

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 27, 2007

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: M. J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending April 27, 2007

Emergency Preparedness Drill: On April 26, 2007 a site-wide 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 151.1C, *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 the evacuation process and subsequent protective actions. The Emergency Operations Center (EOC) 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 Site Representative observed the drill in the EOC. The objectives of the drill were accomplished and a post-drill meeting was conducted to gather feedback that would improve performance in the future. Feedback for improvement included the need to better integrate information systems used in the EOC and improve real-time notification to all EOC staff when new information is received.

Waste Facility Documented Safety Analysis (DSA) Annual Update: The Livermore Site Office (LSO) provided LLNL with comments on the annual update to the Decontamination and Waste Treatment Facility (DWTF) DSA. LSO has determined that the DSA annual update meets the minimum requirements stipulated in 10CFR830 Subpart B. However, LSO requested that LLNL formally resolve 24 comments within 60 days. The LSO comments include issues related to fire protection, waste drum inventory limits, and material-at-risk limits for low-level waste gloveboxes.

Legacy Item Disposition: This week, LLNL continued final preparations to disposition a legacy item referred to as Object-77. Specifically preparations included:

- emergency response training for participants in the phase 2 handling operations;
- a final dry run of the phase 2 handling operations in full personal protective equipment (PPE) consisting of anti-contamination and NOMEX suits – both with hoods – plus powered air purifying respirators;
- a management review of the phase 3 machining operations;
- ALARA radiation exposure training;
- emergency responders briefing on the operation and familiarization with the facility; and
- a LLNL letter requesting LSO approval to conduct the activity.

The Site Representative attended all required training and observed all demonstrations including phase 2 operations. Individuals in the laboratory room during phase 2 operations are required to be qualified fissile material handlers and must be trained on all required PPE and procedures. The Site Representative will observe all phases of the actual activity. The initial phase of the operation is expected to commence in the coming weeks.