DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 10, 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 September 10, 2004

LANL Resumption Status: Schedules for the 9 or 10 LANL readiness assessments (LRAs) for higher-risk nuclear activities (Level 3) are slipping, and none are likely to begin next week. Schedules are still fluid; LANL is starting to plan on LRAs being about 3 weeks long, which is more consistent with the management self assessment (MSA) durations. LANL has resumed 6 of the 26 groups of moderate-risk activities (i.e., Level 2) and is close to authorizing resumption of another 6 (i.e., total 46%). This includes light labs, shops, classified computing, and limited TA-18 operations.

Quality of the Level 2 MSAs completed to date appears mixed; several MSA reports have been revised several times based on feedback from the LANL Resumption Review Board. Lessons learned are being fed back to the on-going MSAs to improve quality. The sequence of resumption is also starting to receive consideration; specifically, certain security, waste management, and health and safety operations need to start before most programmatic work. Developing and implementing a well-conceived sequence of resumption continues to warrants attention.

At this time, LANL has a plan but does not yet appear to have in place a systematic approach for managing and analyzing the issues being reported. Based on cursory analysis, many of these issues involve work control, training and qualification, and equipment and infrastructure. NNSA and LANL are acting on preliminary indicators of problems. For example, NNSA has directed LANL to establish an unreviewed safety question (USQ) review team because of USQ process issues. LANL has also proposed conducting a special cross-cutting LRA focused on the facility-program interface and the accountability for equipment maintenance because of the issues already identified in these areas.

Critical Experiments Facility (TA-18): TA-18 has completed a Level 2 MSA and been authorized to resume activities involving security category III/IV material. To address pre-start findings, TA-18 needs to receive the LANL Director's approval of a restart plan for resolving issues on control of material-at-risk. These issues led LANL to shutdown TA-18 operations on July 9th (site rep weekly 7/16/04). Once that plan is approved and closure verified, TA-18 intends to start packaging security category III/IV material for the first shipments to the Nevada Test Site Device Assembly Facility.

Los Alamos Neutron Science Center (LANSCE): The 1L Target operations and Lujan Center user programs at the LANSCE facility have been re-categorized from Level 3 to Level 2 (site rep weekly, 9/3/2004). Re-categorization of the 1L Target operations appears appropriate given the rigor of the redundant engineered controls that prevent the dominant accident scenario (i.e., tungsten target oxidation and dispersal). LANL documentation supporting re-categorization of the Lujan Center programs indicates that the hazards are commensurate with the Level 2 criteria; however, recent work control issues may warrant further institutional scrutiny.

Authorization Basis: LANL has proposed and NNSA has accepted an updated LANL nuclear facility list. Principal changes are: the TA-21 tritium facility (TSFF) has been down-rated to Hazard Category 3 (HC-3) for 3 years in preparation for D&D; the TA-50 Radioactive Liquid Waste Treatment Facility has been elevated to HC-2, although the supporting analysis has not been submitted; and the TA-54 Decontamination and Volume Reduction System (DVRS) has been elevated to a HC-2 for a 5 month period that starts when DVRS is released to perform TRU waste visual examination and repackaging.