

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 24, 2005

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** T. D. Burns Jr. and C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending June 24, 2005

Keilers is off-site until the week of July 5th.

**Authorization Basis:** NNSA has approved the laboratory implementing requirements (LIRs) for facility categorization (LIR 300-00-05), nuclear facility safety bases (LIR 300-00-06), and non-nuclear facility safety bases (LIR 300-00-07). These documents clearly outline the expectations for LANL safety analyses and should help improve the quality, consistency, and efficiency of laboratory efforts to establish acceptable safety envelopes for nuclear and other hazardous activities. Approval of these documents is a key milestone in support of safety basis improvements under the Operational Efficiency project.

**Quality Assurance (QA):** LANL has completed its investigation of impacts associated with potential misapplication of equipment that received only limited qualification from the central calibration laboratory (site rep weekly, 4/29/2005). The investigation concluded that there were no significant impacts to safety or product quality resulting from these application errors. One non-conformance regarding tardy out-of-tolerance notifications from the calibration laboratory was cited as well as several noteworthy practices. A final report is to be issued shortly.

**Plutonium Facility:** Upon issuance of the contractor operational readiness review (ORR) report, the NNSA ORR commenced for the TA-55 safeguarded trailer pad on Tuesday (site rep weekly, 6/17/05). Key issues from the contractor ORR include: a necessary but still unapproved fire protection exemption, inconsistency between the safety basis and the fire hazards analysis, inadequate start-up plans, and inadequate management understanding of the readiness review process. NNSA intends to complete the ORR and have the pad operational by July 1<sup>st</sup>; one month later than the original target date. The overall TA-18 relocation schedule has been maintained by re-sequencing material moves, with materials destined for the vaults now preceding materials destined for the trailers.

The contractor ORR for the TA-55-185 shed envisioned to support storage of mixed-oxide (MOX) fuel containers has been postponed until late summer (site rep weekly, 5/27/05). Approval for the current storage location will expire on June 30<sup>th</sup> with the shipping container's certification. LANL intends to move the containers to the basement of PF-4 by early next week for temporary storage; they will then be moved to TA-55-185 when it becomes available.

**Critical Experiments Facility (TA-18):** LANL continues to pursue closure of management self assessment (MSA) findings related to resumption of uranium-based critical experiments on the Planet machine. Open MSA pre-start issues include: organizational roles and responsibilities are ill-defined, the safety basis controls have not been clearly established, and operator training is not complete. Commencement of the laboratory readiness assessment is on-hold pending NNSA approval of the plan of action, which is contingent upon further progress on closing MSA issues. Given the resumption delays to date, one of the planned criticality operations for Planet has been cancelled (criticality engineer training) and the other is in jeopardy (NASA space reactor experiment).