

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2008

MEMORANDUM FOR: T. Dwyer, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending August 1, 2008

Weapon Response: LANL recently issued a weapon response related to an electrostatic discharge issue that has caused W76 operations at the Pantex Plant to be suspended since May. Based on the high-priority nature of this issue, LANL dedicated all available subject matter experts to the weapon response development effort. As a result, no truly independent electrostatic discharge experts were available to participate in the peer review of the technical results, as required by LANL's approved procedure. Due to the highly aggressive schedule imposed on this activity, LANL did not engage LLNL to provide independent technical reviewers. NNSA has reviewed LANL's weapon response process to ensure that it satisfies applicable requirements from DOE-NA-STD-3016-2006; however, the NNSA site office does not currently perform oversight of weapon response execution to ensure that LANL is appropriately implementing its approved process.

Plutonium Facility: LANL recently completed switchgear upgrades at the Plutonium Facility to provide automatic diesel generator startup and supply to key facility loads (e.g., ventilation). Although the facility receives power from multiple feeds, electrical transients were causing numerous loss of power events that impacted facility safety systems and facility operation. Facility management is also pursuing additional improvements including better transfer capabilities between available power feeds and improving the facility power factor (site rep weekly 12/15/06).

In accordance with the recommended site office path forward for interim radiography operations (IRO), facility personnel attempted to demonstrate the operating procedure in early-July. Numerous issues were identified during the evolution prompting the site office to request another demonstration be performed. On Friday, facility personnel successfully demonstrated execution of the revised procedure. As required by the path forward, LANL also completed an independent review of IRO design changes and provided a report to the site office (site rep weekly 7/22/08, 6/6/08).

Transuranic Waste Operations: NNSA is poised to begin a readiness assessment on Monday for remote drum venting operations at Area G. The remote drum venting capability is required to remediate the remaining 11 of roughly 235 original drums in the high activity drum campaign.

LANL is also nearing completion of readiness preparation activities for restarting the transuranic waste processing capability at the Radioactive Liquid Waste Treatment Facility. Physical upgrades and modifications are complete and have undergone startup testing, a strengthened operations center has been established, and operators are being trained to an updated set of procedures.

Site-wide Fire Protection: In response to a recent event and questions raised concerning the fire water supply for defense nuclear facilities, LANL has initiated a comprehensive review of the site-wide water distribution system. The review is evaluating the supply tanks and distribution system for single point failures, alarm capabilities (e.g., tank low-level), system maintenance/surveillance and requirements for notifying nuclear facilities of degraded system conditions. Based on the preliminary review to-date, LANL has taken action to ensure receipt of low-level alarms for an Area G water tank that was previously not monitored by the laboratory (site rep weekly 7/18/08).