DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 16, 2009

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending January 16, 2009

This week, Board members Bader, Brown and Winokur were onsite to conduct facility walkdowns and discuss topics including Formality of Operations, the Chemistry and Metallurgy Research Building exit plan and transuranic waste activities. Staff members Moury and Plaue were also onsite.

Transuranic Waste Operations: In September 2008, LANL submitted and the site office approved a formal recovery plan to address a Technical Safety Requirement (TSR) violation associated with the Area G lightning protection system. The site office approval letter included a condition of approval (COA) that required specific actions to be performed prior to December 1, 2008. The letter also noted that the approval expires on December 31, 2008. One of the actions required ground resistance measurements on all transuranic waste storage areas and has yet to be completed. LANL submitted a written request for relief from this requirement in early-December; however, the site office did not respond to this request. On Tuesday, the Facility Operations Director was notified of this issue and directed a suspension of transuranic waste operations. On Thursday, the site office approved an extension of the recovery plan and operations were allowed to be resumed. Although Area G did not comply with a COA and approval of the recovery plan had expired, the LASO letter on Thursday concluded that the facility was not in violation of its TSRs. Instead, LASO concluded that Area G was not in compliance with the hazard controls specified in a recovery plan. The site office also requested that LANL improve its performance in tracking and completing COAs in a timely manner.

Chemistry and Metallurgy Research Building Replacement (CMRR): The site office recently requested that the CMRR project team charter an independent review using corporate reachback to determine if the technical requirements in the Preliminary Documented Safety Analysis (PDSA) have been adequately captured in the interim design and to evaluate key project procedures that will be utilized during detailed design. This week, the team completed their review and provided feedback to NNSA Headquarters and the site office. The team identified a number of positives and the following four issues: specific design criteria for safety class fire suppression systems have not been established by DOE; most design documents have not been revised for consistency with the most recent PDSA (although redline documents reviewed by the team for most safety systems did appear consistent); several codes and standards identified in the PDSA and system design descriptions need to be revised; and project specific procedures need to be developed or revised in some cases. Overall, the team concluded that the design for key safety structures, systems and components is well developed and meets the requirements identified in the PDSA. This team will provide their final report as input to the Technical Independent Project Review that is scheduled to start the last week in January.

Weapons Engineering Tritium Facility (WETF): Currently, activities at WETF include gas transfer system research, development, and design authority functions. NNSA Headquarters (NA-10) has announced a decision to consolidate these types of gas transfer system activities at Sandia National Laboratories and has tasked Sandia to develop a transition plan detailing how this consolidation will be effected. The ramifications of this decision on the near and long term future of WETF are not yet clear. However, this new direction may shift focus at WETF to rapidly de-inventorying the roughly 330 grams of tritium remaining in the facility and affect the strategy, priority and schedule for improving the facility's safety basis and implementing Formality of Operations.