

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 7, 2005

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending January 7, 2005

Resumption Status: The LANL Director approved resumption for on-site transportation this week. The lab readiness review report covering TA-50/54 intrusive waste operations, a critical area, is still not submitted; field work was done about 7 weeks ago.

LANL has made progress on systematically analyzing several thousand institutional issues reported during the resumption reviews; this has led to identifying common problems that potentially require institutional action. However, LANL continues to struggle to formulate complete and effective corrective actions for both institutional and local (i.e., facility-specific) issues. Progress has been particularly slow on local corrective actions, and no mechanism is in place to ensure their integration and consistent quality. NNSA is justifiably concerned with the lab's slow apparent progress. LANL senior management is meeting weekly with NNSA to provide status and has committed to completing the resumption, including corrective action plans, by January 31st.

Federal Oversight: The NNSA Site Office has submitted to headquarters a facility representative (FR) staffing analysis. It indicates a need to increase the number of field-deployed FRs from 11 to 20, as well as permanently assign 2 team leaders and possibly 1 manager (these slots are temporarily filled now by 3 FRs). This would strengthen federal oversight of nuclear and other higher-hazard operations; introduce federal oversight into several dozen radiological and moderate hazard facilities that currently receive no regular federal oversight and little contractor independent oversight; and facilitate verification of closure of facility-specific corrective actions identified from resumption reviews. It does not include additional subject matter experts that may be needed to followup on LANL institutional corrective actions.

Integrated Safety Management (ISM): This week, the TA-50 Radioactive Liquid Waste Treatment Facility had an operator who was sprayed with treated waste water, and the TA-48 Radiochemistry Laboratory (RC-1) had a 17-year-old student who was nearly splattered by low-level tritium and xylene when a small vial shattered. The student was trained but was working alone. Radcon personnel responded but were not informed before entry of the operations in the room or of the presence of a chemical hazard; the emphasis was radiological, similar to the TA-55 toxic vapor event (site rep weekly 1/16/04). While both events had little direct safety consequence, NNSA and LANL reviews have found lessons that could improve implementation of the new integrated work management process.

Authorization Basis (AB): LANL is evaluating several recent instances of inadequate safety analyses or safety basis implementation including: (1) the leak path factor for the Plutonium Facility (TA-55) appears non-conservative, raising questions on the effectiveness of approved controls (site rep weekly 12/24/04); (2) the LANL Policy Office rescinded and then restored 30 lab performance requirements (LPRs) after it was determined that they are referenced in several nuclear facility safety bases; this is an example of institutional-level changes unwittingly affecting nuclear operations without analysis of the possible impact; (3) the TA-18 safety basis credits radiographers as being certified or qualified without defining the terms; this follows on confusion about TA-18 combustible loading inspections (site rep weekly 11/26/04); (4) questions have been raised about triple-stacking of transuranic waste drums in TA-54 and the height of conveyors used in non-destructive characterization of waste drums.