

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 22, 2010

**MEMORANDUM FOR:** Timothy Dwyer, Technical Director  
**FROM:** Jonathan Plaue, DNFSB Site Representative  
**SUBJECT:** LLNL Activity Report for Week Ending October 22, 2010

**DNFSB Staff Activity:** Outside Expert D. Boyd was at the Laboratory on Monday through Wednesday to complete Radiological Worker II requalification training and to assist the Site Representative in a review of procedures.

**Startup and Restart:** This week, subject matter experts from the National Nuclear Security Administration Headquarters and the Office of Health, Safety and Security were at the Laboratory to conduct a Readiness Road Show. The objective of the Road Show was to provide contractor and site office personnel with information on the changes and expectations associated with Department of Energy Order 425.1D, *Verification of Readiness to Startup or Restart Nuclear Facilities*. The Road Show included an overview for management and two half-day working level sessions. All of the presentations were well attended.

On October 15, 2010, the Laboratory submitted to the Livermore Site Office (LSO) the startup notification report (SNR) for the first quarter of fiscal year 2011. Startup of the chlorination system in the Plutonium Facility was the only identified upcoming activity. The projected schedule for the contractor readiness assessment is now February 2011 with the LSO readiness assessment the following month. The previous projected schedule was September 2010. The SNR ascribed the schedule impacts to continued resource conflicts with the inventory reduction project. The chlorination system was officially placed on the SNR in October 2007.

**Tritium Facility:** On October 20, 2010, the Nuclear Materials Technology Program (NMTP) provided an update to LSO on resolution of comments on the previously submitted safety basis (see weekly report dated September 17, 2010). NMTP proposed a specific administrative control (SAC) for glovebox deflagrations, an improved explanation of assumptions in fire scenarios, two additional SACs for combustible loading, identification of the operation and maintenance of the fire detection and alarm system as a key element of the fire protection program, and crediting the emergency preparedness program. LSO is reviewing these proposals. NMTP also reported that resolution of the remaining comments is on schedule for December 10, 2010.

**Emergency Management:** On October 18, 2010, NMTP management approved the critique report from the recent tritium stack alarm (see weekly report dated October 15, 2010). In addition to the issue associated with the equipment malfunction, the critique identified an issue associated with incorrect or inappropriate response of some personnel to the stack alarm. The apparent causes of this issue were identified as: (1) other areas of Superblock were not informed of the alarm, (2) the Facility Safety Plan for Plutonium Facility does not address response to this alarm, (3) access training for Superblock does not address this alarm, (4) security orders may not address this alarm, (5) there have been no drills covering this alarm, and (6) the alarm was silenced before some response personnel arrived from the Plutonium Facility. The critique also identified that the high level stack monitor was not periodically tested for proper response because the available sealed source is inadequate to confirm a response. Corrective actions were developed for each of these specific issues.