

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 8, 2008

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** B. Broderick and C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending February 8, 2008

Bamdad, Plaue, March, McFarland, and Spatz were here reviewing the proposed TA-55 safety basis.

**Environmental and Waste Operations:** This week, LANL briefed the NNSA Site Office on the Project Execution Plan (PEP) for disciplined operations in the Environmental Protection Directorate; LANL expects to submit the PEP next week. Key elements include standing up an integrated project team (IPT) management structure, hiring and embedding experienced senior operations managers, reviewing procedures, evaluating behavior-based safety programs, walking down facilities and fixing unsafe conditions, submitting a new safety basis for Area G this month, and implementing that safety basis in parallel with NNSA review, which LANL projects will be completed by June.

While many of these elements are useful, the linkage between the actions and the problems to be addressed is fading; it is not clear that the elements constitute the necessary and sufficient solution set to address the issues in a timely manner, nor is it clear that adequate compensatory measures are in place to support current operations. The sense-of-urgency expressed in December has waned, and several milestones that were to be completed in January have been missed, including evaluating the curtailed 2005 improvement plan, developing detailed cost estimates, implementing formality of operations, as funding permits, and submitting the PEP. This is unfortunate, given the significance of the issues previously reported (site rep weeklies 1/11/08, 1/4/08, 11/30/07, 11/16/07, 11/9/07).

**Plutonium Facility (TA-55):** LANL has developed an integrated project list (IPL) that captures and prioritizes upgrades and modifications required to meet safety, infrastructure, and programmatic needs. The IPL will be continually updated, through formal change control, as new projects are identified and circumstances change. Separately, LANL has a parent-company assist team evaluating options to improve building confinement (i.e., Recommendation 04-2); results are expected in April and will be folded into the IPL (site rep weeklies 11/16/07, 11/2/07).

**Weapons Engineering Tritium Facility (WETF):** Last Fall, WETF placed gloveboxes in standby pending actions to ensure that pressure relief devices (i.e., bubblers) would prevent gloveboxes from exceeding their maximum allowed working pressure. On Jan 30<sup>th</sup>, NNSA approved a justification for continued operation that, coupled with hardware modifications, addresses this condition. This week, WETF verified the new controls and resumed normal glovebox operations (site rep weekly 11/9/07).

**Radioactive Liquid Waste Treatment Facility (RLWTF):** LANL has an extensive double-lined low-level liquid waste collection system that includes 65 low-point vaults that would capture any leakage from the primary piping. About one-third to one-half of the vaults have detectors in alarm, indicating water intrusion. In September 2007, LANL began sampling vault water and has completed sampling from all but two of these vaults. This week, LANL reported that one vault near WCRR has water with detectable activity (i.e., 71 pCi/L); the other vaults sampled have been less-than-detectable. LANL suspects the cause is legacy contamination from WCRR and is investigating the cause.

**Transuranic Waste Operations:** Based on verification of controls, LANL and the Carlsbad contractor have resumed operations of the second real-time radiography unit; operations were suspended following the foot injury last October (site rep weekly 12/21/07).