

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 1, 2010

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending January 1, 2010

The laboratory was closed Thursday and Friday for the New Year's holiday and the site rep was only in the office on Wednesday.

Tritium Facility: In a letter dated December 21, 2009, the Livermore Site Office (LSO) observed that the laboratory's readiness assessment for the grinder system was comprehensive; however, the three pre-start findings concerning conduct of operations, radiological controls, and system design (see weekly report dated December 18, 2009) were significant enough to warrant additional LSO oversight. As a result, LSO plans to validate closure of the pre-start findings and directed the laboratory to request concurrence prior to commencing grinder operations.

In a second letter dated December 22, 2009, LSO directed the laboratory to take action to improve the Tritium Facility safety basis in response to a readiness assessment finding and several other recently identified technical issues (see weekly report dated December 4, 2009). Four issues in need of improvement were specified with direction to: (1) re-evaluate the consequences to the facility worker and derive controls accordingly for tritium and special tritium compound leaks, deflagrations, and fires; (2) ensure operations are consistent with Department of Energy Handbook 1129-2008, *Tritium Handling and Safe Storage*; (3) review storage and processing of reactive compounds, including lithium hydride; and (4) review the activity description and analysis associated with the disposition of legacy items. LSO provided that resolution of these issues be completed as either part of the annual update due in March 2010 or as separate safety basis amendments should additional time be required. Given the breadth of the issues in need of resolution, it is unclear how a piecemeal approach of separate safety basis amendments could be effective and efficient. The laboratory is required to submit for LSO approval their approach for resolving the issues, including work scope and schedule, within 30 days.