

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 8, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending October 8, 2004

Quirk was on-site this week augmenting site rep coverage of resumption activities.

Resumption Status: The LANL Director has approved resuming 46 % of the moderate and higher risk activities, including the first full nuclear facility resumptions: specifically for the Weapons Engineering Tritium Facility (WETF), the Los Alamos Neutron Science Center (LANSCE), and TA-50 and TA-54 moderate-risk waste operations. These facilities are using startup checklists or plans, mostly focused on formal work control and release, system alignments and operability, and collocated worker awareness.

The LANL Resumption Review Board (RRB) has concurred with 42 % of the higher risk activities moving forward into the lab readiness review (LRR) stage, including 4 of 9 groups of nuclear activities (i.e., 44 %). This week, the RRB concurred with LRRs commencing for the Plutonium Facility (TA-55) – except Pu-238 activities, the Chemistry and Metallurgy Research Building (CMR), and the Radiography Facility (TA-08). The TA-55/CMR LRRs will start next week, and LANL expects them to take 2 weeks. The RRB is currently reviewing the management self-assessment reports for Pu-238 operations, TA-18 critical experiments, and the site services contractor (KSL).

Overall, the quality of the management self-assessments (MSAs) being conducted is still mixed but improving. Nuclear facilities are self-identifying numerous issues and are generally firm in grading themselves; they are typically judging that one-fifth or more of the lines of inquiry are not satisfied. Some are reluctant to identify findings as pre-starts. The RRB continues to be the key element to ensure consistent quality of these reviews, including consistent identification of pre-starts.

Waste Operations: The TA-50/54 operations that are resuming include installation of the visual examination and repackaging glove-box in the Decontamination and Volume Reduction System (DVRS), as well as non-intrusive characterization of transuranic waste. To address pre-starts, these facilities have had supervisors trained on the new work control process and have tightened up both document control and work authorization. These resumptions are key steps toward LANL finishing the Quick-to-WIPP Program by October 2005, their current goal, and significantly reducing TA-54 risks.

Los Alamos Neutron Science Center (LANSCE): The majority of LANSCE pre-starts were related to work control. Although independently derived, LANSCE compensatory measures parallel those of TA-50/54. On a longer-term scale, LANSCE plans to resume user operations in the Lujan Center after addressing conduct-of-operations findings via a resource-loaded plan (site rep weekly 9/10/04).

Issue Management: LANL has established a senior-management-level Institutional Assurance Board (IAB). It will manage the laboratory's contractor assurance system including institutional issues, corrective actions and improvements, assessment of risk, assignment of priorities, and evaluation of effectiveness. All other lab assurance elements are subordinate to the IAB.

Authorization Basis: Because of the extent of issues already recognized with the LANL unreviewed safety question (USQ) process, LANL has proposed and NNSA has approved deleting review of USQ implementation from the scope of the nuclear facility LRRs. Instead, all LRR reports will contain an *a priori* institutional pre-start finding on USQ implementation and will reference the site-wide compensatory measures and the corrective actions currently being pursued to address these issues.