

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 21, 2008

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: B. Broderick and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending March 21, 2008

Criticality Safety: NNSA has approved a revised TA-55 justification for continued operation that releases Vault Room A, which is one of the four rooms identified last September as having reduced criticality safety margin. NNSA asserts that the Room A updated criticality safety evaluation bounds both normal and credible abnormal conditions. NNSA expects LANL to incorporate assumptions into the TA-55 technical safety requirements during the next safety basis update (site rep weekly 2/22/08).

Environmental and Waste Operations: LANL has issued an updated disciplined operations project execution plan that runs through December, as expected; it also includes a crosswalk of findings to corrective actions. Management operational awareness, worker sensitivity to stop-work conditions, and overall emphasis on operating to the approved safety bases have increased. Appropriate senior management attention is currently being applied (site rep weekly 3/7/08).

Transuranic Waste Operations: As of last Friday, the current high-activity drum campaign has shipped about one-third of the drums and one-fifth of the inventory (i.e., 84 of the 235 original drums, 6 kCi of 30 kCi). Also, the WCRR repackaging facility has remediated more than 150 high-activity drums and appears close to completing its part of this campaign. There are about 12 unvented, high-activity drums that will need to undergo remote venting when that operation starts up, which is expected after upcoming LANL and NNSA readiness assessments (site rep weekly 2/15/08).

Recent problems include two instances of cracked glove-box windows and one instance of a failed glove during heavy item handling at WCRR; Area G had a non-waste drum with a calibration source tip-over on a conveyor due to a software problem. LANL is appropriately addressing these events.

Chemistry and Metallurgy Research Building (CMR): As part of facility life extension, NNSA has directed LANL to take actions following up on a federal review of CMR material-at-risk last month. That review noted accomplishments but also several weaknesses, including sub-standard packaging (e.g., bagged slip-lid cans, a few bagged plastic bottles) and inappropriate crediting of ANSI and other containers that may be susceptible to failure during a fire (ref: site rep weeklies 1/6/06, 2/3/06). Key directed actions included: ensuring ownership and timely decisions on disposition of legacy materials; expediting disposal of waste and non-required legacy material; establishing a single material tracking system; moving retained legacy materials to a more robust storage location (i.e., from floor safes to the vault); revisiting the technical basis for excluding certain packaged materials from material-at-risk.

Also, last week, CMR had a contamination-release in the Wing 3 sample management room, resulting in 3 of 4 people in the room with bootie contaminations and 100k dpm maximum on the floor; airborne indicators and nasal smears were negative. CMR is reviewing waste bag-out and sample transfer practices for lessons learned.

Los Alamos Neutron Science Center (LANSCE): LANL has changed plans and is now preparing to propose that LANSCE continue to operate under the current basis for interim operation (BIO) during this year's run cycle, which runs from May through December (site rep weeklies 10/19/07, 6/22/07).