DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 1, 1998

MEMORANDUM FOR: G. W. Cunningham, Technical Director
FROM: J. Kent Fortenberry / Joe Sanders
SUBJECT: SRS Report for Week Ending May 1, 1998

Mis-Transfer at F-Canyon: Low-activity waste being transferred from F-Canyon to Outside Facilities was inadvertently transferred to the wrong tank. No hazards or material incompatibility problems were experienced because all tanks involved provide storage for the low-activity waste being transferred. However, a number of significant items merit attention.

Although valves were aligned per procedure and independently verified, three valves were found misaligned. In addition, the receiving tank was not monitored during the transfer and consequently the mis-transfer was not detected for several hours until a high-level alarm was received (after 21,000 lbs were transferred). A close look at this events reveals problems with procedure compliance, operator error, procedure quality, pre-job briefing, shift turnover, incident recovery, and an inadequate transfer protocol.

Transfer problems have plagued F-Area over the last several months. As reported in the weekly report of 1/23/98, a tank overflow occurred due to the failure to effectively monitor source and receipt tank levels. In March, a transfer pump was operated for several hours in a dead-head condition due to a mispositioned valve. Only when a leak was identified in the pressurized line was the condition diagnosed.

The site reps held discussions with DOE and contractor facility management to identify concerns with the persistent transfer problems in F-Canyon/Outside Facilities, discuss the ineffectiveness of the previous corrective actions, and discuss corrective actions to be taken for this most recent event. It appears that corrective actions taken to date have not yet addressed the root cause. Potential root causes were discussed. The contractor agreed to conduct an evaluation of these events to identify and address root causes. As a result of DOE-SR pressure, discretionary transfers were suspended by the contractor facility management pending some short term corrective actions.

SRS Alert - An Alert was declared at 2:03 a.m. on April 27 as a result of 60 gallons of non-radioactive 4% hydrochloric acid from a demonstration project at the TNX test facility. The incident turned out to be relatively benign. With the exception of some acid contamination of soil next to the building, the leak was contained and neutralized. Soil cleanup is underway. The management of this incident was observed from the Emergency Operations Center (EOC). The EOC appeared adequately manned and reasonably well organized.