

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 16, 2007

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: M. J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending March 16, 2007

Plutonium Facility Criticality Safety Program: This week, LLNL provided a supplemental letter to the Livermore Site Office (LSO) regarding criticality safety deficiencies identified by the Board (see weekly report dated February 9, 2007). The initial LLNL letter dated January 31, 2007, was incomplete in addressing the integration of roles and responsibilities, and the path forward on the configuration management of the Controlled Materials Accountability and Tracking System (COMATS). In its initial response, LLNL asserted that integration would be achieved by simply identifying three existing documents, and that the future use of the Criticality Special Support System (CSSS) would address issues with the configuration management of COMATS - even though the resources to implement CSSS were not yet provided.

In its supplemental response dated March 12, 2007, LLNL took credit for a Nuclear Material Technology Program (NMTP) process improvement initiative that will help to improve the roles and responsibilities of personnel with criticality safety duties to ensure proper integration. The supplemental response also provided a commitment to fully implement the CSSS. Currently, CSSS only provides a material labeling capability, but full implementation will provide NMTP fissile material handlers (FMHs) with the relevant information needed to satisfy Standard Criticality Control Conditions for workstations. Additionally, CSSS will assist FMHs in ensuring that fuel-grade plutonium administrative limits for laboratory rooms are properly calculated. This capability is expected to be available to FMHs in fiscal year 2007.

Readiness Assessment for Legacy Item Disposition: This week, LSO issued its report on the readiness assessment (RA) to disposition the legacy item referred to as Object-77. As expected, the LSO RA identified two pre-start findings, one in the area of training, and the other related to inadequate plans to transition from dry runs to actual radiological operations. LLNL has begun to address the pre-start findings. Closure of the pre-start findings will be confirmed by LLNL and LSO line management.

LSO Senior Nuclear Safety Advisor: Earlier this month, NNSA re-posted the job announcement to fill a Senior Nuclear Safety Advisor vacancy at LSO. The position was originally posted in May, and re-posted in July and October. The current posting closes on March 30, 2007.

Plutonium Facility Occurrence: On March 12, 2007, Plutonium Facility management issued an occurrence report (ORPS report OAK-LLNL-LLNL-2007-0010) regarding a discrepant as-found condition in the facility. The occurrence was reported because insufficient evidence (calculations) existed to ensure that the 7,500 gallon fire water tank could meet the functional requirements described in the current Safety Analysis Report (SAR). The fire suppression system functional requirements will be redefined in the new Documented Safety Analysis (DSA) to better describe the performance that is expected. The fire suppression system requirements will transition from the SAR to the DSA in the near future.