

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 12, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending November 12, 2004

Critical Experiments Facility (TA-18): LANL has completed the laboratory readiness review (LRR) of N-Division activities involving Category I/II materials, which includes TA-18 critical assemblies. This review identified significant operational issues including: lack of adequate staffing; weak level of knowledge of TSR requirements; superficial implementation of the integrated work management process; poor conduct of operations as evidenced by procedural compliance problems; and an overall low state of morale. These issues are similar to those previously identified in a May 2004 management self-assessment at TA-18 (site rep weekly 7/2/04).

N-Division management is scheduled to present their proposed path forward for addressing these issues to the Resumption Review Board next week. Previous presentations to LASO management indicated that N-Division is pursuing some positive initiatives to improve their operational capabilities. However, given the depth and breadth of the issues, it is uncertain whether necessary improvements can be achieved prior to the September 2005 deadline for cessation of Category I/II activities at TA-18.

Plutonium Facility (TA-55): The LANL Director has approved resumption of TA-55 Pu-238 operations. The LRR review of these operations identified several areas needing improvement, including: more timely repair of degraded equipment and revision of incorrect procedures; more rigorous management of on-the-job training; and more deliberate confirmation of readiness. On the positive side, the LRR team found that management effectively communicates information to workers and workers understand the importance of procedural compliance.

Deliberate resumption of Pu-238 operations is a key step for LANL to clean-up Room 201B, which was contaminated with Pu-238 in August 2003. LANL also intends to quickly finish 23 encapsulated fueled-clads to support the NASA New Horizons mission to Pluto. DOE has stated that the 23 fueled-clads are sufficient and that the new scrap recovery line is not needed to support the New Horizons mission (ref: Board letter 8/1/03). Given the progress of the MSA/LRR resumption process, an essential activity re-designation for the fueled-clad activity is no longer being pursued.

Radiography Facility (TA-8-23): TA-8-23 is a 1940s era building that is used for non-destructive testing of high-explosives and nuclear components. The current safety basis for this hazard category 2 facility is a 3 year-old justification for continued operations (JCO). TA-8-23 lacks seismic, confinement, and fire suppression features; however, the dominant hazard (a natural gas line) has been removed. Several attempts to update the safety basis have been unsuccessful. In April 2004, NNSA suspended TA-8-23 operations with explosive and tritium items due to lightening protection deficiencies and safety basis confusion. Efforts to recover from this suspension were superseded by the lab-wide stand-down on July 16th, 2004.

Last week, NNSA approved an interim path forward consisting of (a) rescinding the latest proposed safety basis (submitted in June 2004), (b) resolving all resumption review pre-start findings, (c) and restricting material-at-risk to 40 g Pu-239 equivalent (limits off-site consequences to 2 rem). Additionally, LANL has committed to cease operations if a new safety basis is not approved by March 2005.