

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 12, 2013

MEMORANDUM FOR: Steven Stokes, Acting Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending April 12, 2013

Plutonium Facility: On April 4, 2013, Livermore Field Office (LFO) personnel met with facility management to discuss observations and questions resulting from a walk-down of housekeeping high-efficiency particulate air (HEPA) filters located in the building's loft. In particular, the Site Representative observed two wooden enclosed housekeeping HEPA filters connected to the Safety Class (SC) Room Ventilation System (RVS) and the Safety Significant Glovebox Exhaust System (GBES). The safety basis classifies all ducting for both of these systems in the loft as part of the SC Building Structure. These filters support an enclosure housing two programmatic vacuum pumps that serve a casting furnace in an enduring glovebox. The Essential Drawing for the RVS is not completed; however, the drawing for GBES indicates that its associated wooden filter is SC. The drawing further indicates that the enclosure and associated piping into the glovebox are programmatic and are classified as general service. Any of these components determined to constitute part of the SC Building Structure would be expected to meet Performance Category 3 seismic and wind requirements and provide a 1-hour fire barrier.

On April 12, the Facility Manager determined this situation constituted a Potential Inadequacy of the Safety Analysis because the programmatic equipment is not explicitly described in the safety basis as part of a safety system or interfacing with a safety system. The glovebox is currently not in use and the Facility Manager locked out an isolation valve between it and the loft. Next week, LFO personnel expect to perform an extent of condition review regarding other programmatic equipment with penetrations between the laboratory rooms and the loft.

Waste Storage Facilities. On April 12, the laboratory contractor transmitted to LFO a schedule for the submission of a revised safety basis to account for the errors in the dispersion analysis (see weekly report dated March 8, 2012). Overall, the schedule provides a number of intermediate actions and estimates a submission date of November 24, 2013. Some of the intermediate actions involve addressing concerns communicated by the Board's staff. In a letter dated April 12, 2013, LFO formally captured these concerns and directed the contractor to provide resolution as part of the revised safety basis. A key milestone scheduled for April 25, 2013, will be completion of the Scope and Key Issues Statement, which should contain the proposed safety control strategy.