

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 28, 2012

**MEMORANDUM FOR:** Timothy Dwyer, Technical Director  
**FROM:** Jonathan Plaue, DNFSB Site Representative  
**SUBJECT:** LLNL Activity Report for Week Ending December 28, 2012

**Safety Improvements:** In 2012, the laboratory contractor completed several actions that improved the safety posture of the nuclear facilities at the laboratory, including the following:

- Completed reduction of the special nuclear material inventory of the Plutonium Facility to Security Category III levels, which significantly reduced the actual material-at-risk available during potential accidents
- Installed upgraded continuous air monitors and tritium room monitors in all rooms of the Plutonium Facility and the Tritium Facility, respectively
- Performed an initial revision of all Operational Safety Plans (OSPs) to strengthen identification of task-based hazards and controls, issued a new OSP guide further strengthening expectations, and initiated a second round of updates to all OSPs using the new guide
- Strengthened work planning and control practices including an update to the governing manual and deployment of electronic resources for developing work permits and releasing work
- Completed replacement of the last safety-related ventilation blower in the Plutonium Facility loft
- Developed and implemented a facility-level drill program
- The Livermore Site Office approved and the contractor implemented the long-awaited update to the safety basis update for the Tritium Facility

The contractor's priorities for 2013 include the following:

- Complete modifications to the tanks supplying water to the safety class fire suppression system (spray plenums in the ventilation system) in order to increase water margin and eliminate reliance on the backup nitrogen skid
- Mature and strengthen the facility-level drill program
- Improve the processes governing conduct of engineering and change control
- Initiate routine use and begin repackaging of nuclear materials into compliant containers
- Complete installation of the new Consolidated Waste Processing Line glovebox to support repackaging and elimination of the backlog of transuranic waste
- As funding permits, continue removal of legacy workstations to reduce risk and make floor space available for new programmatic activities