

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 24, 2012

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending August 24, 2012

DNFSB Staff Activity: On Wednesday, staff members Roscetti, Shuffler, and Anderson held a teleconference with personnel from the Livermore Site Office (LSO) and laboratory contractor. The objective of the teleconference was to discuss the contractor's evaluation of options for upgrades to glovebox housekeeping HEPA filters in the Plutonium Facility.

Hardened Engineering Test Building: On August 22, 2012, LSO approved the safety basis amendment to allow as resident items in the facility certain certified sealed sources, highly enriched uranium items, and tritium in shipping containers (see weekly report dated July 13, 2012). The storage of these materials as resident items will provide additional flexibility for the inventory in the Plutonium Facility as part of the reduction of inventory to Security Category III. As a condition of approval, LSO explicitly prohibited storage of tritium in the facility until a National Environmental Policy Act (NEPA) screening is properly completed and approved. As an alternative, the contractor is currently exploring NEPA coverage for storage of tritium in certified shipping containers in the Tritium Facility. LSO recommended that the contractor examine as part of the annual update the need to broaden the safety basis to offer flexibility for potential future sealed source operations consistent with Department of Energy Standard 1027-92, Change Notice 1, *Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports*, and its supplemental guidance. LSO further noted the need for the contractor to improve the quality and timeliness of the submittal and comment resolution process.

Work Planning and Control: This week, a four person team from the corporate partners performed a Functional Management Review (FMR) on pre-job briefings across the laboratory. With respect to the nuclear facilities, the FMR team observed pre-job briefs and work in the Tritium Facility and the Radioactive and Hazardous Waste Management (RHWM) facilities. The team's observations pertinent to the nuclear facilities include the following:

- Processes and forms for pre-job briefings should be standardized across the laboratory. The team noted that the diversity in these practices represented an error precursor, particularly for the centralized service craft personnel that work in all of the facilities.
- Schedules and communication of facility status information should be standardized across the laboratory.
- Forms for work control documents known as Integrated Work Sheets were overly complex, did not reflect relevant information, and workers commented on their difficulty in using the documents.
- An evaporator job in a RHWM facility was controlled by a work permit and four separate procedures. The team found inconsistencies between these documents and difficulties briefing the work to be performed, hazards, and associated controls creating a difficult situation for the workers.

A similar review is planned next month for Los Alamos National Laboratory.