DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 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 October 2019

Defense Nuclear Facilities Safety Board Staff On-Site Activity: On October 7–10, 2019, Board's staff members D.B. Bullen and J.D. Anderson were on site at LLNL to complete discussions with Livermore Field Office (LFO) and Lawrence Livermore National Security, LLC (LLNS), managers and to observe an NNSA review of the LLNS implementation of the Nuclear Explosive Safety (NES) requirements pertaining to the manufacture and control of Nuclear Explosive-Like Assemblies (NELA).

Technical Safety Requirements (TSR) Page Changes: On October 4, 2019, LLNS requested approval from the LFO for page changes to the TSR documents for Building 239, Building 331, Building 332, and Building 334. LLNS noted that these changes remove references to Environmental, Safety, and Health Manual Documents and replaced those citations with the LLNL Radiation Control Manual. LLNS also noted that no changes are needed in the Waste Storage Facilities TSRs.

Management Self-Assessment (MSA) Report on Super Block Parts Inventory Management: On October 10, 2019, LLNS submitted their MSA Report on the management of spare parts and materials in the Super Block. LLNS noted that this MSA was performed following completion of the corrective actions identified to address the findings of an LFO maintenance assessment completed in August 2018. The purpose of the assessment was to confirm the implementation of the Super Block Spare Parts Inventory Management Program, which was developed to meet the requirements of Department of Energy (DOE) Order 414.1D, *Quality Assurance*, and DOE Order 433.1B, *Maintenance Management Program for DOE Nuclear Facilities*. The LLNS MSA team found that the Super Block Inventory Management Program had been successfully implemented and met DOE requirements. LLNS identified no deficiencies, made five observations, and noted two strengths for the program. LLNS also noted the need for more storage space for existing and new spare parts in the Super Block.

Plan of Action – Restart of Waste Storage Facilities (WSF) Transuranic Package Transporter II (TRUPACT II) Loading Operations: On October 25, 2019, the LFO staff recommended that the Field Office Manager approve the plan of action for the restart of TRUPACT-II loading operations at the WSF. The LFO staff verified that the plan provides the appropriate breadth, criteria, and prerequisites and is sufficient to assess the readiness of facility personnel, programs, and equipment to conduct the work safely. The TRUPACT II loading activity was last performed at LLNL in Calendar Year 2010.

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