

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 5, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Lawrence Livermore National Laboratory (LLNL) Report for May 2020

LLNL Operating Status in Response to COVID-19: During May, Lawrence Livermore National Security, LLC (LLNS) began the gradual return of essential employees to the Livermore site as it transitioned from Reduced Mission Critical to Mission Critical Operations status due to the COVID-19 pandemic. This gradual reopening process was executed under strict protective controls, including enforcement of social distancing, requiring face coverings for all employees and N95 masks for employees who work in close quarters. LLNL is resuming activities related to stockpile modernization, including classified and non-classified office-based activities, experimental lab work, facility operations, high-priority construction projects, and specific operations, maintenance and facility support activities.

Building 332 Safety Basis Amendment Approval: On April 27, 2020, the Livermore Field Office (LFO) approved a request by LLNS to remove restrictions for operating the Hydrogen Gas Control System and Hydrogen Gas Isolation System in Operating Configuration B in Building 332. Operating in Configuration B permits hydrogen operations with a small bottle of hydrogen (less than 2.0 standard cubic feet). This control prevents an inadvertent hydrogen reaction event and ensures that hydrogen concentrations will not exceed the lower flammability limit of 3.68% in the argon atmosphere of the glovebox. LFO approved this safety basis amendment and provided a Safety Evaluation Report documenting its review and basis for approval of the Building 332 Documented Safety Analyses page changes which “shall be entered into the Building 332 Safety Basis effective immediately.”

Fiscal Year 2020 Third Quarter Startup Notification Report (SNR) Approval: On May 14, 2020, LFO approved a portion of the third quarter fiscal year 2020 SNR submitted by LLNS. LFO approved the startup activity for the Hazard Category (HC) 2 Recovery Glovebox (RGB), but took no action on the pre-decisional Hydrogen Gas System HC 2 activity in the SNR. LLNS proposed an updated schedule for the RGB startup with the Contractor Readiness Assessment commencing in November 2020 and the Federal Readiness Assessment commencing in January 2021.

Building 332, Documented Safety Analyses (DSA) and Technical Safety Requirements (TSRs): On May 18, 2020, LFO transmitted its comments on the annual update of the Building 332 DSA and TSRs to LLNS. LFO requested that LLNS resubmit any revised DSA and TSR page changes incorporating resolutions to its comments within 120 calendar days.

LFO Approval of Request to Extend Implementation Due Date for Recent Update of Building 239 DSA and TSRs: On May 18, 2020, LFO approved a request submitted on May 8, 2020, by LLNS to extend the implementation due date for the updates to the Building 239 DSA and TSRs. LLNS requested an additional 60 days to complete implementation due to Superblock management focus on re-opening Building 332 and Building 334 to support mission critical activities with reduced staffing. LLNS also noted that Building 239 is not needed for mission critical activities at this time.