

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 28, 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 October 28, 2005

Plutonium Facility Safety System Testing: This week, the Plutonium Facility was placed in maintenance mode to perform inspection and replacement of check valves in the fire suppression system. The applicable Technical Safety Requirements (TSRs) limiting conditions for operation (LCO) actions were implemented to account for the system being inoperable. Facility Engineering developed a procedure, briefed facility and operations personnel prior to performance, and provided direction and support during procedure execution. The fire suppression system was shut down and drained during this procedure, and a 2-hour fire watch was instituted during system shutdown. The check valves were either inspected or replaced as necessary to comply with National Fire Protection Association (NFPA) 25, *Standard for the Inspection, Testing, and Maintenance of Water Based Fire Protection Systems*, requirements. The testing and inspection evolution was completed late in the week and the system has been restored to operating status and the TSR LCOs have been exited.

Emergency Management Corrective Action Plan: On October 14, 2005, the Livermore Site Office (LSO) approved a corrective action plan (CAP) developed by LLNL in response to DOE's Office of Emergency Management Oversight (OA-30) inspection conducted in June 2005. The CAP addresses the seven findings identified in the final inspection report that was provided to LLNL on August 22, 2005. In the CAP, LLNL commits to a number of actions including:

- review of all existing Emergency Preparedness Hazards Assessments (EPHAs) for accuracy, consistency and correctness;
- verify that facility chemical inventories as listed in *ChemTrack* do not exceed EPHA threshold values;
- rewrite Emergency Plan Implementing Procedure (EPIP) 61 to better define the hazardous materials screening process and development of Emergency Action Levels (EALs);
- revise the Environment Safety and Health (ES&H) Manual to incorporate information related to EPHA and EAL requirements; and
- conduct a functional analysis of Emergency Response Organization training.

Emergency Preparedness Drill: On October 26, 2005 an emergency preparedness drill was conducted at LLNL. The goal of the drill was to ensure that the Emergency Response Organization is prepared to carry out emergency response functions during an operational emergency, as required by DOE Order 151.1B, *Comprehensive Emergency Management System*. During this drill, a site-wide notification was made declaring an earthquake event and providing instructions to evacuate all buildings. The LLNL site is divided into "self-help zones" to allow effective management of evacuation or protective actions. The Emergency Operations Center was activated, and an operational emergency was simulated. During this drill, personnel from each zone were expected to confirm that the buildings within that zone were evacuated and that all personnel were accounted for. The Plutonium Facility was not required to participate in the drill since the facility conducts independent drills to meet the order requirements.