

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 29, 2009

**MEMORANDUM FOR:** T. J. Dwyer, Technical Director  
**FROM:** B. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending May 29, 2009

The staff held a teleconference with NNSA and LANL personnel to discuss decontamination, decommissioning and environmental restoration activities at TA-21.

**Management:** The laboratory is establishing a new Facility Operations Director position to oversee the TA-21 work scope that has been accelerated via the American Reinvestment and Recovery Act.

**Weapons Engineering Tritium Facility (WETF):** Hot operations have not been performed at WETF since pervasive pressure safety issues were recognized last October. During this interval, significant effort has been applied to characterizing and correcting pressure safety deficiencies associated with credited safety systems. Despite these efforts, a number of unresolved issues continue to prevent compliance with existing TSR-level Pressure Safety Program requirements.

During this quiescent period, facility personnel also recognized that some legacy tritium-bearing components stored at WETF may have built up sufficient internal pressure to challenge and potentially breach their containment. Processing these legacy units to eliminate this hazard requires the facility to enter Operations mode, which is currently prohibited due to the TSR non-compliances noted above. This week, LANL submitted proposed TSR revisions that would allow the LANL Pressure Safety Committee to approve acceptable compensatory measures where TSR-level pressure safety requirements cannot be met. The proposed revisions would also lower the WETF facility MAR limit from 560 g to 400 g and reduce the MAR allowed in the Tritium Gas Handling System from 150 g to 100 g (site rep weeklies 4/17/09, 2/13/09, 1/23/09, 12/19/08, 11/28/08, 11/21/08, 10/17/08).

**Plutonium Facility:** This week, a criticality infraction was declared at the plutonium facility when a plutonium metal sample was identified in a glovebox that was only analyzed and posted for plutonium oxide. Following evaluation by criticality safety engineering, the material was removed from the glovebox. The metal sample was originally placed in the glovebox several years ago in compliance with criticality safety requirements at that time. The glovebox limits were subsequently changed to require oxide only; however, presence of the metal sample that did not comply with the revised limit was not identified at that time. Based on this issue, facility management plans to revise their criticality procedure to require verification of field compliance whenever new or revised limits are established.

**Transuranic Waste Operations:** On Wednesday, the site office manager authorized the startup of retrieval and loading operations for 16 remote handled transuranic waste containers following review of closure packages associated with the Management Self Assessment pre-start findings. The startup approval included the following 4 conditions of approval: 1) evaluation of programmatic deficiencies and root causes for pre-start findings, 2) treatment of several observations as post-start findings, 3) review of issues associated with implementation of the unreviewed safety question process and 4) evaluation of training records for Area G supervisory personnel (expired or incomplete training not specific to this activity was identified by the site office for some Area G supervisors). A corrective action plan is required for each of these conditions of approval. On Thursday, LANL successfully retrieved the first canister and loaded it into a cask for shipment to the Waste Isolation Pilot Plant.