

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 23, 2008

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending May 23, 2008

Davis reported for duty this week as a site representative.

Contractor Assurance: So far this year, Director's Assessments for the Chemistry and Metallurgy Research Building, Transuranic Waste Operations, and the WCRR repackaging facility have been canceled and the outlook for future Director's Assessments is uncertain. These assessments provide independent, broad-based review of compliance with DOE requirements and appear to represent an important component of the laboratory's overall assessment program that supports the Contractor Assurance System. Discontinuing Director's Assessments would eliminate a valuable tool to help facility management identify deficient or non-compliant areas that require action and to help senior management maintain awareness of conditions and issues associated with operating nuclear facilities.

Chemistry and Metallurgy Research Building (CMR): Representatives from NNSA Headquarters, the NNSA site office, and LANL participated in an integrated nuclear planning workshop this week on the strategy for authorizing and operating CMR beyond 2010 when its current safety basis expires.

Analytical chemistry and material characterization (ACMC) activities and the Bolas Grande project to remediate legacy containment vessels were endorsed as the primary CMR mission activities to receive support for post-2010 operations. Future ACMC would be conducted inside a smaller facility footprint and MAR-intensive operations like sample preparation and Pu-238 activities would be moved into the Plutonium Facility to reduce hazards at CMR. Very preliminary results from the evolving DSA conservatively calculate a worst case unmitigated offsite dose consequence from a seismically-induced fire to be approximately 53 rem. The unmitigated consequence from this bounding accident may be reduced as the analysis matures; however, existing and currently anticipated controls provide little mitigation due to the seismic fragility of CMR. Potential upgrades are being reevaluated and reprioritized based on the extent to which they support anticipated DSA controls and facilitate eventual DSA implementation. Major seismic upgrades are not envisioned.

Transuranic Waste Operations: This week, LANL completed shipment of the last vented drums associated with the ongoing high-activity drum campaign. This is an important step in the direction of overall hazard reduction at the site. Of the approximately 235 original high-activity drums in the current campaign, only 11 unvented drums remain. These drums require remote venting of potentially flammable headspace gas prior to ultimate disposition. A remote drum venting capability has been established at Area G and is undergoing startup activities. A laboratory readiness assessment (RA) began this week to be followed by an NNSA RA prior to authorization to begin hot operations.

Plutonium Facility: This week, an NNSA RA team completed their field activities for startup of the interim radiography project at TA-55. This project provides a 6 MeV radiography capability in a tunnel connected to the TA-55 basement. The RA team has identified numerous potential pre-start findings. Some preliminary issues involve the facility control system, procedures, job hazard analyses and the potential impact of construction modifications on the safety class confinement structure. The RA team plans to complete their review and provide an outbrief to LASO and LANS management next week (site rep weeklies 6/15/07, 3/23/07).