

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 1, 2013

MEMORANDUM FOR: Steven Stokes, Acting Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending March 1, 2013

DNFSB Staff Activity: J. Deplitch was at the laboratory this week to observe the assessment conducted by the DOE Office of Safety and Emergency Management Evaluations (HS-45).

Emergency Management: On Wednesday, Plutonium Facility personnel conducted a facility-level operational drill for the HS-45 assessment. The drill practiced the response of fissile material handlers, facility staff, and the Alameda County Fire Department (ACFD) to a solvent fire in a fume hood containing a depleted uranium part. This drill represents the first time that these entities have practiced an integrated response to a fire scenario in this facility. Several aspects of the scenario were simple: the fire was small and in a hood rather than a glovebox, the fire fighters were not contaminated, and the number of workers in the radioactive materials area was artificially restricted. Nonetheless, the drill successfully increased the recognition of the value of these integrated drills. Further, facility personnel discussed a number of improvement items, examples include:

- The firefighter that led the fire attack noted the need for hands-on practice on firefighting operations involving a glovebox—which is a long-standing issue (see weekly report dated December 18, 2009)
- The Incident Commander noted the need for a dedicated communication liaison to facility operations staff for fire response situations
- Health and safety technicians identified the need to stage response supplies (e.g., respirators) in an additional location

In the Site Representative's opinion, in their totality, the current structure of the institutional drill and exercise program and the facility-level operational drill program is unlikely to facilitate a sufficient number of integrated drills in the nuclear facilities similar to the one conducted this week. For example, the contractor altered this week's drill to include participation of the ACFD in support of a Livermore Field Office request. Currently, participation of the ACFD is only planned for the annual nuclear criticality exercise, which is intended to again serve as the required Emergency Planning Hazards Assessment evaluated exercise.

Tritium Facility: On Tuesday, facility personnel performed video inspections of the facility stacks. The inspections were intended to assess the material condition of the 1960's era structures and clarify the source of the stack debris (see weekly report dated December 7, 2012). Personnel performed the inspection using a digital camera assembly that was lowered from a man-lift. Facility management expects a briefing on the results next week.