

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 28, 2006

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: M. J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending July 28, 2006

DNFSB Staff Site Activity: Staff members E. Elliott and A. Matteucci, and outside expert D. Boyd were at LLNL this week reviewing the implementation of nuclear criticality safety controls in the Plutonium Facility.

Unreviewed Safety Question (USQ) Procedure: On July 17, 2006, the Livermore Site Office (LSO) conditionally approved a revision to the current LLNL USQ procedure. The intent of the revised procedure is to provide consistency with DOE G 424.1-1, *Implementation Guide For Use In Addressing Unreviewed Safety Question Requirements*, and DOE-approved USQ training. Major changes in the USQ procedure include:

- replacement of potentially confusing text with specific citations from DOE G 424.1-1;
- clarification of training and qualification requirements for USQ personnel;
- clarification of entry conditions into the USQ process;
- clarification of USQ screening criteria;
- simplification of the USQ determination worksheet; and
- reference to a new LLNL guidance document for implementing the USQ process.

The conditions of approval all relate to existing commitments to establish and update training requirements associated with USQ implementation. LSO has requested that LLNL implement the new USQ procedure within 120 calendar days from the date of the approval letter.

LLNL Management Contract: On July 14, 2006, the National Nuclear Security Administration (NNSA) released the final Request for Proposal (RFP) for the competitive selection of a management and operating (M&O) contractor for LLNL. All offers and proposal information is due to NNSA on October 12, 2006. The final RFP seeks offerors with the capability to manage science, and operations and management performance at the lab. The planned contract award date is in the February-March 2007 timeframe.

Nuclear Criticality Safety Training: This week, LLNL fissile material handlers (FMHs) and nuclear criticality safety engineers assembled the Training Assembly for Criticality Safety (TACS) in preparation to conduct nuclear criticality safety training in the Plutonium Facility. The TACS, consisting of enriched uranium parts will be used to conduct sub-critical multiplication experiments. The goal of the course is to establish the level of training needed to qualify contractor and DOE criticality safety engineers to DOE-STD-1135-99, *Guidance for Nuclear Criticality Safety Engineer Training and Qualification*. The first training course is scheduled for next week. Three additional courses will be offered by the end of fiscal year 2006.