**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

August 16, 2013

**MEMORANDUM FOR:** S.A. Stokes, Acting Technical Director
**FROM:** R.T. Davis and R.K. Verhaagen
**SUBJECT:** Los Alamos Report for Week Ending August 16, 2013

Staff members J. Plaue and R. Tontodonato were onsite this week.

**Criticality Safety:** This week, LANL submitted a letter requesting relief from previous field office direction on time utilization of qualified Criticality Safety Analysts (CSA). Current field office direction limits CSAs to spending up to 15% of their time working on new or significantly revised Criticality Safety Evaluations (CSE). In addition, work on specific CSEs must be approved by the field office. The remaining 85% of the CSA's time is to be spent supporting emergency response, event response, and field support. The request for relief argues that because of the pause of fissile material operations in the Plutonium Facility, the day-to-day field support by CSAs can be reduced. The CSAs will instead use this additional time to train and qualify newly hired CSAs, and to work on CSEs required to support the resumption of activities in the Plutonium Facility. As such, the letter requests relief from the 15% constraint for working on new or significantly revised CSEs and relief from obtaining field office approval to work on specific CSEs. The CSAs will continue to place priority on emergency/event response and technical support to programmatic operations.

Plutonium Facility personnel continue their process walk-downs to revise and validate procedures and criticality safety-related controls. These walk-downs continue to identify process deviations and criticality safety infractions. This week, facility personnel discovered the arrangement of items in two safes did not match the arrangement as specified by their associated Criticality Safety Limit Approval (CSLA). Additionally, a number of safes were found to have dimensions that did not meet the requirements specified by the CSLA engineered controls.

**Radioactive Liquid Waste Treatment Facility (RLWTF):** LANL completed a Management Self Assessment this week at RLWTF to evaluate use of the Waste Mitigation Risk Management (WMRM) tanks for influent low-level waste storage and use of a new chemical feed system. The MSA team identified 6 pre-start findings, 10 post-start findings, and 5 observations. Following closure of the pre-start findings, LANL plans to use two of the six 50,000 gallon WMRM tanks for influent low-level waste storage.

The WMRM Project was originally intended to establish 300,000 gallons of low-level liquid waste storage under emergency conditions (e.g. wildland fire conditions); however, the project was halted in 2007 due to significant project management and quality assurance issues. In 2009, LANL completed a tie-in to the low-level waste system and additional actions to allow use of the WMRM tanks to provide 250,000 gallons of emergency storage capacity. Since 2009, facility upgrades have been performed including installation of mixing pumps for the 2 tanks that will be used for influent storage and piping runs to feed the low-level waste processing system from the WMRM tanks. Completion of this project will allow LANL to discontinue use of older single shell tanks that are currently used for influent storage. Other actions are being taken to eliminate use of all single shell tanks and piping.

LANL has also completed the Zero Liquid Discharge (ZLD) Project that provides a natural evaporation capability for RLWTF purified water discharge and eliminates the need for an evaporator. The ZLD capability will be used after approval of a new wastewater discharge permit.