

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 20, 2012

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending January 20, 2012

Transuranic Waste Operations: The site office recently provided comments to LANL on Area G Documented Safety Analysis and Technical Safety Requirements (TSRs) changes associated with minimum shift staffing requirements and drum venting operations. LANL plans to resubmit these changes later this month to resolve site office comments.

In October, LANL requested site office approval to revise the safety basis minimum shift staffing requirements that preclude working alone for certain activities not involving transuranic waste operations at Area G. The revised TSRs require a Shift Operations Supervisor, an Operations Center operator, and a nuclear operator with a fire watch operator on call (i.e. able to respond within 2 hours) for operations when material-at-risk is present and transuranic waste operational activities are being performed. The safety basis also requires all of these personnel to be on call when material-at-risk is present but transuranic waste operational activities are not being performed. Transuranic waste operational activities are defined as active waste handling (e.g. waste container movement, characterization and processing). The LANL request noted that the changes will ensure that minimum staff are available to perform TSR actions when required and are consistent with the NNSA Technical Bulletin on minimum staffing.

In November, LANL also requested changes to the Area G safety basis to support drum venting using the Area G Drum Venting System (DVS) in a remote configuration (i.e. with operator standoff requirements during key venting operations). Startup of this operation without the remote configuration failed in 2011 when questions arose during the contractor readiness assessment about non-conservative hydrogen deflagration assumptions in the safety basis (see 4/22/11 site rep report). The safety basis changes are based on controls required for previous remote venting operations, the planned DVS operations and the updated analysis to support the Area G Basis for Interim Operation. LANL has not performed drum venting operations since the deflagration event that occurred in November 2008 during previous remote venting operations.

Federal Oversight: As a part of the fiscal year 2012 performance based incentives, the site office included a measure for the contractor's ability to integrate and execute mission and safety commitments. Based on feedback from NNSA on a previous submittal, LANL recently provided a proposed list of milestones to measure success in this area that included the following:

- Plutonium Facility – Conduct of Operations improvements, criticality safety improvements, seismic safety improvements and material stabilization progress
- Safety Basis – High quality, on schedule safety basis submittals, and a schedule for safety basis annual updates
- Transuranic Waste Operations – RANT shipping facility safety basis submittal, readiness for 231 Permacon box line and drum venting operations, de-inventory MDA-B, ship 22,500 PE-Ci offsite from Area G, implement DOE Order 426.2, reduce NCR closure times and submit corrective action plan for initial nuclear safety culture causal analysis (last item due 3/12/12)
- Chemistry and Metallurgy Building – Improve Fissile Material Handler training and certification, and complete scheduled vital safety system assessments
- Weapons Engineering Tritium Facility – Startup gas transfer operations from the function tester through the load out and high pressure gloveboxes