

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 2006

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** M. J. Merritt, DNFSB Site Representative  
**SUBJECT:** Report for Week Ending March 24, 2006

**Plutonium Facility Safety Basis:** On December 19, 2005, LLNL submitted the Plutonium Facility Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) document to the Livermore Site Office (LSO) to comply with 10 CFR Part 830, the *Nuclear Safety Management* rule. This week, LSO completed a draft Safety Evaluation Report (SER). LSO is currently performing final reviews of the SER and is expected to approve the DSA and TSR with conditions of approval in the near future. LLNL has committed to submitting an implementation plan for the rule compliant DSA/TSR within 30 days of receipt of the SER.

**Plutonium Facility Resumption:** Currently, approximately 50 percent of the work stations (see weekly report dated December 9, 2005) in the Plutonium Facility are either in operation or in trial operational periods. The work stations are controlled by Operational Safety Plans (OSPs) that are unique to the work station(s). The current OSP status is as follows:

- seven OSPs in operation;
- 17 OSPs in trial operation; and
- approximately 25 OSPs in various stages of the resumption process.

The work station resumption process continues to follow the protocol documented in the *Process for Standing-Up Workstations to Limited Operations*. As part of the final preparations, gloves in many of the gloveboxes have been changed as necessary, and the data collected relating to glove replacements and inspections is being collected as part of a recent effort to establish a facility glovebox glove change program. LLNL is continuing to make progress in establishing a viable program for glove condition tracking and replacement.

**LSO Senior Nuclear Safety Advisor:** This week, the National Nuclear Security Administration (NNSA) posted a vacancy announcement for a Senior Nuclear Safety Advisor at LSO. The creation of this position is consistent with advice provided to NNSA by the Board in 2005. The role of the incumbent will be to provide expert technical counsel to the LSO Manager on matters such as criticality safety, safety analyses and documentation, and systems engineering. The incumbent will also be expected to provide oversight of nuclear operations at LLNL nuclear facilities to ensure that the operations are carried out safely and in accordance with established procedures. The closing date for applications is April 20, 2006.

**Plutonium Facility Occurrence:** On March 20, 2006, Plutonium Facility management issued an occurrence report (ORPS report OAK-LLNL-LLNL-2006-0012) regarding the lockout-tagout (LO/TO) requirements for the Plutonium Facility chlorination system. The existing Safety Analysis Report states that "the hydrogen chloride (HCl) and chlorine (Cl<sub>2</sub>) systems are locked and tagged out of service." As part of response to the occurrence, facility management has locked and tagged the system out of service. Currently, no HCl or Cl<sub>2</sub> is located in the facility, but the distribution system is being maintained for the eventual startup of a chlorination box. The new DSA identifies several safety controls for HCl and Cl<sub>2</sub> as part of the Toxic Gas Monitor and Alarm System, but does not require the chlorination system to be locked out of service, since supply of the gases is required for the future chlorination operations.