

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 10, 2003

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending January 10, 2003

Von Holle was on site this week reviewing preliminary safety analyses for an experiment and potential improvements in safe work practices. Also, the site rep attended a Standing Management Team meeting in Albuquerque to determine the status of laboratory support for Pantex operations.

**Radiochemistry Laboratory (TA-48):** LANL has temporarily suspended operations in the TA-48 Alpha Wing and is reducing radioactive inventory as a result of the 2000-2 Phase II confinement ventilation review and recurring issues with formality of operations (site rep weekly 12/20/02). With this week's shipments, LANL believes the current inventory is about 75 % of the Hazard Category 3 (HC-3) lower limit, which may permit TA-48 to be downgraded to a radiological facility. NNSA and LANL are currently pursuing two tracks in parallel: (a) evaluate mission impact, inventory, and the inventory management system to support a likely LANL proposal to downgrade TA-48 and (b) pursue implementation of the HC-3 authorization basis by February 5<sup>th</sup>, as previously planned.

The site rep believes the TA-48 issues extend beyond the confinement ventilation system, considering cumulatively last year's two Phase II assessments (i.e., fire suppression, confinement ventilation), the NNSA safety evaluation report findings (e.g., seismic, fire protection), and occurrence reports (e.g., perchlorate controls, circuit breaker arcing). It may be worthwhile for TA-48 to improve formality of operations and then demonstrate they can appropriately control hazards and the inventory, maintain safety systems in an operational status, and apply adequate controls (e.g., meet 10 CFR 835), even if the facility is downgraded to the radiological facility level. Longer term, the safety issues raised in the NNSA safety evaluation report still appear to warrant being addressed.

**NNSA Technical Staffing:** NNSA technical staffing issues raised by the Board more than a year ago persist at this site, particularly a shortage of local qualified subject matter experts (ref: Board letter 10/10/01). For example, given the scale of LANL activities, the NNSA site office would appear to rate a full-time emergency management specialist. Instead, emergency management is a collateral duty of the single site office industrial hygienist. The DOE Office of Assessment identified this as a weakness last year. Also, LANL facility maintenance practices are a well-recognized area needing improvement, as previously reported. The NNSA site office currently lacks even a part-time maintenance specialist. Additionally, the site office authorization basis team is tasked with technically reviewing extensive ABs for plutonium and radioactive waste facility operations. Several of these ABs are already submitted or to be submitted during the next few months. This team is currently understaffed by one-third and is being supervised, on an acting basis as a collateral duty, by another site office manager. NNSA is now reviewing complex-wide federal staffing needs, including the needs of this site office (site rep weekly 12/20/02).

**Integrated Safety Management (ISM):** LANL has formed a team to review hazard analyses processes, to identify best industry practices (based on a study of outside organizations), and to recommend improvements. This was a corrective action from the January 2002 liquid chlorine dioxide explosion in a non-nuclear facility (site rep weekly 10/25/02). The site rep understands that the team is considering improvements to institutional requirements for initial risk determination, independent and management review, hazard assessment training, and other areas. This is positive.