

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 27, 2005

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** Michael J. Merritt, DNFSB Site Representative  
**SUBJECT:** Lawrence Livermore National Laboratory  
Report for Week Ending May 27, 2005

**Plutonium Facility Safety Basis:** The Livermore Site Office (LSO) has agreed to a schedule and approach for LLNL to finalize the Plutonium Facility Documented Safety Analysis (DSA) to comply with the Nuclear Safety Management rule (10 CFR Part 830). LLNL will submit the final DSA to LSO by December 19, 2005. Issuance of the DSA has been delayed because facility personnel have been addressing safety issues related to implementation of the current authorization basis. Included in the current issues are a number of potential inadequacies in the safety analysis (PISAs). LSO and LLNL have agreed on a cutoff date for resolution of PISAs to be incorporated in the DSA. Any open PISAs after the cutoff date will be incorporated in future annual updates to the DSA. LLNL continues to resolve LSO comments on the DSA.

One notable change in the DSA relates to the conservatism of the leak path factor (LPF) analysis that supports the DSA. In September 2004, LSO directed LLNL to use an LPF analysis performed by a technical consultant (see weekly report dated September 10, 2004). During the comment resolution process, LLNL has decided to use a more conservative LPF of one, rather than relying on the analysis provided by LSO.

**Plutonium Facility Resumption Plan:** On May 25, 2005, the National Nuclear Security Administration (NNSA) Headquarters, LSO and LLNL agreed on a project management plan for the resumption of programmatic activities in the Plutonium Facility. According to the plan, resumption of limited operations would begin by October 10, 2005. The limited resumption will be preceded by a LLNL management self-assessment and a readiness assessment conducted jointly by LLNL and LSO. The plan was presented as a resource-loaded schedule that is divided into seven major tasks. The major tasks are as follows:

- Resumption of limited operations;
- LLNL re-submittal of the Documented Safety Analysis (DSA)
- Schedule for configuration management plan;
- Maintaining the facility for specifically approved operations;
- Technical Safety Requirements (TSR) recovery plans;
- Resumption of full operations; and
- Authorization Basis updates for Superblock facilities.

LLNL purports that the underlying details of the plan will address the concerns identified by the Board in a letter to NNSA dated March 8, 2005. The plan accounts for the implementation of corrective actions and compensatory measures that have been agreed to by LLNL and LSO. The corrective actions include the implementation of TSR recovery plans for deficient administrative control programs. Additionally, LLNL is developing a system to demonstrate that compensatory measures being implemented are adequate to address the corresponding safety issues.