

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 31, 2009

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending July 31, 2009

The site rep was out of the office on Friday.

Plutonium Facility: On July 16, 2009, the laboratory declared implementation of the annual update to the documented safety analysis and technical safety requirements. The annual update was submitted by the laboratory in April 2008 and was approved by the Livermore Site Office (LSO) on November 19, 2008. The annual update incorporates Change Notice 3 to Department of Energy (DOE) Standard 3009, *Preparation Guide for the US Department of Energy Nonreactor Nuclear Facility Documented Safety Analyses* and DOE Standard 1186, *Specific Administrative Controls*. LSO plans to conduct verification of the changes resulting from the update in the next several months.

Last week, the laboratory successfully completed replacement of one of the supply fans for the room ventilation system. The replacement activity occurred with the facility in Maintenance Mode for an extended weekend. The laboratory received LSO approval to exceed a condition in the technical safety requirements as a contingency; however, the activity was completed within the required completion time. The replacement of this supply fan represents completion of a significant effort during the past year to replace aging equipment associated with the safety class room ventilation system.

Nuclear Criticality Safety: A severity level 4 criticality safety infraction occurred in the Plutonium Facility on Monday. The static violation resulted from the transfer of bottles containing liquids in excess of the moderator limits for the receiving workstation. In this instance, the receiving workstation was an adjoining glovebox. Upon discovery of the non-compliance, the fissile material handlers transferred the liquids to another workstation. This attempt to correct the situation was in direct violation of applicable procedures and training—the handlers should have stopped work and contacted appropriate safety personnel. Management temporarily suspended operations in the impacted room, critiqued the incident, and briefed personnel on appropriate response. Criticality safety staff determined the final configuration of the room to be safe and activities have resumed in the impacted room under deliberate operations.

Tritium Facility Modernization: The laboratory provided a status briefing to LSO this week. Installation and leak testing has been completed for the Tritium Processing Station glovebox. Functional testing is underway in parallel with the management self assessment which commenced on July 13, 2009. Laboratory and federal readiness assessments are targeted to begin the weeks of August 17 and September 14, respectively. Additional discussions also took place this week regarding the derivation, definition, and implementation of the safety function for tritium gloveboxes.