

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 5, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: R.K. Verhaagen and J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending August 5, 2016

DNFSB Staff Activity: On Thursday, B.K. Caleca, M.W. Dunlevy, T.J. Dwyer, and A.H. Hadjian conducted a teleconference with NNSA and LANL contractor personnel to discuss planning for the request for proposals covering additional seismic analyses and testing for the Plutonium Facility.

Area G–Inappropriately Remediated Nitrate Salts (RNS): Updates on a few key actions:

- The NNSA Field Office review and approval of the Evaluation of the Safety of the Situation (ESS) concerning transuranic waste inventory discrepancies continues. There currently is no schedule for the review of this document, which was submitted on May 13, 2016 (see 5/20/16 weekly).
- LANL continues to develop the submittal package for revision 6.1 of the ESS concerning the RNS waste. In mid-June, the NNSA Field Office informally discontinued review of revision 6.0 after there was consensus that several changes were needed. Approval and implementation of revision 6.1 is needed to disposition the wildland fire and aircraft crash scenarios, as well as authorize installation of the pressure relief devices on the pipe overpack containers holding RNS waste.
- LANL engineering personnel continue to finalize the design and cost estimate for a backup electrical power capability to the Dome 375 Permacon. NNSA personnel became concerned about the lack of backup power following a loss of power event this spring (see 4/1/16 weekly).
- Area G safety basis personnel provided NNSA and EM personnel with high quality drafts of the safety basis documents for Area G and the Waste Characterization Reduction and Repackaging Facility (WCCRF). They hope this approach will facilitate timely federal review and approval.
- Area G personnel have established a high fidelity mockup of the WCRRF glovebox and are using it to prove out procedures for the mixing and blending operations needed for RNS treatment.

Plutonium Facility–Restart Activities: Last Friday, the Contractor Readiness Assessment (CRA) team completed their review of Plutonium Pyrochemical Operations (see 7/22/2016 weekly). The CRA team identified two pre-start findings: (1) inadequate hazard assessment and abatement for the Chlorine Gas Delivery System and (2) ineffective implementation of criticality controls into operating procedures to ensure criticality safety limits are protected in a sustainable manner. The team also identified one post-start finding related to deficiencies with facility Contractor Assurance and Issues Management systems and questioned whether these systems were adequate to support future resumption efforts and ensure sustainment of ongoing operations. Overall the team concluded that subject to satisfactory resolution of the pre-start findings, LANL has demonstrated its readiness for equipment, procedures, and personnel to safely support Plutonium Pyrochemical Operations. Of note, the Line Management Review Team chartered by the NNSA Field Office to shadow this review (see 5/6/2016 weekly) is developing a summary report documenting their conclusions and recommendations on LANL's readiness to proceed with the Federal Readiness Assessment.

Weapons Engineering Tritium Facility (WETF)–Safety Basis: On Thursday, WETF personnel completed corrective actions from the Implementation Verification Review of the most recently approved revision of the WETF Documented Safety Analysis and Technical Safety Requirements. The Facility Operations Director declared the new safety basis implemented which marks a significant milestone by lowering facility material-at-risk limits to a level that reduces the consequences of the worst case postulated accident scenario to below the DOE Evaluation Guideline.