

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 18, 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 March 18,2005

LANL was closed Monday and Tuesday due to snow.

Management: NNSA intends by June 30th to verify that 100% of the pre-start findings from the LANL resumption reviews are either closed or have adequate compensatory measures in place. LANL management and lab readiness assessment teams performed a similar verification prior to resumption. Given the importance of fully resolving the pre-starts, this second-check appears worthwhile. Longer-term, NNSA intends to also confirm by sampling that local corrective actions are adequate.

Radioactive Liquid Waste Treatment Facility (RLWTF): Last Friday, LANL began a formal investigation into the two workers exposed to unexpectedly high airborne contamination (site rep weekly 3/11/05). The investigative team expects to report its findings in mid-April.

Chemistry and Metallurgy Research Building (CMR): Earlier this month, NNSA assessed the implementation of CMR safety system requirements by tracking from the 1998 basis of interim operation (BIO) down to system documentation and surveillance procedures. As part of this review, both NNSA and LANL found inconsistencies in the current safety basis, particularly for Wing 9 hot cell interlocks and contamination confinement features and for a ventilation functional test that is vaguely described in the BIO. LANL believes that they have met the intent of the safety basis and that the safety basis revision submitted last April for CMR will resolve these problems.

Unreviewed Safety Questions (USQ): LANL is reviewing all negative USQ determinations (USQDs) dating back to April 2001 in response to NNSA concerns on inadequate implementation of the USQ process at the lab (site rep weekly, 9/24/04). About 16 % (253) of the +1,500 negative USQDs in this set have been reviewed. Six of the reviewed USQDs (i.e., ~3%) appear to have been mis-characterized as negative and should have been positive. Common implementation problems identified so far include: poor understanding of the margin-of-safety concept; inadequate bases for answers to USQD questions; and re-cycling of previous USQDs without adequate consideration of their applicability to new situations. LANL expects to complete this review by early-July.

Waste Operations: NNSA has approved TRUPACT loading operations at the TA-54 RANT facility on an interim basis (site rep weekly, 2/25/05). This approval expires August 1, 2006 and is contingent upon implementation of several compensatory measures to address seismic vulnerabilities, including: additional bracing for facility equipment; in-situ testing of over-head appurtenances; and material-at-risk limitations. LASO indicated that a major factor in approving these operations was the significant risk-reduction benefit associated with removing high-curie waste drums from TA-54 to WIPP. With this approval, LANL anticipates commencing Quick-to-WIPP shipments by mid-April. To address the long-term viability of the RANT facility, LANL has indicated that they will initiate a project to make the permanent facility modifications necessary to eliminate identified seismic vulnerabilities.

Quality Assurance (QA): LANL has proposed and NNSA is now reviewing a lab-wide QA program and implementation plan. LANL does not have a DOE approved QA program and has reported this as a non-compliance with the QA provisions in the Nuclear Safety Management Rule (10 CFR 830).