

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 12, 2011

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending August 12, 2011

Transuranic Waste Operations – WCRR Repackaging Facility: This week, LANL personnel recognized that waste processing operations have occurred for several weeks despite expiration of a Safety Evaluation Report (SER) approval of an Evaluation of the Safety of the Situation (ESS). On Thursday, the site office extended the SER approval to September 2nd to resolve this issue. In March 2011, LANL declared a Potential Inadequacy of the Safety Analysis because a Specific Administrative Control that prohibits staging or processing waste in the glovebox enclosure was not carried forward into the Technical Safety Requirements (TSRs). The control was implemented by standing order pending update and implementation of revised TSRs. In the March site office approval of the ESS, a condition of approval was identified that required LANL to submit safety basis and TSR page changes within 60 days. In addition, the SER identified that it would expire 90 days after approval (June 28th). LANL submitted the page changes in June but not within 60 days as required by the SER. The facility also continued to perform transuranic waste processing after the SER expired. This issue was complicated by the Las Conchas fire that started on June 26th and resulted in a laboratory shutdown for over a week.

Transuranic Waste Operations – Area G: The site office approved safety basis page changes last week that support operation of high energy real-time radiography at Area G. This operation provides characterization capability to support shipment of additional waste container types to WIPP. Because of previous readiness and startup issues at Area G, LANL management has decided to use outside personnel to review and ensure facility readiness prior to performing a management self assessment. The site office approval also requests LANL to provide a technical basis for concluding that the worker radiography hazard is a standard industrial hazard.

Plutonium Facility – Seismic Safety: Recently, LANL submitted a revision to the Justification for Continued Operations (JCO) associated with the increased seismic risk identified by the SAFER analysis of the Plutonium Facility. This revision resolves several site office conditions of approval including a requirement to identify TSR level controls for the marine doors that are credited to reduce the potential for an unfiltered release path following a seismic event. The JCO now includes a material at risk limit (MAR) for the glovebox line directly beneath roof girder drag strut (one of identified seismic vulnerabilities). A biweekly surveillance for this MAR limit will be implemented for this control. Facility upgrades to resolve the currently identified seismic vulnerabilities are ongoing and scheduled to be complete by the end of the calendar year.

Transuranic Waste Operations – RANT Repackaging Facility: Last week, the site office provided the SER approval to LANL for an updated safety basis and TSRs. This revision of the safety basis resolves several conditions of approval from the previous safety basis including re-analysis of the aircraft crash accident scenario, which now has a frequency of less than 1e-6/year. Implementation of the revised safety basis is scheduled to complete within 90 days. Because RANT is now considered an enduring facility, the site office has requested the next update to be a DOE-STD-3009 compliant documented safety analysis (previous safety basis analysis was in the form of a basis for interim operations).