

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 18, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending August 18, 2006

On Wednesday, the staff held a video-teleconference with the NNSA site office on the oversight pilot.

Federal Oversight: On Oct 1st, the NNSA site office intends to increase federal presence at facilities with postulated accidents having predicted high off-site consequences (e.g., TA-54, TA-55) and to rely on LANL's developmental contractor assurance system to monitor less hazardous facilities and worker safety. Federal oversight of institutional safety programs is still being defined.

Accident Investigations: LANL's investigation of the June 30th construction accident at RLWTF is complete. While the report has not been released, it appears that the identified root causes center on lack of management's awareness of unsafe conditions and behaviors at the job-site; lack of implementation of the Integrated Work Management (IWM) process; lack of flow-down and enforcement of LANL requirements upon subcontractors; and lack of review of subcontractor history for safety issues. NNSA has accepted LANL's conclusions (site rep weeklies 7/14/06, 6/30/06).

Integrated Safety Management: LANL is investigating another serious safety event, which occurred last Friday (8/11). A subcontractor contacted 480 V while drilling a self-tapping screw into a non-nuclear facility's motor control center; the subcontractor luckily escaped injury. There are apparent parallel issues between this event, the June 30th accident, and prior LANL accidents and near-misses.

The Board observed last year the importance of the IWM initiative for improving worker safety, as well as the need for workers, supervisors, and safety professionals to understand the process and to be involved in its implementation (Board ltr 7/21/05). Progress stalled before contract transition. LANL is now exploring whether and how to change the IWM process. When considering changes, it would be worthwhile for LANL to explicitly consider the logic and trade-offs for each process step, since the current process reflects hard lessons learned found during several investigations since 2001.

Authorization Basis (AB): Both LANL and NNSA rely on subcontractors to, respectively, prepare and review safety analyses; in recent years, both have increasingly relied on one subcontractor to do both functions. It's unclear that NNSA and LANL are adequately ensuring appropriate independence.

Plutonium Facility (TA-55): TA-55 has declared that the interim technical safety requirements are fully implemented, although NNSA and LANL have not closed on the prior reported issues (site rep weekly 7/28/06). TA-55 has also lost power and ventilation a half-dozen times since June 1st, causing PF-4 evacuation; NNSA is still reviewing a March AB package for improving ventilation reliability.

Waste Operations: For budgetary reasons, LANL has curtailed the integrated plan developed last Fall to make nuclear waste operations more unified, efficient, and disciplined; NNSA approved the plan in May 2006, and it is part of the authorization agreement for waste operations (site rep weekly 9/23/05).

Pajarito Laboratory (TA-18): TA-18 has curtailed nuclear operations because a procedural change last April specifying criticality safety limits was never finalized; LANL asserts that operations have been within the limits, which have not changed recently. Operations should resume next week.