**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

May 6, 2016

**TO:** Steven A. Stokes, Technical Director
**FROM:** Matthew P. Duncan, Cognizant Engineer
**SUBJECT:** Lawrence Livermore National Laboratory Report for April 2016

**DNFSB Staff Activity:** J. Anderson traveled to Lawrence Livermore National Laboratory to attend the weapon training and orientation for the W84 nuclear explosive safety study.

**Waste Storage Facilities:** The Livermore Field Office approved Lawrence Livermore National Laboratory's request for a one-time authorization to apply epoxy to the floor of one of the Waste Storage Facilities. For additional information, see the February 2016 report.

**Plutonium Facility:** On March 23, 2016, the Operations Support Manager for Weapons and Complex Integration authorized startup of nuclear operations in the Centralized Waste Processing Line. For additional information about the Centralized Waste Processing Line, see the December 2015 report.

**Probabilistic Seismic Hazard Analysis:** Lawrence Livermore National Laboratory initiated an update to the site's probabilistic seismic hazard analysis on May 21, 2013. A participatory peer review panel has been involved from the beginning and reviewed all activities associated with the update project. The role of the participatory peer review panel was to conduct a review of the adequacy of the process followed as well as the technical adequacy of the results. On March 30, 2016, the participatory peer review panel formally concluded that the process and technical aspects of the analysis met accepted guidance and current expectations. Compilation of the final report is expected to be completed on May 6, 2016.

**Plutonium Facility:** The Livermore Field Office approved Lawrence Livermore National Laboratory's updated aircraft crash analysis for the Plutonium Facility. The updated analysis resolved historical inconsistencies caused by mixing source term calculation guidance from DOE-STD-3009-94, *Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analyses* and DOE-STD-3014-96, *Accident Analysis for Aircraft Crash into Hazardous Facilities*. The analysis concluded that the unmitigated dose consequences at the site boundary resulting from an aircraft crash would be well below the evaluation guideline of 25 rem total effective dose.