

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 20, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending October 20, 2006

H-Canyon: Last week while processing neptunium solution, a plug caused solvent to overflow from a mixer-settler and into the 13H cell and sump. The spill has been cleaned up and actions are being taken to dissolve the solids plugging the leg connecting the 1A bank to the weir-box.

Transuranic Waste Operations: The Site Reps observed transuranic (TRU) waste repackaging operations in F-Canyon and discussed corrective actions to two recent events. In one case, breathing air was accidentally turned off to workers for a very short period of time. In addition, a drum containing beryllium was unpacked although beryllium drums were not supposed to be processed until the end of the campaign. The Site Reps also noticed that workers were using box cutters during repackaging operations.

During the transportation of four TRU drums by a forklift, the pallet failed and all four drums fell to the ground. The impact caused three significant breaches in the steel wall and inner liner of one drum. The contractor is investigating the cause. Potential contributing factors include the lack of a pallet inspection program and uneven loading of the pallet. One of the drums weighed over 900 lbs while the other three drums averaged approximately 150 lbs.

Readiness Reviews: The Department of Energy Readiness Assessment for the Saltstone facility was delayed a week in order to repair damage from a recent lightning strike. Following the repairs, the contractor conducted a clean grout run but the operation was terminated early due to erratic flow indications.

The National Nuclear Security Administration Operational Readiness Review for the Tritium Extraction Facility will begin Monday.

Actinide Recovery Process: During tests of the process vessel vent system, the minimum pressure differential between the vapor space of two strike tanks and the cells that house the tanks was not achieved. It appears that the current system configuration does not have the necessary static pressure capacity to control the air flow and "tank to cell" pressure differential under the best conditions, much less if dirty high-efficiency particulate air filters were present. Engineers are evaluating possible solutions.

H-Area Outside Facilities: While relocating a recently emptied tanker truck, an operator noticed a yellow stain on the ground where the tanker had been parked. Followup surveys determined that the stained area contained approximately 7,500 dpm (alpha) and 200,000 (beta/gamma). A troubling aspect to the event was the acknowledgment of existing contaminated areas which have not been adequately characterized or controlled.