

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2015

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending March 6, 2015

**Field Office:** On Monday, the field office Manager announced that Mr. John Krepps is the new Senior Technical Safety Advisor. This assignment fills a vacancy that has existed for multiple years. Additionally, she announced temporary fills from other field offices for the Acting Deputy Manager and Assistant Manager for Operations while permanent assignments for these key safety-related positions are processed.

**Plutonium Facility–Safety Systems:** Last Friday, LANL submitted to the field office for review and approval a Safety Design Strategy (SDS) for the Plutonium Facility Active Confinement Ventilation Upgrade Project (ACVUP). This upgrade to the Plutonium Facility ventilation system is a commitment from DOE in the implementation plan for Board Recommendation 2009-2 to reduce the risk of a seismically induced fire. The SDS notes that the ACVUP is in the conceptual design phase and that final configuration for the construction and operation of the active confinement ventilation system is in development. The SDS reiterates that the ACVUP constitutes a major modification to the existing Plutonium Facility safety basis and provides the graded approach intended for development of safety basis documents (see 1/9/2015 weekly). Notably, the SDS indicates that LANL will design the system under the requirements of DOE Order 420.1B, *Facility Safety*.

**Weapons Engineering Tritium Facility (WETF)–Emergency Management:** On Wednesday, WETF personnel conducted an emergency exercise in preparation for upcoming readiness activities. The exercise scenario postulated that a worker executing a delivery on the loading dock experienced a medical condition and dropped a legacy tritium container breaching its contents. Overall, WETF personnel acknowledged that although some improvements were realized, the fire department's approximately 30 minute response time to the patient should be quickened. In particular, in this scenario a radiological control technician immediately reported airborne tritium measurements from the scene of  $90 \mu\text{Ci}/\text{m}^3$ —levels that do not prohibit immediate approach. In the opinion of the Site Representatives, while the overall response was somewhat improved compared to recent WETF exercises, difficulties persist with fundamental elements including command and control, and communications indicating that completed corrective actions may not have fully addressed the underlying problems. In addition, simulation continues to create challenges. For example, one of the workers on the dock simulated a call to 911 and then actually called the operations center. In reality, the worker would likely need to stay on the line with 911, which would have entirely changed the flow of information to the facility operations center and the Facility Incident Command.

**Area G–Nitrate Salts:** On Tuesday, LANL submitted to the field office for approval a revised Evaluation of the Safety of the Situation (ESS) for the storage of nitrate salts. The revision addresses the need to include two additional remediated nitrate salt containers that Area G personnel recently identified as part of an extent-of-condition review. Following approval of the ESS, Area G personnel plan to relocate these pipe overpack containers to the Dome 375 Permacon. In addition to accounting for these new containers, the ESS clarifies the specific controls relied upon to justify continued operations. This clarification helps to address questions that arose after two recent snowstorms prevented completion of hourly rounds for visual inspections and temperature readings.