

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 7, 2005

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Michael J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending January 7, 2005

Plutonium Facility Safety Basis: The Manager of the Livermore Site Office (LSO) has informed the National Nuclear Security Administration (NNSA) that the completion date for the draft Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) for the Plutonium Facility will be delayed. In a September 10, 2004 letter, LSO directed LLNL to submit the DSA and TSR by January 15, 2005. The revised documents were to incorporate important safety changes that were directed by LSO (see weekly report dated September 10, 2004). This information was provided to the Board in a letter from NNSA on October 7, 2004.

LSO has indicated that the reason for the delay is that multiple high priority safety issues exist within the Nuclear Materials Technology Program. Although not specifically identified in its January 3, 2005 letter to NNSA, it is clear that LLNL resources are consumed with identifying corrective actions to address findings from the Department of Energy's Office of Independent Oversight and Performance Assurance (OA) recent audit (see weekly report dated November 19, 2004), as well as resolving issues with the configuration management of vital safety systems (see weekly report dated December 10, 2004). LSO did not identify a new date for LLNL to provide the DSA and TSRs. This will be decided once LSO and LLNL have established a path forward on the collective issues.

Radiological Control Program Review: LSO has chartered a "for-cause" review of the radiological control program at LLNL. The justification for the review was provided to LLNL in a November 10, 2004 letter in which LSO expressed concerns about recent occurrences of radiation contamination control barrier failures. LSO stated that the occurrences may be precursors to more significant events. The review is scheduled during the period of January 18 through January 28, 2005.

LSO provided the plan for the radiological program review to LLNL in a January 4, 2005. The plan cites specific reasons for the review including personnel internal exposures resulting from the MOVER event (see weekly report dated October 15, 2004), a series of radiation-related ORPS reports, and concerns stemming from the recent OA audit. The team that will be conducting the review includes personnel from DOE headquarters, the Y-12 Site Office, the NNSA service center, and the LSO health physicist. The review plan contains seven specific objectives and the review criteria to achieve the objectives. Specifically the team will review the following:

- Corrective actions from recent audits;
- Follow up from the MOVER investigation;
- Corrective actions from the June 2002 extremity overexposure;
- LLNL internal 10CFR835 audit process;
- Workplace monitoring, contamination control, and radiological posting programs;
- ALARA program implementation; and
- The radiation protection program from an Integrated Safety Management perspective.