

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2003

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending August 1, 2003

**Radiochemistry Laboratory (TA-48):** TA-48 is a radiological facility, recently downgraded from Hazard Category 3. On Wednesday, a researcher had a small amount of acid solution jet onto his face and drip into his eyes (amount released estimated to be on the order of a milliliter). He was wearing prescription safety glasses at the time. The researcher had just pressured a small ion exchange column by using a syringe attached to a rubber stopper at the top of the column. Apparently, the rubber stopper was not fully seated, allowing the solution to spray. Facility management considers the work being performed to be routine and the equipment used to be fairly standard for a radiochemistry lab.

Immediate and supplemental actions were prompt and appropriate, and included extensive eye flushing and medical attention. No permanent eye damage is expected. The responsible LANL division has committed to a review of the event for lessons learned, as well as a review of their work activities and whether appropriate eye protection is specified. LANL senior management also intends to conduct an investigation. The NNSA Site Office has observed that this event has similarities to some other recent events (e.g., site rep weekly 4/11/03). This work was planned, controlled, and authorized under the LANL safe work practices, which is the LANL mechanism for implementing integrated safety management (ISM) into programmatic work for both nuclear and non-nuclear facilities.

**Plutonium Facility (TA-55):** NNSA is evaluating the impact of the Board's letter of today on the Pu-238 scrap recovery line and on the upcoming NNSA readiness assessment (RA). The site rep understands that NNSA is now planning on starting the RA after briefing the Board on August 21<sup>st</sup>. LANL has not yet declared readiness, although was planning on the NNSA RA starting that week.

The LANL RA report is nearly complete. It is based on team observations made last month and a year ago (7/02). It remains to be seen that the cumulative scope of the LANL RA completely covered the new authorization basis approved in May 2003. Preliminarily, the LANL review has about 30 pre-start and 20 post-start findings, of which about half were reported as complete on Tuesday. LANL recognizes that there are lessons learned from this RA that can improve the LANL RA process.

**Weapons Engineering Tritium Facility (WETF):** WETF has proactively ceased programmatic work and placed the facility in warm standby so that personnel can focus on implementing the technical safety requirements (TSRs) initially approved in April 2002. NNSA modified the TSRs on July 17<sup>th</sup>. The objectives now are, by November 2003, achieve TSR implementation and be ready for an NNSA operational readiness review (ORR) for Building 450 startup.

**Recommendations 94-1/00-1:** On Tuesday, the NNSA Site Office Manager concurred in a LANL project execution plan that describes the scope, cost, and schedule for substantially completing 94-1 nuclear material stabilization activities at LANL by end of CY 2010 (site rep weekly 3/21/03). The plan now goes to NNSA headquarters for final review and approval. It is a living document and includes provisions for periodic progress reporting and for formal change control. It is the culmination of two years of work and is an improvement in resource-loaded planning here necessary to complete 94-1 nuclear material stabilization activities. It could be a roadmap to eventual success if it is approved and then consistently funded and managed and fully executed through the out-years.