

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 3, 2012

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending August 3, 2012

Mr. Broderick was out of the office this week.

Federal Oversight: On Wednesday, the site office sent a letter to LANL management on nuclear safety culture and operations. Earlier this month, LANL identified that the static gauge pressure for the fire suppression system at the RANT shipping facility drops below the Technical Safety Requirement (TSR) lower pressure limit (i.e. the surveillance requirement) under certain conditions of domestic water usage. Facility management entered the New Information Process to evaluate whether this issue constitutes a Potentially Inadequacy in the Safety Analysis; however, no compensatory actions were taken to preclude pressure drops and normal operations continued. The site office letter notes that allowing conditions such as this to continue can lead to “normalization of deviation” and that lack of immediate action is not consistent with LANL commitments to nuclear safety culture. As noted on July 6th, the laboratory recently established a senior executive committee on nuclear safety that will be responsible for directing improvements in nuclear safety and operations.

Weapons Engineering Tritium Facility (WETF): Last week, LANL submitted a significant update to the WETF Documented Safety Analysis (DSA) and TSRs along with the Fire Hazards Analysis, Upgrade Safety Basis Strategy and the Inputs, Methods and Assumptions document. Although LANL has revised and updated the previous WETF safety basis, this update represents a significant revision to the WETF DSA and TSRs. The revised safety basis document includes an inventory limit of 250 grams of tritium (including holdup) and the following safety class structures, systems and components: DOT Type B shipping package, facility structure, pressurized gas flow restrictors, qualified containment vessels, oxygen monitoring system and the wet pipe sprinkler system. The site office is currently reviewing this submittal package. LANL will develop an implementation plan within 30 days of the site office approval of the DSA and TSRs.

Facility Hazard Categorization: LANL recently requested site office approval to use NA-1 SD G 1027, *Guidance on Using Release Fraction and Modern Dosimetric Information Consistently with DOE STD 1027-92* for the Technical Area-48 RC-1 building, which is a radiological facility (i.e. material quantities less than hazard category 3 per DOE STD 1027-92). The submittal includes a revised facility hazard categorization document to demonstrate that RC-1 remains below hazard category 3 quantities using the NNSA guidance document. Consistent with direction from the site office, LANL has completed an impact assessment and programmatic implementation plan for use of this guidance. Site office approval of this request will allow LANL to increase material inventories in support of increased throughputs for the LANL Medical Isotope Program. LANL plans to pursue use of the NNSA guidance for other radiological facilities on a case-by-case basis with site office approval when there is a mission need.

Area G – Readiness: On Monday, LANL began the contractor readiness assessment for the drum venting system at Dome 33 in Area G. Field observations including conduct of an emergency drill were completed this week. The team plans complete their review and outbrief the results to site management next week. A federal readiness assessment is scheduled for September.