DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 15, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives

SUBJECT: SRS Report for Week Ending June 15, 2007

Tank Farms Operations: While troubleshooting a feed control issue at Tank 43, two workers became contaminated on their personal clothing. The individuals were wearing one set of protective clothing (PC), but due to the hot weather the protective clothing became wet from perspiration. The troubleshooting activities required work at low elevations and the workers sat and kneeled in the contamination area. The work area was not decontaminated nor were any of the contaminated areas covered with paper. Factors that contributed to the event include: poor work planning, inadequate communication of the radiological hazards, sitting and kneeling in a single set of PCs, and failure to exit the area once the PCs became wet.

Transuranic (TRU) Waste Operations: While preparing a TRU drum shipment from E-Area to F-Canyon, one of the drums was listed with a higher plutonium equivalent curie (PEC) loading than the drum actually contained. The estimated drum inventory was 73.1 PEC but was listed on the candidate drum list as 86.4 PEC. The discrepancy was not identified until after the six drum shipment. A control in the F-Canyon Justification for Continued Operations credits the configuration control program to limit receipt of TRU drums to less than 80 PEC per drum. The total shipment PEC inventory was listed as 138.2 PEC which was also greater than the 125 PEC shipment limit. Despite these controls the shipment was made. In at least one case, an independent verification was procedurally required to validate the PEC values. The event represents a significant breakdown in conduct of operations.

A second TRU drum has been identified in which the final head space gas analysis indicates high hydrogen (4.7%) (Site Rep Weekly 4/20/07).

Defense Waste Processing Facility: In order to perform a required maintenance evolution on a diesel generator day tank, a seismically qualified scaffold was required. When maintenance personnel went to perform the work, they found that the scaffolding was constructed at the wrong diesel generator day tank. The work package correctly identified which day tank required the scaffolding but workers instead relied upon an informal shift priorities list which contained the wrong day tank. Neither the pre-job brief nor a walkdown by operations personnel identified the error.

Transportation: The Deputy Assistant Secretary for Safety Management and Operations sent the DOE-SR Manager a memorandum stating his expectation that adequate safety analyses are performed for transportation activities and controls are established for both facility operations affected and transportation activities planned with a clear authorization from DOE. Furthermore, it discusses the fact that DOE-SR does not currently approve non-routine transfers and requests that DOE-SR perform a review of the DOE-approved transportation safety document (Site Rep weekly 6/8/07).