

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 20, 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 April 20, 2007

**Plutonium Facility Safety Basis:** On April 6, 2007, the NNSA Deputy Administrator for Defense Programs (NA-10) approved the LLNL request – submitted through the Livermore Site Office (LSO) – for an exemption to the requirement to provide an annual update to the Plutonium Facility documented safety analysis (DSA). LLNL requested this exemption from LSO on February 14, 2007. The exemption request is related to the DSA that LLNL submitted to LSO on December 19, 2005, and LSO approved in April 2006. Specifically, LLNL and LSO requested an exemption to 10 CFR Part 830.202.c.2. This section of the *Nuclear Safety Management* rule requires that LLNL annually submit to DOE either an updated DSA or a letter stating that there have been no changes in the DSA since the prior submission. This update was due in April 2007 and was expected to include a number of safety improvements that were defined in the LSO Safety Evaluation Report conditions of approval. LLNL and LSO requested that the first annual update to the DSA be deferred until April 2008. LLNL justifies the need for the exemption by pointing out that the DSA is currently in the implementation phase and will not be complete until November 2007. Once the DSA is fully implemented, LLNL safety basis resources will be reallocated to begin the annual update process.

The NNSA approval letter for the exemption contains specific references regarding the current safety posture of the facility and also defines terms and conditions as part of the approval. NNSA has concluded that safe operations are assured based on the facility being operated in compliance with a combination of the existing safety analysis report controls and the new DSA controls during the transition period in accordance with the current safety basis implementation plan. The terms and conditions include a deadline of April 7, 2008 for the annual update with no further extension for this one-time exemption. Additionally, the exemption specifies that LLNL must prioritize safety basis work for the facility so that the DSA is fully implemented by November 15, 2007. Currently, the annual update is expected to include changes associated with the implementation of DOE-STD-3009, Change Notice 3, but the exemption letter indicates that LLNL could petition for further schedule relief provided LLNL can demonstrate all other elements of the annual update will be met by the deadline.

**Legacy Item Disposition:** This week, significant progress was made in the preparations to disposition a legacy item referred to as Object-77. Specifically, the following preparations were completed:

- a containment tent was constructed at the entrance to the laboratory room and tested;
- work permits to conduct the activity were finalized;
- training of fissile material handlers on off-normal egress and use of NOMEX fire hoods with anti-contamination clothing was completed;
- special dosimetry training was completed; and
- documents were completed to address LSO readiness assessment pre-start findings related to training and startup activities.

The emergency response plan for this activity is in final approval and LLNL should be in a position to request LSO approval to proceed in the coming weeks.