

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 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 February 2020

Waste Isolation Pilot Plant (WIPP) Transuranic Package Transporter II (TRUPACT-II)

Critical Lift Plan: On February 5, 2020, Lawrence Livermore National Security, LLC, (LLNS) staff completed the *TRUPACT II Loading Operations Critical Lift Plan*. LLNS staff developed the critical lift plan in support of loading and unloading of TRUPACT-II shipping containers per DOE-STD-1090-2011, *Hoisting and Rigging Standard*. Each TRUPACT-II will be loaded either with 14 drums arranged as two seven-packs stacked on top of each other or with two standard waste boxes (SWBs). LLNS staff noted that all early shipments to WIPP will only be drums. The Critical Lift Plan delineates the steps for handling TRUPACT-II inner and outer lids as required in the corrective actions from the LLNS Contractor Readiness Assessment (see LLNL Report for December 2019).

Fiscal Year 2020 Second Quarter Startup Notification Report (SNR): On February 21 2020, the Livermore Field Office (LFO) approved the Fiscal Year 2020 Second Quarter SNR submitted by LLNS on January 15, 2020. The LFO approval included the planned restart of TRUPACT-II loading in March 2020 and the projected startup of Recovery Line Hazard Category 2 Gloveboxes in September 2020. The LFO approval included no action on the pre-decisional Hydrogen Gas System (HYDEC) activity. LFO noted that if LLNS proposes any new activities that will require a readiness review prior to the submittal of the next quarterly SNR, an addendum to the current SNR must be submitted for approval before the start of those readiness reviews.

Periodic Issue Report (PIR): On February 24, 2020, LFO transmitted the PIR to LLNS. The PIR assessed operations, and environment, health and safety programs at LLNL. The PIR identified eight deficiencies, made eleven observations, and noted three strengths. The deficiencies included issues with Explosives Safety Site Plan requirements, postings, records, and work control documents. The strengths included “the LLNL training and qualifications program for [explosives] handlers is exceptional and a model,” and “explosives safety engineers are highly qualified and trained.” The PIR transmitted the deficiencies and observations to LLNS for entry into its Issues Tracking System.

LFO Integrated Management System Description: On February 24, 2020, LFO transmitted Revision 1 of its Integrated Management System Description to the National Nuclear Security Administration (NNSA) Associate Administrator for Safety, Infrastructure and Operations, as required by Department of Energy Order 450.2, *Integrated Safety Management*. This revision added the establishment of LFO Enduring Safety Goals and annual safety performance measures and metrics, revised the description of the LFO Technical Qualification Program to reflect the implementation of NNSA Supplemental Directive 426.1A, updated the delegated Nuclear Authorities, and updated the list of LFO Integrated Safety Management System implementing documents.

Building 239 Safety Basis: On February 25, 2020, LLNL received LFO approval of the 2019 Annual Update of the Building 239 Radiography Facility Documented Safety Analyses and Technical Safety Requirements.