

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 11, 2014

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending July 11, 2014

**DNFSB Staff Activity:** D. Campbell augmented the Site Representative office and performed cognizant engineer familiarization activities. He and the Site Representatives walked down the Weapons Engineering Tritium Facility, the Chemistry and Metallurgy Research Building, and the Plutonium Facility.

**Plutonium Facility–Safety Basis:** Late last month, the field office approved LANL’s request to extend the expiration date of three safety basis documents. The documents include a temporary modification involving fire rated containers from 2012, an Evaluation of the Safety of the Situation/Justification for Continued Operations (ESS/JCO) for refueling activities from 2012, and an ESS/JCO associated with ammonium nitrate in the ventilation ducting from 2010. The field office notes that implementation of the 2013 safety basis will close these documents and that implementation of the 2013 safety basis is currently scheduled to be completed by May 31, 2015.

The Site Representatives note the importance of executing timely annual updates to the safety basis in order to minimize confusion regarding the safety basis. For example, the safety basis document list for the Plutonium Facility currently indicates that in addition to the Documented Safety Analysis and Technical Safety Requirements, 13 sets of documents (including submittals, associated field office approvals, and extensions) are currently implemented. These documents sets include 10 ESS/JCOs, 2 temporary modifications, and the seismic addendum.

**Plutonium Facility–Seismic Safety:** Last week, LANL transmitted to the field office a progress report on seismic/structural upgrades for the Plutonium Facility. The report provides status of progress made on achieving milestones in the FY14 Project Execution Strategy for facility upgrades, as well as new scope added to the strategy as additional FY 2014 funds became available. Progress on all milestones are either on track or ahead of schedule. Notable 2014 accomplishments include completion of:

- Vault column modifications to correct captured column structural deficiencies
- Attic fire suppression seismic modifications
- 106 out of 122 identified non-standard fire suppression seismic modifications
- Facility corridor fire suppression seismic modifications
- Basement standard fire suppression seismic modifications
- 90% design for modifications to improve shear capacity of interior roof girders

Additional milestones to the execution strategy for FY14 include completion of:

- Anchorage upgrades for uninterruptable power supply automatic transfer switches
- Anchorage upgrades for electrical distribution system unit substations
- Installation of seismic upgrades for bleed-off ductwork
- Anchorage of basement flammable material storage cabinets