

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 5, 2018

TO: Steven A. Stokes, Technical Director

FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer

SUBJECT: Lawrence Livermore National Laboratory (LLNL) Report for December 2017

Defense Nuclear Facilities Safety Board (Board) Staff Activity: The Board's staff provided zero person-weeks of on-site oversight at LLNL during December 2017.

Building 331: Tritium Grinder System (TGS) Contractor Readiness Assessment (CRA). LLNL completed a CRA to assess the readiness of the TGS and its ancillary structures, systems and components on December 4, 2017. The TGS provides the capability of processing tritium containing devices for a variety of customers. The CRA included a review of grinder performance parameters, demonstrations of pre-start procedures, grinder loading, the grinding process, tritium recovery, debris removal, evacuation of the collection tank, and responses to off-normal operating conditions. The CRA team concluded that following closure of the pre-start findings identified during their review, the facility and project are ready to commence safe operations. LLNL is currently working to resolve the pre-start findings in the CRA report.

Building 332: Glovebox Nitrogen Supply System (GNSS). On December 14, 2017, LLNL requested a 60-day extension to remain in operation mode with an alternate configuration of the Building 322 GNSS. (See LLNL Monthly Report for August 2017). The extension was requested to allow for additional refurbishment to be completed on the vacuum boundary between the inner and outer shells of the GNSS tank. On December 22, 2017, the Livermore Field Office (LFO) of the National Nuclear Security Administration (NNSA) approved this extension request and established a new deadline of no later than March 7, 2018, for the completion of the GNSS refurbishment.

Building 332: Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR). On December 21, 2017, LFO transmitted comments on the May 2017 update to the Plutonium Facility – Building 332 DSA and TSR to Lawrence Livermore National Security, LLC, (LNS). LFO requested that LNS resubmit any revised DSA and TSR page changes incorporating resolutions to these comments no later than March 16, 2018.

LFO Integrated Management System Description: On December 21, 2017, LFO transmitted its new *Integrated Management System Description* to the NNSA Associate Administrator for Safety, Infrastructure and Operations, as required by DOE Order 450.2, *Integrated Safety Management*. This manual has now been split into three documents that encompass the LFO Integrated Management System Description; Functions, Responsibilities and Authorities; and Quality Assurance. This version of the *Integrated Management System Description* aligns Integrated Safety Management (ISM) implementing mechanisms with ISM Guiding Principles and Core Functions.