DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 23, 2010

MEMORANDUM FOR: T. J. Dwyer, Technical Director **FROM:** B.P. Broderick and R.T. Davis

SUBJECT: Los Alamos Report for Week Ending July 23, 2010

Radioactive Liquid Waste: This week, the site office issued direction to LANL on maintaining an enduring radioactive liquid waste processing capability. The Radioactive Liquid Waste Processing Facility – Upgrade Project (RLWTF-UP), which is over 90% complete with design, was intended to replace the existing aging facility and provide capability for both transuranic and low level liquid waste processing. However, NNSA has concluded that the escalating project cost (currently estimated at approximately \$350M versus previous estimates of approximately \$100M) combined with out-year funding challenges (given other high priority projects) require NNSA to evaluate and pursue other alternatives. Therefore, the site office has directed LANL to 1) provide a recommendation for the most cost effective and efficient way to ramp down on the current RLWTF-UP design activities and 2) evaluate options to provide an enduring radioactive liquid waste capability (including upgrade and use of existing facilities and smaller scope new facilities). The site office requested a final recommendation on a preferred option within eight weeks.

Chemistry and Metallurgy Research Replacement (CMRR) Project: The Integrated Design Coordination Meeting for the CMRR project was conducted in Los Alamos this week and included representatives from NNSA, LANL and project subcontractors. For the CMRR Nuclear Facility, the project is completing the closure of issues identified in the Technical Independent Project Review that was conducted late last year. The CMRR Nuclear Facility final design contracts are expected to be awarded in October.

Plutonium Facility – Unreviewed Safety Question: This week, LANL concluded that the presence of potentially explosive ammonium nitrate powder identified on high efficiency particulate air (HEPA) filters represents an Unreviewed Safety Question. Previous actions to place the facility in a safe configuration remain in effect (e.g., aqueous operations the 200 area suspended and controlled access to the HEPA plenum room). LANL continues to investigate the source of the ammonium nitrate powder with samples from the in-service HEPA filters collected this week (site rep report 7/9/10).

Weapons Engineering Tritium Facility (WETF): LANL continues to pursue startup preparations for the function test capability at WETF. A management self assessment is scheduled to begin next week followed by a contractor readiness assessment planned for August 9th.

Plutonium Facility – Safety Basis: As noted last week, Plutonium Facility personnel are on the final phase of implementing the Documented Safety Analysis that was approved in December 2008. LANL recently requested an extension for completing this activity to October (previously scheduled to be complete in August). The extension is required to allow completion of fire suppression system modifications and implementation of the material-at-risk tracking system.