

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 25, 2013

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis and R.K. Verhaagen
SUBJECT: Los Alamos Report for Week Ending October 25, 2013

Transuranic Waste Operations: Operations at Area G, the WCRR repackaging facility, and the RANT shipping facility resumed this week including shipments to WIPP.

Criticality Safety: In an effort to complete a ranking of fissile material operations (FMOs) across the site based on risk from a criticality safety perspective, LANL submitted a list of what it considers low risk FMOs to the field office for concurrence. The list of low risk FMOs was developed using criteria that provides a high level of confidence that adequate controls are in place to prevent a criticality. The list includes nearly half of the FMOs at the site, and all of the FMOs outside of the Plutonium Facility. As directed by the field office, this risk ranking represents a shift from a previous effort (see 3/19/13 weekly) that ranked FMOs primarily by the confidence level in the technical basis for the criticality safety evaluation. LANL has committed to risk rank the remaining Plutonium Facility FMOs in a future submittal. This risk ranking effort will be used to assist in identifying lower risk FMOs within the Plutonium Facility that will be the first to be resumed.

The Nuclear Criticality Safety Division Leader recently issued a memorandum communicating expectations regarding performance demonstrations for newly qualified criticality safety analysts (CSAs). These performance demonstrations are designed to evaluate newly qualified CSA's quality of work and to ensure a high performance standard. Newly qualified CSAs will be required to perform procedure reviews, criticality safety evaluations, annual process reviews, and event response under review of Nuclear Criticality Safety Division leadership until they have adequately demonstrated competency in these areas.

Plutonium Facility – Safety Basis: This week, the field office approved the Evaluation of the Safety of the Situation (ESS) associated with General Purpose Heat Source (GPHS) items that were found to be bulging (see 9/13/13 weekly). The ESS proposed compensatory measures to apply a damage ratio of one to these items, overpack in safety class containers when outside of a glovebox, and store no more than two GPHS items together. The field office did not identify any conditions of approval. Initial investigation appears to indicate that the bulging is caused by internal pressure; however, LANL continues to investigate the issue.

Safety Basis: Earlier this year, LANL developed and submitted a draft of the *Safety Basis Division Technical Bulletin Guidance on the Identification of Other Equipment Important to Safety (OEITS)*. This guidance was developed to comply with DOE Order 420.1B requirements for the identification of systems that perform important defense-in-depth functions. The guidance also identifies how these systems will be managed through facility safety management programs (e.g. engineering, quality assurance). Earlier this month, the field office concurred with this guidance and directed LANL to formally issue the document within 45 days along with an implementation plan. The first phase of the implementation plan will include identification of an initial list of OEITS by January 17, 2014, based on information available in facility safety basis documents and line management judgment. Facility safety basis documents will also be upgraded during the annual updates to comply with the OEITS guidance and refine the list of defense-in-depth systems.