

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 17, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending February 17, 2006

Nuclear Safety Oversight: The NNSA Site Office (LASO) is within two weeks of the end of its 14-week stand-down to prepare for the June 1st contract transition (site rep weeklies 1/6/06, 11/25/05). Preparations for the stand-down were incomplete when it began, including establishing compensatory oversight mechanisms. LANL has since embedded 8 operationally experienced people as institutional oversight within the nuclear and higher-hazard facilities, and LASO has renewed its own oversight mechanisms and increased its staffing dedicated to continuity-of-operations by 20 % (i.e., to 37). Both these efforts started from scratch in early December and have grown in effectiveness during the last two months, based on the quantity and quality of operational data now being reported.

Separately, NNSA appears poised to accelerate dependence on the contractor assurance system (CAS) at LANL after the June 1st contract transition. Few details are available now on the new contractor's CAS proposal or on the CAS implementation schedule. It is also unclear how accelerated federal dependence on CAS would be consistent with recommendations on federal oversight that were made during the two recent NNSA Type B investigations and the DOE-SP Independent Oversight review (site rep weeklies 2/3/06, 12/30/05, 10/14/05).

Fire Protection: LASO has not yet formally tasked LANL to develop an updated fire protection strategy, as committed to by NNSA to the Board in a letter dated Jan 12th; the site rep believes that a near-term update of LANL's status on executing its current strategy would be more beneficial – particularly for wildfire – and that a strategy revision should be deferred until after contract transition.

Criticality Safety: By March 8th, LANL expects to finish the documentation review of its on-going fissile material operations and to finalize a criticality safety improvement plan that addresses issues identified in NNSA's Dec 2005 criticality safety assessment report (site rep weekly 1/13/06). LANL reported this week that they are about 80 % complete reviewing analyses and procedures for about 600 operations; of those completed, about 10 % (44 operations) have warranted a walk-down for further evaluation and about 5 % (22 operations) have warranted putting compensatory measures in place.

Plutonium Facility (TA-55): Pu-238 bench-scale aqueous recovery operations resumed this week. Separately, the vault recovery operation has been curtailed in order to ensure that hazard identification and controls are adequate for addressing abnormal containers; recovery should resume next week. Overall, vault decontamination appears essentially done, except perhaps for the shelf that held the container that failed on Dec 19th. The key steps now are to address suspect containers and to establish confidence that controls will be adequate for future handling and storage operations based on current knowledge of containers and their contents. Longer term, increased emphasis on stabilization and packaging (i.e., Recommendations 94-1/00-1/05-1) appears warranted to prevent recurrence.

Waste Operations: On February 7th, NNSA formally approved Critical Decision 0 (CD-0) for a new Hazard Category 2 transuranic waste facility that would be capable of processing and shipping about 1,000 drums per year after TA-54 shuts down, which is expected in 2012 per the Consent Order. Total project cost is not to exceed \$40 M. Bounding accident scenarios, safety system functional classification, and to the extent possible, all other aspects of the facility safety basis are to be defined as part of conceptual design and before CD-1, which is scheduled for the 2nd quarter of FY-07.