

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 7, 2007

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director

**FROM:** B. Broderick and C. H. Keilers, Jr.

**SUBJECT:** Los Alamos Report for Week Ending September 7, 2007

**Management:** LANL is starting to plan for a possible reduction-in-force; this is driven by the large uncertainty in the FY-08 budget, ranging from a best-case flat-budget to a worse-case \$350M decrement. LANL management believes delaying action will only exacerbate the size of the action ultimately required.

**Corrective Actions for Contaminated Puncture Wounds:** LANL has issued institutional requirements for glovebox safety (ISD 101-28), in accordance with the corrective action plan for the TA-55 and CMR puncture wounds that occurred in January (site rep weekly 6/1/07). The ISD covers areas such as maintenance, glove integrity, ergonomics, sharps, and housekeeping.

In July, LANL revised this corrective action plan. Specifically, LANL strengthened its dependence on the upcoming revision to the integrated work management (IWM) process but weakened the action to establish a first line management (FLM) position by no longer requiring consistency. Instead, each associate director is expected to define how this position will be implemented in their organization. Weaknesses in first line management played a key role in these accidents. It appears worthwhile for LANL to consider, at least, establishing a consistent FLM implementation in LANL nuclear facilities.

**Plutonium Facility (TA-55):** TA-55 is planning an outage from Nov 5<sup>th</sup> through the end of the year, focused on formality of operations, configuration management, condition assessments, procedure standardization, system improvements, etc.; some limited operations would continue (Pu-238, MOX).

**Criticality Safety:** TA-55 is declaring a potential inadequacy of the safety analysis (PISA) and is suspending fissile material moves into two vault rooms unless the moves are reviewed by the LANL criticality safety group; material moves out of the rooms are unrestricted. While related, this is a different problem and affects different rooms than those reported last week. In this week's case, BISCO neutron shielding with 2 % boron carbide was installed in 1986; material certification was provided but has been lost; it's unclear whether or not the 1986 criticality safety evaluations credited boron. Given the uncertainty, the facility chose to enter the PISA process for these two rooms. LANL expects to have an analysis in about a week on whether the boron is required.

**Transuranic Waste Operations:** LANL expects to soon complete physical modifications to the RANT shipping facility to support shipping high-activity waste drums; they involve fire suppression, lightning protection, vehicle barriers, and combustible reduction. LANL has also proposed startup of the WCRR repackaging facility with compensatory measures (site rep weekly 8/3/07).

**Nuclear Environmental Sites:** LANL has suspended low-level waste shipments from TA-21 to Area G after discovering dripping packages were shipped on Thursday. This is similar to the event reported Aug 17<sup>th</sup>. LANL has launched but has not yet completed a formal investigation of the prior event.

Last Tuesday (8/28), a LANL subcontractor found an area with 1M dpm beta/gamma and 12k dpm alpha fixed contamination in Bayo Canyon, formerly known as TA-10. The area is being posted and controlled. TA-10 was transferred to Los Alamos County in 1967. Last month, NNSA approved downgrading TA-10 from a nuclear facility (HC-3) to radiological status based on updated analyses.