a breach, the operator placed the assembly back in the chamber, which had been chilled as part of a thermal shock test. The initial attempt to raise the chamber temperature had to be aborted because the wrong program was initiated. After the temperature was raised in a controlled manner, a visual inspection of the dropped assembly did not identify any damage. The assembly was then placed in a secondary container and safely transported to another facility.
- At the Tritium Extraction Facility, a Tritium Producing Burnable Absorber Rod was dropped when the procedure reader lost his place and skipped the step to place the rod gripper control in the "clamp" position. Work was suspended and the rod was later recovered.
- At H Canyon, a monorail cable on the new hot canyon crane broke while trying to lift a jumper at an angle. The jumper dropped ~ 6 feet and may have been bent.
- At L Basins, a 5/16" gap in the gripper fingers allowed a fuel assembly to slip out a gripper tool and fall 4 inches onto the rubber mat on the Transfer Pit floor.

Saltstone Disposal Facility: Grouting was terminated Thursday after leachate was found leaking from conduit that penetrated the Vault 4 Cell F wall. The leak was later sealed with putty.

H Canyon: A safety-significant High Coil Pressure interlock was activated when an operator mistakenly increased steam flow rather than cooling water flow to the High Activity Waste Evaporator. In light of recent operational errors, management temporarily stopped crane work and shut down the evaporators. Crane work and other activities will be subject to increased supervision.

Criticality Safety: While preparing for hot operations, it was discovered that two credited filters used to prevent the transfer of resin from two neptunium processing anion columns at HB Line had not been installed.

Maintenance Work Instructions: An electronic template has been developed to standardize step numbering, warnings, hold points, and common actions. (See 7/13/07 and 7/27/07 reports).

Tritium Extraction Facility: A facility investigation and simulation concluded that a recent ventilation upset (see 10/19/07 report) was likely caused by the operator inadvertently changing the position of the damper control switch while removing a lockout.

Tank Farms: Low temperature aluminum dissolution of tank 51 began. The Modular Caustic Side Solvent Extraction Unit ran during the week, although it encountered problems with contactor speed interlocks and excessive decontaminated salt solution coalescer differential pressure.