

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 5, 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 November 5, 2004

Winters was on-site this week participating in the Quick-to-WIPP discussions. Martin, Nichols, and Von Holle were on site attending a high explosives conference.

Resumption Status: The Director has approved resumption of plutonium operations (TA-55/CMR, except Pu-238), as well as health, safety, and radiological services. TA-55 and CMR are planning a deliberate inventory and resumption effort during the next month. Overall, the LANL Director has approved resuming 63 % of the moderate and higher risk activity groups.

Quick-to-WIPP Program: This program involves shipping ~2,000 transuranic waste drums with the highest, most dispersable inventory to WIPP. LANL shipments to WIPP were suspended in Oct 2003. Characterization activities briefly resumed in July but were then suspended on July 16th as part of the LANL-wide stand-down. NNSA, LANL, DOE-EM, Carlsbad Field Office (CBFO), and the CBFO contractor met this week to determine a path-forward to quickly resuming compliant characterization and shipping, and progress was made. Key goals are to resume non-intrusive characterization shortly, achieve a full characterization rate of 60 drums per week by January, resume shipments no later than March, and complete the program in October. Continued close cooperation between multiple agencies is required for success. Since these actions address the highest-consequence nuclear accident postulated at LANL, it appears prudent for NNSA and LANL to consider categorizing Quick-to-WIPP activities as essential (i.e., Level 0). This hazard will likely persist after October 2005, since LANL anticipates a new round of recovering high-activity waste from underground. NNSA and LANL would be well-served to consider accepting higher short-term risks (e.g., seismic) to expedite efficiently shipping this waste to WIPP and thereby achieve timely overall risk reduction.

Tritium Facilities: The path forward for the one remaining TA-21 nuclear facility (TSFF) is ambiguous. LANL identified authorization basis (AB) issues during resumption reviews last month and indicated that an essential activity would be proposed near-term to remove 3 waste drums containing more than 90% of the facility's source term (site rep weekly, 9/24/04). This would reduce the radioactive inventory below the hazard category 3 threshold and thereby permit downgrading TSFF. To date, this has not happened; in fact, NNSA continues to press LANL to control the facility to a 1986 AB and to fully implement a new AB. It appears more appropriate to expedite removing the source and downgrading TSFF, based on this facility being slated for near-term closure.

Essential Activities: NNSA and LANL continue to have inadequate control of activities deemed essential (i.e., Level 0 – see site rep weekly 10/22/04). These activities are allowed to proceed prior to completion of the resumption review process and originally were just those necessary to keep facilities safe, stable, and secure. LANL is increasingly proposing other activities as essential based on programmatic drivers (e.g., Pu-238 fueled clads completion, TA-18 emergency response training). In at least one case, NNSA and LANL organizations bypassed the LANL Director approval and NNSA Site Manager concurrence for a proposed essential activity, which was subsequently suspended pending proper approval. NNSA and LANL have also not designated key risk-reduction activities as essential, such as TSFF source reduction, the Quick-to-WIPP Program, and Pu-238 room decon in TA-55. LANL has prepared guidance on re-designation but has not disseminated the guidance. More rigor in managing essential activities is necessary ensure the integrity of the resumption process.