

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 25, 2006

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Todd Davis, Acting DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending August 25, 2006

Activity Summary: Michael Merritt was on leave for the week. Todd Davis was on site to provide support to the DNFSB site office.

Configuration Management: On July 14, 2006, the Livermore Site Office (LSO) formally requested the Nuclear Materials Technology Program (NMTP) provide an update to the resource-loaded schedule for upgrading configuration management of vital safety systems. This week, NMTP personnel briefed LSO and the site rep on the details of the proposed schedule. The formal schedule is expected to be transmitted to LSO next week. The proposed schedule has been revised to align with the safety basis implementation schedule (discussed below) for vital safety systems at the Plutonium Facility. Updated redline drawings and system design descriptions will be completed in a phased approach consistent with the safety basis implementation plan. Additional activities identified in the configuration management plan include conversion of the redline drawings to as-built drawings and their inclusion in the facility configuration management database. Notably, activities to walkdown (i.e., redline) vital safety systems at the other LLNL (Hazard Category 3) nuclear facilities are not scheduled to begin until September 2007.

Plutonium Facility Safety System Repairs: In August 2004, NMTP personnel identified cracking in portions of the glovebox exhaust system associated with acidic work in one room of the Plutonium Facility. Subsequent non-destructive testing of other glovebox exhaust system ducting in the facility did not identify additional cracking problems. Seismically qualified cuffs were installed over the cracked portions of the ducting to allow operations to continue in the affected gloveboxes. Earlier this year, NMTP began a project to replace the failed portions of the glovebox exhaust system. A temporary modification has been installed to provide interim exhaust while the duct system is replaced. Construction activities to install the replacement glovebox exhaust ducting are on-going and expected to be complete by the end of September.

Plutonium Facility Safety Basis Implementation Plan: In early July, LLNL initiated the safety basis implementation plan to transition operation of the Plutonium Facility to a safety basis compliant with 10 CFR Part 830, *Nuclear Safety Management*. The implementation plan was approved by LSO on June 20, 2006. As previously noted, the implementation plan involves a phased approach for field implementation of safety-related structures, systems, and components (SSCs) and Safety Management Programs (SMPs). Currently, NMTP is in the process of completing procedures for implementing surveillance requirements and administrative controls for the initial group of SSCs and SMPs. The safety basis implementation plan requires that facility management review and validate implementation prior to declaring a group of controls implemented. In addition, LSO has formed an implementation verification review team to confirm the adequacy of implementing procedures. The first group of controls is scheduled to be implemented by September 26, 2006.