

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 28, 2014

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis, R.K. Verhaagen, and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending March 28, 2014

DNFSB Staff Activity: R.K. Verhaagen continued monitoring the recovery associated with the radioactive material release event at the Waste Isolation Pilot Plant (WIPP). M.P. Duncan and P.J. Foster observed the weeklong Construction Project Review (CPR) for the Transuranic Waste Facility project. On Thursday, B.A. Laake and R.P. Arnold met with LANL personnel to discuss weapons response.

Area G–Operations: Last week, Area G personnel completed processing the final waste packages associated with the 3706 Campaign. Final assay for these packages should occur in early April. Next week, Area G personnel plan to commence shipping transuranic waste packages to Waste Control Specialists in Andrews, Texas for interim storage until the WIPP can resume accepting waste.

Area G–Safety Basis: Last Friday, Area G personnel submitted to the field office an Evaluation of the Safety of the Situation (ESS) for the Potential Inadequacy in the Safety Analysis (PISA) concerning unanalyzed pool fires involving drums containing 100 % combustible waste. This PISA was declared subsequent to the Board’s staff review (see 1/31/14 weekly). The ESS notes an operational restriction on the receipt of newly generated waste and anticipates resolution as part of a safety basis page change expected to be submitted to the field office next week.

Plutonium Facility–Criticality Safety: Facility personnel completed additional analysis of the current conditions related to the PISA concerning unanalyzed flooding (see 3/21/14 weekly). Based on this analysis and as part of further immediate compensatory actions to achieve a safe and stable condition, facility personnel plan to move fissile material from about eight locations and place further restrictions maintaining containerization and prohibiting the addition of fissile material to several other locations.

Weapons Engineering Tritium Facility: Facility personnel completed installation of the new digital modules for the Oxygen Monitoring System and briefed the field office on their proposal to declare the system operable following post-maintenance testing (see 3/21/14 weekly). The field office did not agree with this basis and is expected to direct in-service testing prior to an operability declaration as a condition of approval for the revised ESS. As a result, the contractor readiness assessment will be delayed until early May. Separately, facility personnel requested and received from the field office a 15-day extension to the 9-day requirement for processing New Information related to potential errors in the hydraulic calculations underpinning the required riser pressure limit.

Transuranic Waste Facility (TWF): This week, NNSA performed a CPR to ensure the TWF project is ready to complete construction to meet the baseline technical scope within the approved cost and schedule. The CPR team identified a number of specific recommendations that require resolution and provided the following summary conclusions: (1) the project is ready for final preparations for Critical Decision-3, *Approve Start of Construction*; (2) the project can be completed by January 2018 within the current total project cost; and (3) additional resources are needed for both the federal and contractor project teams. NNSA review of CD-3 is scheduled to occur in May or June 2014.

Criticality Safety: On Tuesday, the LANL Director approved a charter for a revised Institutional Nuclear Criticality Safety Committee. Notably, the committee includes an external member from LLNL.