

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 21, 2014

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis, R.K. Verhaagen, and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending February 21, 2014

DNFSB Staff Activity: R. T. Davis remained deployed to the Waste Isolation Pilot Plant to monitor the accident investigation of the underground fire involving a salt handling truck and the separate radiological contamination event.

Plutonium Facility–Criticality Safety: Last Friday, LANL released a *Resumption Strategy and Schedule* to the field office, headquarters, and various program sponsors. The strategy outlines a number of actions to strengthen, standardize, streamline, and sustain improvements to criticality safety and conduct of operations. A central element of many of these improvements is the development and use of robust technical basis documents analyzing sets of common material limits and conditions (see 2/14/14 weekly). In the near term, management intends to conduct pilots for each of the six currently identified standardized conditions, which will involve revisions to criticality safety evaluations, limit approvals, postings, and procedures, as appropriate. From a schedule standpoint, the strategy provides projections for a number of programmatic activities. Management believes this schedule is conservative and expects to achieve efficiencies, particularly through the implementation of the new standardized conditions. The first projected start date is March 31, 2014, for an enriched uranium metallography operation. The last projected milestone is the resumption of electrorefining operations by February 24, 2015. The schedule does not cover aqueous operations.

Criticality Safety: On Tuesday, LANL transmitted a revision of the institutional Nuclear Criticality Program document (SD130) to the field office for approval. The primary changes associated with this revision include: (1) establishing *de minimis* values for requiring a criticality safety evaluation, (2) clarifying requirements for postings, (3) making limit approval documents optional, (4) requiring criticality controls in procedures, and (5) allowing criticality limits to be set below the values established in the governing evaluation.

Weapons Engineering Tritium Facility (WETF): On Tuesday, the field office issued their Safety Evaluation Report for the deficiencies associated with the oxygen monitoring system (OMS) (see 1/24/14 weekly). The field office noted several quality problems with the submittal and provided further directed actions to the laboratory. The directed actions primarily require WETF personnel to utilize technically defensible trending data to verify the OMS remains in calibration during the 31-day period prior to declaring the system operable. The Site Representatives note that WETF instrumentation systems are not capable of providing trending data on the state of OMS calibration. Absent the ability to automatically collect this data, WETF management plans to take as-found calibration readings around the 21 and 31-day marks, the first of which should occur next week.

Readiness Reviews: Last week, LANL submitted a change to the laboratory procedure governing the conduct of readiness reviews (P115) to the field office for review and approval. This change was developed in response to lessons learned from the Federal Operational Readiness Review of the Confinement Vessel Disposition Project (see 10/11/13 weekly). Specifically, the change was made to ensure that adequate actions are taken to maintain operational readiness when an excessive amount of time elapses between readiness reviews.