DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 21, 2005

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending October 21, 2005

Tank 5: After some equipment issues were resolved, the Tank 7 to Tank 5 high-level waste transfer was initiated. During the transfer, a new leak site was discovered approximately 24 inches above the tank bottom. The leak began several hours after the waste was raised above this level. Over a period of 16 hours, the waste slowly wetted the side of the tank until it reached the bottom curve of the tank. A few drops were visible on the annulus floor below the edge. The leak site was still wet after the transfer was completed. The contractor is planning to add inhibited water to the tank over the weekend until the waste level is high enough to start the submersible mixer pumps.

Readiness Assessments (RA): In those cases where the contractor was granted startup authority, this authority had been delegated to the Area Project Manager. As part of the corrective actions of the Tank 5 RA, the Chief Closure Officer rescinded this delegation and will now grant these approvals himself. In addition, line managers for upcoming RA's are required to personally meet with the contractor president before declaring readiness for the review to start.

In preparation for two upcoming RA's, the Site Reps have taken a number of actions to ensure the contractors plans are consistent with Department of Energy orders and standards. The Site Reps walked down the upgraded Saltstone facility and Modular Repackaging System with facility managers. The lists of procedures to be demonstrated during the RA's were examined and the level of simulation during the demonstrations were discussed. The Plan of Action and other planning documents were reviewed. The Site Reps also checked with the Saltstone RA Team Lead to ensure that the RA would not only examine the upgrades to allow for 0.2 curie per gallon salt processing, but also address the fact that no hot saltstone operations have been conducted during the last couple of years.

Tritium: Last Friday, power was lost to the H-Area Old Manufacturing facility due to a 13.8 KVA phase to phase short. Three 13.8 KVA fuses blew and the entire substation will have to be replaced, although the transformer itself was not damaged. The standby diesel generator picked up the loads as designed. The contractor is investigating the event but the likely cause is a power surge.

Nuclear Incident Monitors (NIM): During the last 2 weeks, eight of the twelve NIMs in H-Canyon were found to have failed and performance concerns have also been identified with the HB-Line system. The NIMs in both facilities were taken out of service. Nuclear operations have been terminated in H-Canyon and compensatory measures enacted at HB-Line. The previously noted power surge may be partly responsible, although some damage was found before the surge. The failed NIMs will be replaced with spares after a surge suppression device is installed and tested.