

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 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 January 2019

Defense Nuclear Facilities Safety Board (Board) Staff Activity: The Board's staff provided zero person-weeks of on-site safety oversight at LLNL during January 2019.

Contractor Readiness Assessment (CRA) Implementation Plan (IP) for the Restart of Transuranic (TRU) Waste Characterization Operations: On December 18, 2018, LLNL Weapons and Complex Integration (WCI) management approved the IP for the restart of TRU waste characterization. LLNL is conducting this CRA to evaluate the adequacy and readiness of the personnel, procedures, and equipment associated with the TRU waste characterization restart within the Waste Storage Facility. The Livermore Field Office (LFO) approved the Plan of Action (POA) for conducting the TRU Waste Characterization Operations CRA on August 23, 2018. The characterization operations include real-time radiography, non-destructive assay, container gas sampling, and gas generation testing. LLNL has scheduled this CRA for April 2019.

Periodic Issue Report (PIR): On December 21, 2018, LFO transmitted the PIR to LLNL. This report summarizes the strengths, deficiencies, and observations identified during LFO's day-to-day oversight activities. LFO made three observations in its *Fire Detection and Alarm System (FDAS) Functional Area Review* in Building 332. The observations addressed battery load tests for the Building 332 FDAS back-up batteries and incomplete FDAS essential drawings. LLNL entered the actions taken to address these observations into its Issues Tracking System.

LFO Review of Lawrence Livermore Integrated Safety Management System: On December 27, 2019, LFO transmitted the Lawrence Livermore National Security, LLC (LLNS) Declaration of Integrated Safety Management System (ISMS) Effectiveness, an ISMS Effectiveness Review, and associated revisions to the Lawrence Livermore National Laboratory ISMS Program Description to LLNS. The National Nuclear Security Administration (NNSA) Effectiveness Review determined that LLNS has implemented ISMS feedback and improvement mechanisms that include a wide array of the Contractor Assurance System (CAS) tools. In total, NNSA identified one deficiency, 14 observations for consideration, and 11 strengths. Based upon the overall positive performance noted in the report, LFO stated that the next submittal of the LLNL Integrated Safety Management System Declaration and Effectiveness Review has been extended to November 30, 2020.

Startup/Restart Notification Report (SNR): On January 14, 2019, LLNS submitted its SNR for the second quarter of fiscal year 2019 to LFO for approval. The SNR included the Building 332 Recovery Glovebox Line and the Building 332 Hydrogen Gas System, both of which have projected startup dates in the 6–12 month timeframe. Two additional restart activities related to TRU waste, TRU Waste Characterization and TRU Package Transporter Model II (TRUPACT-II) loading, have projected startup/restart dates of May 20, 2019, and September 1, 2019, respectively. LLNS noted that each of these startups/restarts will require both contractor and Federal readiness assessments.