

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 20, 2004

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending August 20, 2004

The Board and a staff team were on site this week reviewing resumption planning and status.

**LANL Resumption Status:** LANL has resumed all the low-risk activities (i.e., level 1). At this time, it's anticipated that there will be 43 management self-assessments (MSAs) for the moderate and higher risk activities (i.e., levels 2 and 3, respectively), followed by 16 to 18 LANL readiness assessments (RAs) for level 3's. As of Friday morning, the LANL Resumption Review Board (RRB) had approved 30 of 43 MSA startup notification reports, which establish the scope, team composition, and sampling for the MSAs. All LANL nuclear operations are now cleared to begin their MSAs, except LANSCE and TA-18. MSAs are expected to take 2 to 4 weeks. Several have started.

**Plutonium Facility:** This week, LANL began the accelerated campaign to load shipping containers with seal-welded cans of plutonium oxide to support the MOX program. LANL has reviewed analysis, testing, and manufacturing of the cans and confirmed that they meet safety-class pedigree.

**Recommendations 94-1/00-1:** LANL nuclear material stabilization activities are being impacted by the stand-down and warrant priority upon resumption to reduce risk. Also, NNSA rejected last week the LANL proposed process hazard analysis for the large vessel cleanout operation (site rep weekly 2/6/09). Impacts of both on the Secretary's proposed implementation plan are to be determined. Separately, the DOE Inspector General Office reported this week on its review of LANL stabilization activities and observed that multi-year delays have occurred because: the program was underfunded between 1997 and 2002; LANL has not made full use of project management tools; and NNSA has not incorporated incentives into the LANL contract. NNSA has generally agreed with the findings.

**Authorization Basis (AB):** In a letter and staff report (5/27/04), the Board observed that NNSA has not enforced the annual update requirements for LANL safety bases; that several nuclear facilities (e.g., TA-55) are operating now with safety bases that are 5 to 8 years old; that NNSA has established that the lack of current AB container requirements contributed to the TA-55 Pu-238 uptakes last August; and that more balanced priorities would be beneficial in improving facility safety bases.

NNSA and LANL acknowledge that there are significant quality and timeliness issues in the AB preparation and review process, resulting in a large backlog. To address quality, LANL intends to: establish a centralized safety basis management office; develop a new safety analyst qual standard; assign a safety analyst to the NNSA Site Office (LASO) for cross-training; pilot improved training for safety analysts; develop safety basis training for line managers; and set up an Unreviewed Safety Question (USQ) back-look program. The last is in response to a recent LASO observation that there has been a series of USQs declared as negative that should have been positive.

To address timeliness, LASO has initiated a high-priority risk management plan; arranged for support from 3 qualified headquarters analysts; hired 2 new but not yet qualified analysts and requested 4 more slots; issued a support contract to cover some document reviews; supported the LANL safety basis academy's development. LASO and LANL have also teamed to review and rework the TA-55 AB upgrade proposed in April 2002. This effort has been impacted by the stand-down and by support required for the accelerated MOX shipment; LANL believes it might be completed in October. Overall, the NNSA and LANL efforts are expected to be responsive to the Board letter.