DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 18, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director **FROM:** R.K. Verhaagen and J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending November 18, 2016

DNFSB Activity: Board Member Santos was on site to observe the Board's staff review of LANL's software quality assurance (SQA) program discussed below. Board Member Santos walked down the high fidelity mockup of the Waste Characterization Reduction and Repackaging Facility (WCRRF) glovebox that LANL is using to prepare operators and procedures for the mixing and blending activities needed for inappropriately remediated nitrate salt (RNS) waste treatment. Mr. Santos also met with the NNSA Field Office Manager and Deputy Manager.

DNFSB Staff Activity: R.C. Eul was onsite and W.S. Horton called in remotely to conduct a review of LANL's SQA program. The team evaluated the program's compliance with DOE SQA directives as well as the implementation of the program through a sampling of safety software being used at LANL defense nuclear facilities.

Weapons Engineering Tritium Facility (WETF)—Safety Basis: On Thursday, WETF personnel determined that the Potential Inadequacy of the Safety Analysis declared for three flanged tritium waste containers (FTWCS) stored within WETF (see 11/11/16 weekly) represents a positive Unreviewed Safety Question. WETF safety basis personnel identified that the facility hazards analysis does not consider scenarios to evaluate the generation of flammable hydrogen-oxygen mixtures in tritium containment vessels. WETF management cite the robust construction of the FTWCS, the way the FTWCS were loaded, and the ability to prevent any ignition sources as justification for the current safe storage of these items. WETF safety basis personnel are now developing an Evaluation of the Safety of the Situation (ESS) to submit to the NNSA Field Office for review and approval.

WCRRF–Safety Basis: On Thursday, LANL submitted to the NNSA Field Office for review a notification and supporting documentation for closure of the ESS for the July 2015 WCRRF roof leak (see 7/17/15 weekly). LANL informed the NNSA Field Office that the repairs to the roof have been completed and the building structural integrity has been restored and declared operable.

Transuranic Waste Facility (TWF)–Safety Basis: This week, the NNSA Field Office reconvened the Senior Review Board (SRB) to evaluate a revised Safety Evaluation Report (SER) for the TWF safety basis (see 11/4/16 weekly). The SRB went line-by-line through the draft SER and heard minority opinions from the Safety Basis Review Team. The SRB continues to deliberate and are expected to make a presentation of their proposal for the path forward to NNSA's Cognizant Secretarial Officer for Safety next Monday.

Area G–RNS Waste: On Thursday, LANL submitted to the NNSA Field Office for review and approval a request to remove and replace a lid on one of the 55 gallon drums in Area G containing RNS waste that has stripped filter hole threads. LANL notes in the request that this will also require removal and replacement of the pressure relief device with supplemental filtration that is currently installed.