DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 20, 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 May 20, 2005

Management: On Thursday, NNSA issued the request for proposal for the next LANL contract (site rep weekly 2/25/05). Key dates are: proposals due - July 19; contract awarded - December 1; contract begins - June 1, 2006. The new contract would run 5 to 20 years. Maximum annual fee that could be earned may jump nearly an order of magnitude compared to the current contract (\$8.7M vs \$79M).

Chemistry and Metallurgy Research Building (CMR): CMR had a contamination release to a lab room last Thursday (5/12) that may result in Pu-239 uptakes by one to four workers; preliminary bioassay results will be available in a few weeks. The workers were introducing bag-out material into a glovebox line when contamination was detected on a worker's gloves; within minutes, the continuous airborne monitor alarmed, and the workers evacuated. The workers were in anti-C's but were not in respirators. Followup actions taken were appropriate. CMR is reviewing the event for lessons learned, including adequacy of procedures and controls and applicability to other operations.

Chemistry and Metallurgy Research Replacement Facility Project (CMRR): On Wednesday, the Deputy Secretary approved Critical Decision 1 (CD-1 – start of preliminary design) for CMRR, as well as CD-0 for CMR decontamination and decommissioning. NNSA owes the Board a briefing within 30 days of CD-1 approval on the rationale for using a design-build approach and on its plan to ensure adequate NNSA and LANL technical staffing for preliminary design (ref: Board ltr, 2/24/05).

Critical Experiments Facility (TA-18): Early Move activities appear to be on track to de-inventory TA-18 to below the Security Category I/II threshold in September. This is receiving high priority.

The management self-assessment report for Planet uranium-based critical assembly operations is in preparation. Tentatively, there are several pre-start findings; the most challenging pre-starts involve clarifying the safety basis to avoid operator confusion (site rep weekly 3/4/05). Clarifying the safety basis warrants priority if the limited scope of Planet operations envisioned are to occur safely, deliberately, and within the time remaining. This ought to be achievable.

Emergency Management: Several assessments during the last year have identified issues with LANL emergency management (ref: site rep weekly 12/3/04). LANL is also implementing the National Incident Management System (NIMS). NNSA and LANL met this week and have developed a pathforward to address the issues and to verify progress during upcoming emergency exercises.

Waste Operations: LANL is proposing continued use of conveyors for moving a single drum at a time during certain characterization activities; the conveyors place the drum at 5 to 7 feet elevation, which is above the drum maximum certified drop height of 4 feet (site rep weekly 5/6/05). By December, LANL intends to lower the characterization equipment (i.e., trailers) as the permanent solution. Acceptance increases the likelihood LANL can keep transuranic waste shipments to WIPP on schedule. These shipments are LANL's principal mechanism for reducing the risks associated with the highest consequence nuclear accident postulated at LANL in approved safety analyses.

Tritium Facilities: TA-21 (TSFF) has reduced its tritium inventory to below the Hazard Category 3 nuclear facility threshold; subject to NNSA verification, it will be downgraded to a radiological facility. Neutron Tube Target Loading operations continue pending transfer of that mission to Sandia.