

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 24, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending February 24, 2006

Hunt was here this week augmenting site rep coverage.

**Plutonium Facility (TA-55):** LANL has placed TA-55 in standby (Mode 2) and established a continuous fire watch due to an emergent concern over operability of sprinkler heads. Extent of condition and path-forward are still being determined; initial projections are that programmatic operations may remain suspended for several weeks. The facility has begun to containerize material that is now in glove-boxes and thereby increase the margin-of-safety during a possible extended suspension. LANL is also considering whether similar concerns may apply to other LANL facilities.

The concern arose when engineering personnel were walking down the system and found that up to about half of the sprinkler heads in some rooms have paint or corrosion, which could compromise functionality of fire suppression. TA-55 fire suppression is designated safety-significant now and is being considered for re-designation as safety-class in response to the building confinement strategy issue. During this suspension, TA-55 intends to also pursue resolution of other issues, such as those identified in last year's NNSA criticality safety assessment and the DOE-SP review.

**Waste Operations:** On Friday, the TA-54 TRUPACT loading facility (RANT) suspended operations due to a potential inadequacy in safety analysis (PISA) involving the minimum specified riser pressure for the fire suppression system. While this suspension may be short-term, it also interferes with transuranic waste shipments from LANL to WIPP, which are key to addressing the lab's highest consequence nuclear accident postulated in approved safety analyses (site rep weekly 1/20/06).

**Fire Protection:** Fire scenarios dominate the high-consequence end of the risk spectrum for LANL nuclear facilities. LANL is working on corrective actions to address weaknesses in the institutional fire protection program in response to a Board letter of May 31<sup>st</sup>, 2005. The issues discussed above highlight the importance of strengthening the institutional program and oversight in this area.

**Critical Experiments Facility (TA-18):** TA-18 activities are dwindling and consist mostly of finishing the Early Move Project and staging sources from the Off-Site Source Recovery Program; in particular, the possibility of restarting SHEBA is remote, and planning for its decommissioning has begun. People are leaving, the customer-base is shifting elsewhere, and resources are decreasing to run TA-18 as a Hazard Category 2 nuclear facility. New focus on timely closure appears warranted.

**Radiological Facilities:** NNSA has concurred with LANL that there is no plutonium-oxide eutectic issue for encapsulated sources; restrictions are still in place for plutonium-metal sources. A related concern – on whether encapsulation credited by DOE STD-1027 would maintain integrity in an unmitigated fire – is apparently not being pursued, at least not locally (site rep weekly 2/3/05).

**Radioactive Liquid Waste Treatment Facility (RLWTF):** Last Friday (2/17), TA-55 transferred their acid liquid waste inventory to the RLWTF acid waste receipt tank. Next week, RLWTF expects to begin a management self-assessment on resuming transuranic waste operations in order to process the liquid waste backlog and de-inventory systems before planned upgrades (site rep weekly 1/27/06).