

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 20, 2009

**MEMORANDUM FOR:** T. J. Dwyer, Technical Director  
**FROM:** B. P. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending November 20, 2009

**Weapons Engineering Tritium Facility (WETF):** This week, LANL began an Implementation Verification Review (IVR) for multiple Technical Safety Requirement (TSR) page changes at WETF. The changes include revisions to the containerization and pressure safety programs to address legacy containers that may exceed their maximum allowable working pressure and to modify requirements for pressurized tritium systems. The changes were also required to resolve inconsistencies between the safety analysis and the TSRs. The IVR is expected to conclude early next week. A laboratory readiness assessment is planned in December to support resumption of tritium gas handling activities.

**Technical Area (TA)-21:** During activities to support American Recovery and Reinvestment Act demolition work at the legacy TA-21 site, three unvented transuranic waste drums were discovered in a decommissioned radiological facility. The drums, which contain a total inventory of less than 0.25 plutonium equivalent-Ci, show no signs of internal pressurization. However, to mitigate the risk of hydrogen deflagration, this week laboratory personnel applied lid restraints to the three unvented drums and restricted operations that can be performed in the vicinity of the staged drums. LANL personnel are preparing a transportation plan for NNSA review and approval to place the three unvented drums in vented over-packs and move them from TA-21 to Area G where they will be placed in a controlled, segregated storage array to await ultimate venting and disposition.

**High Explosive Operations:** This week, LANL senior management paused all high explosive operations at the laboratory in response to the latest in a series of events where personnel deliberately bypassed safety barriers or disregarded safety postings. During the operational pause, compensatory measures were developed to improve access control and communications at high explosive firing sites. Also, personnel received a refresher briefing focused on safety requirements and management expectations for strict compliance with these requirements. Prior to resuming work, operations at high explosive firing sites had to be reviewed and approved by programmatic line management and released by the Facility Operations Director's organization.

**Sitewide Seismic Hazards:** The site office previously approved an extension for the Justification for Continued Operation (JCO) associated with the updated probabilistic seismic hazards assessment for six nuclear facilities to November 23, 2009 and to June 30, 2010 for the Plutonium Facility. This week, LANL requested another extension for the six nuclear facilities (i.e. WETF, CMR, RLWTF, WCRR, RANT and interim radiography operations at PF-4) to March 2010. LANL notes that the independent peer review of safety basis calculations is taking longer than expected. The schedule for seismic evaluation and resolution of the JCO for the Plutonium Facility remains unchanged.

**Plutonium Facility:** A laboratory readiness assessment began this week to support the start-up of surveillance activities related to DOE-STD-3013, *Stabilization, Packaging, and Storage of Plutonium Bearing Materials*. These new activities involve drilling into the outer and inner welded containers of a 3013 packaging configuration to obtain headspace gas samples for analysis and evaluation.