

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 30, 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 June 30, 2006

DNFSB Staff Site Activity: T. Dwyer was at LLNL this week assisting in site representative duties and meeting with DNFSB interns at LLNL and Sandia National Laboratories-CA.

Plutonium Facility Safety Basis Implementation Plan: This week, the Livermore Site Office (LSO) concurred with the LLNL implementation plan to transition facility operations to a safety basis compliant with 10 CFR Part 830, *Nuclear Safety Management*. The initial implementation plan (see weekly report date June 2, 2006) was revised based on preliminary LSO comments. In its response, LSO recognized LLNL's goal to safely transition to the newly approved Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) as soon as possible while minimizing impact to programmatic mission. However, LSO encouraged LLNL to make every effort to complete the project well before the proposed schedule date of September 30, 2007. LSO also cautioned LLNL that any facility changes required during the transition period that are not related to implementation of the DSA will need to be reviewed against the existing safety basis using the unreviewed safety question process.

Nuclear Criticality Safety Training: This week, LLNL Fissile Material Handlers (FMHs) disassembled the Training Assembly for Criticality Safety (TACS) uranium assembly into component parts in preparation to conduct nuclear criticality safety training in the Plutonium Facility. Contamination surveys performed during the disassembly confirmed the absence of loose surface contamination on the component parts. Since the parts are free of loose surface contamination, the training can be conducted as planned using minimal contamination control techniques. TACS will be used to conduct sub-critical multiplication experiments. The goal 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*. Training courses are expected to begin in July with four courses to be completed by the end of fiscal year 2006.

LLNL Management Contract: The National Nuclear Security Administration (NNSA) recently released a draft Request for Proposal (RFP) for the competitive selection of a management and operating (M&O) contractor for LLNL. This week, NNSA reinstated the comment period for the draft RFP from the original June 5, 2006 to June 27, 2006. No specific reason was cited for the extension of the comment period. The draft RFP seeks offerors with the capability to manage science, and operations and management performance at the lab.

Tritium Facility Segmentation: On June 20, 2006, LSO approved the future segmentation of the Tritium Facility into two Category 3 nuclear facilities. The segmentation was initially proposed by LLNL in September 2003 to support the Preliminary Documented Safety Analysis for the Tritium Facility Modernization (TFM) project. TFM includes plans to upgrade and modernize tritium handling capabilities that are likely to include tritium target-filling for the National Ignition Facility.