DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 30, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending July 30, 2004

Burnfield was on site this week observing an NNSA assessment of LANL internal dosimetry. The assessment results are forthcoming (site rep weekly 5/21/04).

LANL Resumption Status: LANL resumed some low risk (i.e., level 1) activities this week. All but essential operations were suspended on July 16th. NNSA and LANL management are updating the risk characterization criteria and placing risk characterization under change control. They are converging but have not finalized verification and resumption criteria for moderate and higher risk activities (levels 2 and 3). LANL has established the COMPASS project to guide the resumption effort by using project management tools to monitor indicators and prioritize distribution of institutional resources. COMPASS stands for Culture and Operations Model Plan and Surety System. The work force is moving from a 9-day/80-hr to 5-day/40-hr schedule to support resumption. LANL management is the restart authority for activities not involving classified removable electronic media.

The NNSA Site Office continues to work on an oversight management plan, which will define federal activities required for concurrence in resumption of higher risk activities. The Site Office plans to request outside federal assistance, as appropriate, after the plan is developed. Currently, the Site Office and DOE Office of Assessment (DOE-OA) are coordinating an upcoming DOE-OA team visit that will focus on select LANL activities, including TA-55.

Plutonium Facility (TA-55): TA-55 has instituted daily inspection tours by cognizant personnel of facility spaces and programmatic equipment. Discrepancies are being repaired when found (e.g. some glove change-outs). TA-55 has also reviewed their work orders and is completing essential periodic maintenance using the integrated work control process. There is programmatic pressure to ship plutonium oxide for mixed oxide (MOX) fuel lead test assemblies. TA-55 expects shortly to resume preparing hazard analyses to support finishing cleanup of the Pu-238 contaminated room.

Chemistry and Metallurgy Research Building (CMR): CMR has issued a standing order to continue essential facility activities, which include surveillance rounds, fire alarm and suppression tests, transient combustible inspection, material-at-risk admin controls, ventilation inspection, etc. Cognizant programmatic personnel began inspections of lab spaces this week. CMR has some solid samples in process that appear stable and some liquid residues (tens of liters) that need disposition.

Radioactive Liquid Waste Treatment Facility (RLWTF): RLWTF has continued to receive low-activity waste streams and resumed some low-level treatment processes and controlled discharges this week. The facility has questioned resumption of transuranic (TRU) waste treatment, which could impact TA-55. The TRU waste streams are stored, neutralized, clarified, precipitated, and cemented via a batch process. The clarifier (CL-1) is a rectangular carbon steel tank that has been in continuous service for longer than 2 decades. Facility management has identified external pitting and corrosion at the bottom of CL-1 along two sides converging at a corner. Internal condition is unknown. CL-1 may have experienced accelerated corrosion in the last year due to higher salt concentration and the collection of moisture during cooling of waste. The room has a berm to contain any leakage, but cleaning up after a leak would be radiologically challenging. Repair or replacement also looks difficult. More time to address the issue could be gained by expediting replacement of the leaking caustic waste receipt tank, but progress on replacement has been glacial (site rep weekly 10/24/03).