

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 26, 2005

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** Michael J. Merritt, DNFSB Site Representative  
**SUBJECT:** Lawrence Livermore National Laboratory  
Report for Week Ending August 26, 2005

**Plutonium Facility Resumption Status:** The field work portion of the Plutonium Facility readiness assessment (RA) for limited operations was completed this week. On Monday, the Unistrut seismic bracing systems were repaired in rooms that supported activities observed as part of the RA. Members of the RA teams were able to observe programmatic work, as well as, the Unistrut repair work. Potential issues have been identified by the LLNL RA team in procedure control, unreviewed safety question review criteria, and the delineation of roles and responsibilities as defined by the Facility Safety Plan. The Livermore Site Office (LSO) RA team has also identified additional issues with the fire protection program. Both teams are currently documenting and categorizing their findings. The reports on the RA results are expected at the end of August.

**Plutonium Facility Fire Protection Program:** On July 18, 2005, LLNL reported a deficiency with the implementation of the Plutonium Facility Technical Safety Requirements (TSRs) relative to the fire protection program. On August 9, 2005, LLNL submitted a recovery plan for the TSR fire protection program. As part of the recovery plan, LLNL tested certain components of the fire suppression system earlier this month (see weekly report dated August 12, 2005). This week, LSO provided feedback to LLNL after it reviewed the recovery plan and separately, LLNL reported a minor problem encountered during the fire suppression system testing.

In its August 22 written response, LSO states that the fire protection recovery plan, in conjunction with the corrective actions taken as a result of LLNL's management self-assessment (see weekly report dated August 5, 2005), adequately addresses the issues identified with the program. However, LSO also states that the recovery plan does not identify the root causes for the program deficiencies. LSO believes a root cause analysis is necessary to prevent recurrence of the problems. LSO has directed LLNL to complete an identification of root and contributing causes and identify any additional corrective actions by October 3, 2005.

On August 23, 2005, LLNL reported a problem that occurred during the fire suppression system testing earlier this month (ORPS report OAK-LLNL-LLNL-2005-0066). Water supply valves to the fire suppression system remain open during normal operation. If the valve is closed, an alarm should occur at the fire system control panel. During the testing evolution, the supply valves were manually closed, but one valve failed to alarm and another valve only alarmed momentarily. The cause was determined to be a problem with switches that detect the position of the valve stem.

**Emergency Management Inspection:** DOE's Office of Emergency Management Oversight (OA-30) has completed its report on the results of its emergency management inspection at LLNL. According to the report, the aspects of the emergency management program that require the most improvement are hazards survey and assessments, training, drills and exercises, and feedback and improvement. LLNL now has 30 days to develop an interim corrective action plan, and 60 days for a final corrective action plan.