

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 16, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: B. Broderick and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending February 16, 2007

Anderson, Matteucci, Plaue, and Shuffler were on site this week reviewing TA-55 aqueous operations.

Contract Modification: On Jan 25th, NNSA and LANL added the updated DOE orders for emergency management (DOE O151.1C, 11/2/05) and facility safety (DOE O420.1B, 12/22/05) to the contract.

Radioactive Liquid Waste Treatment Facility (RLWTF): LANL has completed installation of the new caustic waste receipt tank and expects to complete system testing and begin receiving TA-55 transuranic liquid waste starting next week. LANL also now intends to propose that RLWTF process its transuranic waste inventory in May before starting to upgrade its deteriorated systems; this would increase TA-55's ability to process residues before RLWTF completes its first phase of upgrades. Last year, after a multi-year hiatus, RLWTF ran a transuranic waste campaign using the existing systems and a rigorous contingency planning and startup process (site rep weeklies 11/24/06, 8/11/06).

Electrical Safety: In recent weeks, LANL has had several electrical safety related events. A programmatic 208-volt lathe in a nuclear facility was damaged upon startup because it was wired to 480-volts. The ground wire shorted in a field-installed-plug for a programmatic laser in a nuclear facility, causing an arc. The 480-volt bus entering a non-nuclear facility overheated, causing a burning odor, due to improper installation by a subcontractor. Another subcontractor was working on an energized 480-volt panel with proper protective equipment but without an integrated work document.

In each case, appropriate recovery actions were taken, including stop work, and no injuries resulted. For these events, the causes are well understood and could be addressed by previously identified corrective actions. Near term, the LANL Chief Electrical Safety Officer (ESO) has recommended that facility ESOs take suspect and unapproved electrical equipment out of service until inspected. Longer term, LANL intends to issue and implement new lab-wide requirements for electrical equipment and for subcontractor management, as well as pursue the conduct of engineering initiative.

Issue Management: LANL is late on many of the corrective actions from the June 2006 RLWTF construction accident and has not yet systematically developed corrective actions for the June 2006 CMR hood fire (site rep weekly 10/20/06). LANL also appears to be falling behind on issuing Price Anderson (PAAA) noncompliance reports; three were issued this week for the longstanding non-compliant quality assurance program and for emergency management and fire suppression issues identified before June 2006. NNSA has established a performance based incentive involving corrective actions; however, other than occasional facility rep involvement, NNSA does not appear to be actively monitoring and advocating progress on corrective actions.

The LANL Institutional Management Review Board is exercising formal change control on lab-wide corrective actions (e.g., scope, schedule) and is learning from these experiences and improving its processes; this is a key element of the evolving contractor assurance system (CAS). The accident investigation for the CMR and TA-55 contaminated puncture wounds is expected to be done by Feb 26th and will provide LANL an opportunity to demonstrate improvement (site rep weekly 2/2/07).