

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 3, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending February 3, 2006

**Solid Waste Management Facility (SWMF):** An assay instrument used in the 90's to segregate low-level radioactive from transuranic waste provided the same reading whether the amount of plutonium (Pu) was below the detection limit or the Pu activity saturated the detector. When this happened, a default value of 0.02 fissile gram equivalent (FGE) was assigned. An assay indicated this week that one of these drums actually contained 681 FGE ( $2\sigma$  value). This new information resulted in a Technical Safety Requirement spacing violation, the storage of hazard category (HC) 2 quantities in a HC 3 facility, and exceeding a facility mass limit. A preliminary database search of drums assigned similar default mass values found another 600+ drums, all of which are being tagged and barricaded. It is unclear when this detector saturation issue was identified and how this information was handled. SWMF went through a major recovery effort in 2004 when a similar event happened (Site Rep 7/30/04 report), but this group of drums was excluded from those corrective actions because the assay data was believed to be accurate. While drums being moved to this storage location required dose rate surveys to identify other possibly mischaracterized drums, this drum was already in the facility and for some reason its associated neutron dose (10.5 mrem/hr at 30 cm) was not recognized as an anomaly.

**Rec. 2000-2:** The Site Reps reviewed the institutionalization of implementation plan commitments. Most of the opportunities for improvement that were open during the last status report have been dispositioned. Despite a number of recent personnel changes, only 2 systems engineers were not fully qualified, but they were on track to do so. System health reports are still being regularly conducted on a rotating basis, although several systems had not been reviewed since 2003 or 2004. The tank farms program is still relatively immature. Observation of two system health report presentations found good facility management involvement. Two potential areas of concern are 1) the apparent lack of documented, consolidated system information to prevent the loss of corporate knowledge when systems engineers change and 2) the high degree of flexibility in safety system component performance monitoring program and resulting variability in implementation. The contractor had already realized the former issue as a result of recent layoffs and is looking at ways to address it. The Site Reps will be meeting with individual systems engineers to further investigate the basis for how performance monitoring is conducted.

**HB-Line:** Following the installation of a new glovebag in HB-Line, a glovebox exhaust low vacuum alarm was received in the control room. In response to the alarm, the contractor entered into the applicable limiting condition of operation and reentered the room to identify the cause of the alarm. Upon further investigation, facility personnel noted that the recently installed glovebag was missing the bottom heat seal. Per procedure technicians are required to inspect glovebags prior to introduction into a gloveport. Unfortunately, the required inspection failed to identify that the glovebag was open ended. The missing seal allowed for a direct path into the glovebox and resulted in the decreased vacuum on the glovebox.