

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 24, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending June 24, 2016

DNFSB Staff Activity: D. M. Gutowski participated in Site Representative Office activities to compare and contrast practices with the Hanford Site. On Tuesday, M. R. Bradisse, B. K. Caleca and P. J. Foster conducted a teleconference with the Transuranic Waste Facility project personnel to discuss commercial grade dedication processes used for a seismically-actuated electrical shutoff switch.

Weapons Engineering Tritium Facility (WETF)–Safety Basis: WETF management entered their New Information process for two separate issues. First, during a fact-finding associated with a failed weekly surveillance on the Oxygen Monitoring System (OMS) for the Load-out glovebox, they discovered that the “fail” light condition is not indicated remotely in the operations center nor via local indication. As a consequence, this inoperable condition is only detectable when personnel physically open the door to the OMS module, which had previously only been performed as part of the weekly surveillance. The safety basis credits local indication as Safety Significant. As an interim corrective action, WETF management has added visual inspection of the modules to the daily rounds. The second New Information issue concerns the potential for the tritium beta decay to induce radiolysis in tritiated water stored in a type of container known as the AL-M1. Personnel from the Savannah River Site raised this question during observation of WETF activities with AL-M1s.

Emergency Management: On Monday, Emergency Operations Center (EOC) personnel conducted their quarterly exercise. The scenario involved a seismic event with a tritium release at WETF, concurrent high explosive operations at the Dual Axis Hydrodynamic Test Facility, and minor damage and elk-related injuries elsewhere across the site. At the hotwash, players generally noted positive performance.

Plutonium Facility–Safety Basis: On Thursday, the NNSA Field Office approved LANL’s request to further extend the Evaluation of the Safety of the Situation/Justification for Continued Operations (ESS/JCO) governing nuclear criticality safety for two rooms in the facility vault. The new expiration date is January 5, 2017. The Field Office last granted a six month extension in January 2016 for this ESS/JCO that originated in 2012 (see 1/22/16 weekly). The Field Office approval letter notes that additional time is needed to complete the criticality safety evaluation documents, resolve comments, and implement the documents once approved.

Plutonium Facility–Safety Basis: Last Thursday, operations personnel declared a process deviation after observing plutonium oxide in taped slip-lid containers in quantities that required a water-resistant container per the criticality safety posting. NNSA Field Office management expressed disappointment, as this operation had recently successfully completed a federal readiness assessment.

Plutonium Facility–Operations: Workers righted the multi-thousand pound safe that tipped into a glovebox line last month (see 5/27/16 weekly). The glovebox will remain out of service until a modification can be made to restore confinement capability to the damaged gloveport.