

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 28, 2011

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending October 28, 2011

Mr. Broderick was out of the office this week.

Transuranic Waste Operations – Area G: On Tuesday, LANL waste personnel successfully repackaged the americium-241 item received from Sandia National Laboratories – Albuquerque (see last week’s report). After opening the copper-shielded steel box, LANL personnel identified contaminated lead and plastic but not the americium-241 item that was expected. The contaminated materials including the glovebag used for this operation were collapsed and packaged in a standard waste box for disposition as transuranic waste.

In July, LANL began processing fiberglass-reinforced plywood boxes containing legacy transuranic wastes that are too large to fit in drums or standard waste boxes. This operation is being performed in the waste processing line in Building 412 at Area G. To date, 17 boxes that contain less than Hazard Category 3 threshold material (0.52 plutonium-239 equivalent curies) have been processed. An additional approximately 400 boxes remain that exceed the Hazard Category 3 threshold and need to be repackaged prior to shipment to WIPP.

This week, waste disposition project personnel completed line management activities to support startup for the higher activity boxes. The site office also approved the Plan of Action for the initial startup of this operation. A contractor readiness assessment is scheduled to begin next week followed by a federal readiness review in November. Lessons learned and operator training from processing operations with the less contaminated boxes has been used to help ensure readiness to process the higher activity waste boxes.

Transuranic Waste Operations – WCRR Repackaging Facility: Earlier this year, LANL submitted revised safety basis documents for the WCRR Repackaging Facility that support an increase in the material at risk limits from 300 to 800 combustible equivalent curies to allow processing higher activity transuranic waste containers. The submittal also clarified that the electrical distribution system is not a safety significant support system. Based on site office comments, the safety basis was resubmitted in September. This week, the site office provided an additional comment that identifies the need for the electrical distribution system to be safety significant. The site office letter notes that this system supports the safety significant confinement ventilation system and, therefore, should have the same safety classification.

Radioactive Liquid Waste Treatment Facility (RLWTF): Earlier this month, LANL submitted a safety basis strategy for completing a DOE standard 3009 compliant Documented Safety Analysis (DSA) and Technical Safety Requirements for the existing RLWTF. LANL had previously submitted a Basis for Interim Operation in December 2010; however, in July 2011 the site office directed development of a DSA because of the potential for delays in the replacement project. The strategy notes that approximately 18 months will be required to develop the new DSA for RLWTF. The facility is currently operating under a 1995 safety basis document with interim Technical Safety Requirements.