

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 21, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending April 21, 2006

Contract Transition: Forty days remain under the UC contract. LANL has almost finished its integrated corrective action plan (ICAP) for the two recent Type B investigations and the DOE-SP review. LANL has also triaged the findings from the LANS due-diligence facility walk-downs; several findings indicate persistent weaknesses that parallel those that led to the 2004 lab suspension; LANL is pursuing several findings needing near-term attention (site rep weeklies 3/31/06, 1 /27/06).

Based on discussions, the site rep understands the following: LANS intends to address remaining findings after the June 1st transition, including mapping institutional issues from the walk-downs and the ICAP into an expanded Operational Efficiency (OE) Project; NNSA has directed LANS to provide a report on the walk-downs by May 1st and provide their plan for an expanded OE project by June 1st.

Solid Waste Operations: The DOE Carlsbad Field Office (CBFO) has assigned a "work-off team" to review LANL transuranic waste operations during the next few months, identify improvements, and assist LANL in developing a new legacy waste disposition baseline, due in mid-May. While encouraging in the longer-term, this does not alter the impending suspension of waste characterization this summer and the eventual drop in shipments after the Quick-to-WIPP campaign is finished.

Liquid Waste Operations: The transuranic liquid waste processing system in the Radioactive Liquid Waste Treatment Facility (RLWTF) is in marginal condition (site rep weekly 2/24/06). The facility has completed a readiness assessment to resume operating this system, including demonstrating procedures for confirming system integrity and for rapidly detecting and responding to leaks. Operations will likely resume next week.

Separately, NNSA has requested LANL to provide alternatives to fully upgrading the system, given the limited remaining facility life; these are also expected next week. There are tradeoffs to consider; one option is to capture more source-term upstream in TA-55, which has more robust safety systems, and thereby reduce the source-term and the operational load on the degraded systems in the RLWTF.

Authorization Basis (AB): NNSA and LANL have made little progress in the last two years on updating nuclear facility ABs; these documents capture the analyses, requirements, and controls that are the foundation for safe nuclear operations (ref: Board letter 5/27/04). For example, the safety analyses for the Chemistry and Metallurgy Research Building (CMR), the TA-55 Plutonium Facility, and the RLWTF are 8, 10, and 11 years old, respectively. TA-55 does have interim technical safety requirements (iTSRs) that were approved last year, but the iTSRs expire this summer. Also, last August, LANL proposed iTSRs for CMR and a new AB for RLWTF; these still await NNSA action.

Federal Oversight: As a result of the aging AB situation, LANL needs to propose and NNSA needs to evaluate and act upon several AB submittals per week to support continued safe nuclear operations. The ability of the NNSA Site Office (LASO) to support the status quo - much less to make progress on the aging AB backlog - has been marginal for some time (site rep weekly 3/10/06). During the next few weeks, LASO is losing several key safety analysts, which will likely exacerbate the problem.