

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 28, 2005

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** Michael J. Merritt, DNFSB Site Representative  
**SUBJECT:** Lawrence Livermore National Laboratory  
Report for Week Ending January 28, 2005

**DNFSB Staff Site Activity:** D. Burnfield was at LLNL on January 18-26, 2005, observing the “for-cause” radiological control program review of LLNL activities chartered by the Livermore Site Office (LSO).

**Plutonium Facility Operating Status:** The Plutonium Facility has been in Standby mode since January 18, 2005 (see weekly report dated January 21, 2005). LSO assumes that the stand-down will remain in effect until LLNL provides a plan of action with compensatory measures that will address current safety issues. LSO also communicated in a January 21, 2005 letter that any programmatic work that needs to be performed should meet the facility’s Technical Safety Requirements (TSRs) and should be concurred with by LSO. The Plutonium Facility management has defined the term “stand-down of programmatic work.” The term means stand-down of programmatic, facility, and security activities that have the potential to release radiological materials or to challenge/damage facility safety systems. LLNL and LSO have agreed on a process to authorize limited work.

LSO expects LLNL to submit two plans in the near future. The first plan will identify specific compensatory measures that ensure the safety posture of the facility is adequate despite the fact that programmatic work is currently not being authorized. The second plan will identify compensatory measures and corrective actions to allow the facility to return to Operations mode and resume programmatic work. This second plan is referred to as the “plan of action” and is in its third revision (see weekly report dated January 14, 2005).

**Radiological Control Program Review:** An LSO chartered review of the radiological control program at LLNL was conducted during the period of January 18 through January 28, 2005. The review was intended to evaluate occurrences of radiation contamination control barrier failures and other weaknesses in the LLNL radiation protection program (see weekly report dated January 7, 2005). A final report is not yet complete, but based on the draft report and close-out briefings, the report is expected to identify general findings in the following areas:

- The LLNL process to correct identified issues is not effective;
- A widespread lack of adherence to policies and procedures;
- Staffing levels for health and safety support are at critically low levels;
- The work control process requires attention to improve effectiveness; and
- The issues management process needs immediate attention to correct deficiencies.

Specific observations in nuclear facilities that support the overall findings were primarily in the areas of procedural adherence, training of operators and hazard control technicians, and the performance of radiation surveys to support operations. Many of these problems were also identified in other radiation protection audits within the past three years.