

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 9, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending June 9, 2006

DNFSB Activity: Mr. Robinson was on-site to observe the Tank 48 independent review team meeting. The Site Reps. attended a public meeting held by the Nuclear Regulatory Commission concerning closure of high-level waste Tanks 18 and 19. In addition, the Site Reps. attended the quarterly meeting of the Governor's Nuclear Advisory Council in Columbia, South Carolina.

H-Canyon: As discussed last week, the contractor identified high dose rate areas around two tanks located in the Outside Facilities. Neither re-circulation of material within the tanks nor additional transfers were successful in dispersing the high dose rate material. A new path forward has been developed which is intended to limit the transfer of additional corrosion products to the tanks (e.g., the feed tank in H-Canyon will no longer be agitated prior to transferring material). Shielding will be added to reduce the radiation field and additional radiation monitoring equipment will be permanently added in the area.

Waste Stabilization Building (WSB): This week, the Site Reps. met with National Nuclear Security Administration representatives to discuss the proposed radiological confinement strategy for the facility. The WSB will be used to process waste generated from the Mixed Oxide Fuel Fabrication Facility (MFFF) and the Pit Disassembly and Conversion Facility. Significant quantities of actinide material, primarily americium-241, are expected to be processed in the facility. Critical Decision-2 is expected later next month with operations commencing shortly before MFFF startup.

Glass Waste Storage Building #2: The Department of Energy Operational Readiness Review team had three post-start findings dealing with the facility representative qualification card, maintenance procedures, and the facility canister number and curie content limits.

F-Canyon: This week the contractor conducted two mockups of the 804 tank cleaning activity - one using a clean mockup tank and the other one involving full dress out in the actual cell (but without removing any actual sludge). Removal of the sludge is expected to commence within the next few days.

Bagged, contaminated equipment was transferred to a Sealand container. After the interior was downgraded to a radioactive materials area (RMA), workers wearing gloves entered the container to label the equipment. Afterwards, 20,000 dpm alpha was found on a shoe of one of the workers. Subsequent surveys found 50,000 dpm alpha on some rope that had been used as a tag line for moving the equipment. The rope was not bagged as required for items inside a RMA. Considering the contamination levels found, the contractor is evaluating whether it was appropriate for the initial reentry to have been made without any air sampling or respiratory protection. In addition, the contractor has placed the affected five workers on a special bioassay program.