

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 25, 2011

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending November 25, 2011

The laboratory was closed Thursday and Friday for the Thanksgiving holiday.

Tritium Facility: In a letter dated November 18, 2011, the laboratory contractor transmitted to the Livermore Site Office (LSO) the latest revisions to the safety basis originally submitted in June 2010. The page changes incorporated LSO's conditions of approval. Key changes to the document include:

- Refined language describing the safety function, functional requirements, system boundaries, and interfaces for the safety significant tritium glovebox system.
- Inserted language describing the Specific Administrative Control (SAC) for tritium fire response, which included: (1) training personnel to secure tritium operations if safe to do so and exit the room in the event of a large fire and (2) an annual fire drill to rehearse response of personnel to a fire. The key element of the Emergency Preparedness Program concerning plume avoidance was removed in this submittal.
- Incorporated the SAC for total hydrogen species in a glovebox and captured the additional hydrogen species limit of 2 percent of the glovebox volume for any continuous unisolated volume as a key element of the Fire Protection Program.
- Listed the natural gas seismic shutoff valve to defense-in-depth Equipment Important to Safety.

LSO will review the page changes and is targeting approval by the end of the December 2011. The contractor currently estimates that implementation of the new safety basis will take 180 days from approval and is developing a task list and schedule to support this extended time frame.