

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 2, 2019

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer  
**SUBJECT:** Lawrence Livermore National Laboratory (LLNL) Report for July 2019

**Defense Nuclear Facilities Safety Board Staff On-Site Activity:** None during July 2019.

**Building 332 Seismic Safety – Positive Unreviewed Safety Question Determination (USQD):** On July 1, 2019, Lawrence Livermore National Security, LLC (LLNS) declared a potential inadequacy in the safety analysis (PISA) for the seismic response of Building 332, the Plutonium Facility, to an evaluation-basis earthquake as identified in the updated seismic hazard analysis. The PISA resulted in a positive USQD. LLNS has implemented compensatory measures and is in the process of completing an evaluation of the safety of the situation including identifying if additional compensatory measures are necessary to justify continued operation of the facility.

**FY 2019 Fourth Quarter Startup/Restart Notification Report (SNR):** LLNS submitted the fourth quarter fiscal year 2019 SNR to the Livermore Field Office (LFO) for approval on July 3, 2019. The SNR included two systems in Building 332, the recovery glovebox line and the hydrogen gas system. The projected time period for startup of the recovery glovebox line is six to twelve months. The contractor readiness assessment (CRA) and Federal readiness assessment (FRA) for the hydrogen gas system are projected for January 2020 and February 2020, respectively. The projected restart date of the hydrogen gas system is March 16, 2020. One additional restart activity related to transuranic waste, Transuranic Package Transporter Model 2 (TRUPACT-II) loading, has a projected restart date of December 18, 2019. The CRA and FRA for TRUPACT-II loading are scheduled for September 2019 and October 2019, respectively.

**Approval of the Plan of Action (POA) for the TRUPACT-II Loading CRA:** The LFO approved the POA for the TRUPACT-II loading CRA on July 8, 2019. LLNS stated that their readiness assessment will evaluate the readiness to restart the transuranic waste (TRU) loading activity in the Waste Storage Facilities (Building 625) yard in preparation for shipment of the TRU waste to the Waste Isolation Pilot Plant. In their approval, the LFO noted that the POA had the appropriate breadth, criteria, and prerequisites, and was sufficient to assess the readiness of facility personnel, programs, and equipment to conduct work safely.

### **Building 239 Documented Safety Analyses (DSA) and Technical Safety Requirements (TSR)**

**Annual Update:** On July 10, 2019, LLNS submitted the annual update of the Building 239 (Radiography Facility) DSA and TSR to the LFO for review and approval. The annual update addresses all USQDs that were completed for the facility during the time period from June 29, 2017, to January 10, 2019.

**Building 334 DSA and TSR Resubmittal:** On July 12, 2019, LLNS resubmitted revised versions of the February 2019 DSA and TSR for the Hardened Engineering Test Building – Building 334. LLNS noted that the revised documents are intended to resolve all review comment records as required by the LFO in their correspondence of May 14, 2019.