DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 17, 2003

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending October 17, 2003

Integrated Safety Management: NNSA and LANL are intensely pursuing interim work management improvements to address long-standing work control issues identified by various investigations and assessments (site rep weeklies 9/5/03, 9/12/03, 10/3/03). LANL also has a longer-term effort (6-8 months) to develop, pilot, and implement an integrated work management system that will drive improvements in facility, programmatic, and subcontracted work.

During the next two weeks, LANL intends to roll out, train, and begin to implement a single work management process, considering improvements in areas such as the following: level of detail and sequencing in work definition; identification and clear communication of hazards and controls at the activity level; clear roles and responsibilities; single-point control and accountability, including for jobs involving multiple organizations; worker, supervisor, and subject matter expert involvement in work planning; field walkdown and validation of controls; readiness confirmation before and periodically during the work; formality of work authorization and release. This interim product is intended to supplement existing work management processes until the longer-term effort is completed.

Weapons Engineering Tritium Facility (WETF): On July 25th, LANL suspended programmatic work in WETF to focus on implementing the improved safety basis and on preparing for the NNSA Operational Readiness Review for Building 450 startup. As of this week, LANL has prepared, trained on, and demonstrated 6 of 8 new surveillance procedures required to implement the new technical safety requirements (TSRs). One of the remaining two procedures involves determining if sufficient halon is present in the control room fire suppression system, designated safety significant. During verification of this procedure, the NNSA facility rep determined that measurement uncertainty was apparently missing in the approved TSR and in the proposed surveillance procedure. LANL is working to correct this. NNSA has also raised the longer-term question of continued halon availability for this system.

Separately, LANL has proposed and NNSA has concurred in a path forward to address WETF lightning protection system issues. The technical review by a second outside expert is to be conducted by 11/14/03. NNSA is to provide direction on risk reduction needs by 12/19/03. LANL will submit an implementation plan by 1/30/04. NNSA will provide direction on the plan by 2/27/03.

Plutonium Facility (TA-55): On October 3rd, the NNSA Type B investigation team completed their field work on the 8/5/03 Pu-238 contamination event and their report is forthcoming (site rep weekly 8/8/03). LANL is drafting recovery plans focused on decontaminating the affected room, repackaging existing Pu-238 residues, resuming suspended Pu-238 operations, ensuring appropriate packaging for newly generated Pu-238 residues, and examining the confinement pedigree for all plutonium items outside a glovebox environment in TA-55 and the Chemistry and Metallurgical Research building. LANL appears to be considering proper balance between minimizing waste and worker dose, restoring the room, and resuming operation. Relatedly, the site rep understands that the NNSA readiness assessment for the new Pu-238 scrap recovery line is currently not scheduled, and is pending both recovery progress and NNSA/LANL review of the justification of needs from the Type B investigation.

Safety Alert: DOE has issued a safety alert on possible sub-standard hydrostatic testing of compressed gas cylinders used for transportation and storage (i.e., tube trailers). Of 94 tube trailers at LANL, 88 are affected. Some are at nuclear facilities. LANL is taking them out of service as the gas is depleted.