

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 22, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending September 22, 2006

DNFSB Activity: Messrs. R. Robinson, M. Sautman, and R. Zavadoski observed the 35% Design Review for the Salt Waste Processing Facility.

Rec. 94-1 Completion: This week, the contractor completed the last calcination of neptunium-237 for Recommendation 94-1. Stabilization of pre-existing neptunium nitrate was the last SRS related milestone associated with the recommendation. The contractor will continue to stabilize additional neptunium, but this material is outside the scope of the original recommendation.

K-Area Plutonium Operations: The Site Rep walked down the K-Area Interim Surveillance project. The contractor recently completed construction on the project and startup/testing has begun. During the walk down the Site Rep raised a concern with wooden pre-filter housings within the glovebox. The contractor assured the Site Rep that the wooden pre-filter housings were solely intended for testing and will be replaced with stainless steel housings prior to commencing radiological operations.

Waste Remediation: The Site Rep observed transuranic (TRU) waste remediation activities at F-Canyon and noted that previously raised issues with TRU repacking had been addressed. (See August 25 weekly report). A large metal support ring was used to expand the bagout sleeve rather than holding it open by hand while waste was being pushed through. Rather than using box cutters (as was observed at another line), operators used utility shears to cut up plastic, tape, and other materials. The Site Rep had previously suggested that shears may allow better control of the cutting surface than slashing with a blade. The most hazardous item found during repacking at F-Canyon so far was a bottle of hydrofluoric acid that was later neutralized. The Site Rep had also previously questioned the practice of punching through cardboard cartons with a screwdriver during TRU repacking at the Savannah River National Laboratory. The Site Rep was shown a new engineered carton cutting device that eliminates the use of sharp or pointed objects for puncturing cartons for examination. Finally, the Site Rep observed workers remove plywood waste boxes from black boxes at the Solid Waste Management Facility.

Emergency Preparedness: When the Site Rep calculated the average score of facility emergency drills and exercises during a 12-month period, the scores were consistently very high. For example, six facilities had an average score between 98 and 99.6%. The Site Rep has questioned whether the high scores might indicate the scenarios are too easy, don't change often enough, or that controllers are not critical enough. One of the objectives of training drills should be to challenge the facility in order to identify in a safe and controlled manner where their vulnerabilities are. When scores are consistently very high, the opportunity for identifying and fixing these vulnerabilities may be missed. During several readiness reviews over the last year, facilities either failed the emergency drill or had significant findings related to emergency preparedness.