

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 16, 2011

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending December 16, 2011

DNFSB Activity: On Monday, Chairman Winokur and Vice Chairman Roberson, accompanied by staff members D. Ogg and J. Anderson, visited the laboratory. The Board members met the new Laboratory Director and received briefings on the Livermore Site Office (LSO), infrastructure and administrative improvements in the nuclear facilities, emergency management, future programmatic missions, and work planning and control. The Board also visited the Emergency Operations Center and observed operations in the Plutonium and Tritium facilities.

Livermore Site Office: Last week, LSO received the final report from the biennial review performed by the Office of the Chief of Defense Nuclear Safety (CDNS). Overall, the CDNS determined that LSO met objectives in each of the 18 assessed functional areas. CDNS identified 11 findings, 14 weaknesses, and several opportunities for improvement. These results indicated the need for improvement in training, emergency management, and fire protection.

Tritium Facility: On Thursday, contractor personnel briefed LSO on the status and future operations of the Tritium Grinder System in support of a request to renew the contract with the US Army for processing of tritiated components. The contractor reported that more than 100,000 of the British telephone dials were processed as part of process development testing, and while technical and operational challenges were overcome, overall tritium recovery was poor. A second process development effort focused on Army components resulted in much better tritium recovery. Based on this information, LSO management approved continued work with the Army components. Also, while a formal plan and decision were not made, it appears likely that the contractor will discontinue processing of the British telephone dials and seek alternative options for disposition. There are approximately 1.4 million dials remaining at the laboratory.

LSO personnel have been reviewing the recently submitted page changes to the safety basis (see weekly report dated November 24, 2011). Their review identified several quality and flowdown issues with the page changes, particularly with the conditions of approval associated with the glovebox boundary and specific administrative control for response to fires. The contractor is revising the page changes based on informal feedback and discussions with LSO. The revised pages changes are likely to be submitted in mid-January 2012.

Nuclear Material Programmatic Operations: This week program personnel received the first shipment of pits from Pantex in support of a request to recover and provide plutonium metal for the Los Alamos National Laboratory (see weekly report dated June 3, 2011). Program personnel decided to utilize traditional metal recovery processes (i.e., breakdown and melt) rather than the hydride/dehydride/casting capability as originally envisioned.