

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 16, 2001

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director

**FROM:** C. H. Keilers, Jr.

**SUBJECT:** Los Alamos Report for Week Ending November 16, 2001

**Radiography Facility:** TA-8 Building 23 (TA-8-23) has been used since the late 1940s for non-destructive testing of high explosive (HE) and nuclear components. Overnight storage is prohibited. The facility has adequate separation from other facilities, a fire alarm system, lightning protection, x-ray machine interlocks, but no confinement features and no installed fire suppression. It also has a natural gas line to an equipment room, which needs to be considered in accident analyses.

In late 2000, DOE designated TA-8-23 as a Hazard Category 2 Nuclear Facility. At that time, a DOE-approved authorization basis did not exist. In April 2001, LANL submitted to DOE a Justification for Continued Operation (JCO). In parallel, LANL is preparing technical safety requirements (TSRs) and a safety analysis report, now at 70 percent complete. On October 29<sup>th</sup>, DOE approved the JCO subject to some conditions considered equivalent to TSRs. Among others, these include mass limits on cased HE and plutonium, as well as prohibitions on uncased HE, heat sources (Pu-238), radiography sources (Co-60), and combined HE/radioactive material operations (e.g., HE with depleted uranium). The last impacts planned operations, and DOE has suggested that LANL consider submitting an unreviewed safety question with justification. Resolution is pending.

**Plutonium Handling and Processing Facility (TA-55):** As of October 31<sup>st</sup>, LANL reported that about 80 percent of the TA-55 Type A corrective actions have been completed (site rep weekly 9/28/01). Some of the improvements remaining include: improving formality of operations; completing component labeling; capturing normal system lineups on system drawings; verifying actions on maintenance and testing of compression fittings and teflon seals; addressing minor-to-moderate glovebox vulnerabilities found during recent inspections; and implementing a self-assessment process to improve reliance on the skill of the worker.

While DOE and LANL have been tracking milestone completions, an independent DOE assessment and verification of closure remains to be done. Such assessments are required by DOE Order 414.1A, *Quality Assurance*, and the corresponding DOE-AL supplemental directive on corrective action tracking systems. The site rep believes that verification is overdue. DOE-AL has prepared a Criteria Review and Approach Document (CRAD) and is close to completing a verification plan based on the supplemental directive requirements. The plan still needs to be coordinated with LANL, and discussions between DOE and LANL this week indicated that there is some confusion. Tentatively, DOE believes that verification of the completed actions will be done in January.

**Chemical and Metallurgical Research Building (CMR):** Thursday morning, a tractor-trailer rig hauling low level waste containers had its trailer de-couple as the rig was exiting the CMR parking lot onto Diamond Drive. The trailer slid back about 10 feet and landed on its front leg supports. Radiological controls and security personnel responded appropriately. The trailer was found to be mechanically sound. There was no release of radioactivity from the containers, and they have been moved to TA-54. LANL is

investigating to determine the cause of the event.