

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 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 April 2021

**Plutonium Facility (Building 332) Documented Safety Analyses (DSA) and Technical Safety Requirements (TSR) Annual Update - Implementation Due Date Extension Request:** On April 8, 2021, Lawrence Livermore National Security, LLC (LLNS) requested a 60-day extension to the due date for the implementation of the November 2019 Building 332 DSA and TSR. LLNS requested the extension to allow Facility Managers to adequately support multiple high-priority projects, including the startup of the Recovery Glovebox Line, during April through June 2021. LLNL is actively preparing for a full resumption of normal operations as the workforce and general population receive vaccinations against COVID-19. LLNS noted that facility management involvement is critical to ensuring that workers returning to the facility are trained in new security procedures and are resuming work in a safe and deliberate fashion.

**2020 Annual Unreviewed Safety Question Determination Summaries:** On April 7, 2021, LLNS transmitted the summaries of the Unreviewed Safety Question Determination (USQD) activity at the LLNL nuclear facilities (Radiography Facility – Building 239; Tritium Facility – Building 331; Plutonium Facility – Building 332; Hardened Engineering Test Building – Building 334; and the Waste Storage Facilities) for January 1, 2020, through December 31, 2020, as required by 10 CFR 830, *Nuclear Safety Management*. LLNS also included USQDs started in 2019 that were not completed until 2020. LLNS noted that DSA changes resulting from these activities will be incorporated into the appropriate annual update for each facility. For this reporting period, LLNS had no positive USQDs for these facilities.

**Third Quarter Fiscal Year 2021 Startup Notification Report (SNR):** On April 15, 2021, LLNS submitted the Third 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*. LLNS identified three changes in this quarter's SNR: (1) the delay of the Recovery Glovebox Line readiness schedule by one month to June 2021 for the Contractor Readiness Assessment (CRA) and August 2021 for the Federal Readiness Assessment (FRA), (2) the establishment of the readiness schedule for the Hydrogen Gas System (HYDEC) Operations (CRA September 2021 and FRA November 2021), and (3) the addition of the Centralized Waste Processing Line (CWPL) readiness assessment (CRA July 2021 and FRA – To Be Determined). While LLNS ceased CWPL operations for approximately 14 months, the majority of which was due to COVID-19-related procurement delays, LLNS noted that it did not cease CWPL operations due to a DOE-directed shutdown, violation of safety limits, or any similar operational concern.

**Plan of Action (POA) for the CRA for Building 332 CWPL Operations:** On April 29, 2021, LLNS submitted its POA for the CWPL CRA to the Livermore Field Office for review and approval. The CWPL is a large glove box that supports the repackaging and visual examination of transuranic (TRU) waste. Visual examination allows LLNL to meet Waste Isolation Pilot Plant requirements and allows the removal and segregation of prohibited items. The operation of CWPL underpins all activities at LLNL that generate TRU waste. The POA describes the breadth of, and the prerequisites for, the CRA in accordance with the requirements detailed in DOE Order 425.1D.