

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 5, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Lawrence Livermore National Laboratory (LLNL) Report for January 2021

LLNL Operating Status in Response to COVID-19: LLNL remains in Phase 2 of their “Phased Recovery and Re-entry Plan” with a majority of the workforce continuing to telework.

New LLNL Director: On January 28, 2021, LLNL announced the selection of Dr. Kimberly Budil as President of Lawrence Livermore National Security, LLC (LLNS) and the 13th Director of LLNL, effective March 2, 2021. Dr. Budil currently leads LLNL’s nuclear weapons program as the Principal Associate Director for Weapons & Complex Integration.

Building 332 Glovebox Argon Supply System (GASS): On January 28, 2021, the Livermore Field Office (LFO) approved a request by LLNS to operate the Building 332 GASS on a temporary supply tank while in Operation Mode during the replacement of the argon tank. On October 30, 2020, LLNS requested authorization to operate the Building 332 GASS in an alternate configuration on a contingency basis for up to ninety days. LFO noted that the alternate configuration is a pre-planned contingency to mitigate any disruption should the existing Safety Significant GASS argon tank or related components fail during the installation of the new replacement tank. LFO also concluded that the GASS will continue to meet the function, controls, and applicable requirements of the Building 332 Safety Basis while in the temporary configuration.

Second Quarter Fiscal Year 2021 Startup Notification Report (SNR): On January 21, 2021, LLNS submitted the Second Quarter Fiscal Year 2021 SNR. LLNS provided this submittal in compliance with DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. The SNR included the restart of the Building 332 Hydrogen Gas System and the startup of the Recovery Glovebox Line, each being Hazard Category 2 systems. LLNS noted that the only significant change to the SNR was a three-month delay to the Recovery Glovebox Line readiness schedule. LLNS projected that the Contractor Readiness Assessment will commence in May 2021 and the Federal Readiness Assessment will commence in July 2021. LLNS also noted that this schedule continues to include contingency for additional uncertainty based on unknowns related to the availability of personnel and potential restrictions related to the ongoing COVID-19 pandemic.

Building 332 Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR): On January 12, 2021, LFO approved the DSA and TSR Addendum for the Recovery Glovebox Line. As part of their approval, LFO directed LLNS to evaluate the impact of ion exchange resin purity to be used for Recovery Glovebox Line operations and determine if impurities negatively affect the outcomes of the accident analyses. LFO required that this evaluation be submitted for review within 120 calendar days. LFO concluded that the resubmitted Building 332 DSA and TSR Addendum with updated page changes, together with the LFO Safety Evaluation Report (SER), were sufficient and appropriate to serve as the basis for the safe operation of the Recovery Glovebox Line addition. LFO directed adding their letter and SER to the Building 332 Safety Basis effective January 12, 2021, and implementing the updated DSA and TSR within 180 days.