

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 7, 2012

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: R.T. Davis
SUBJECT: Los Alamos Report for Week Ending September 7, 2012

Los Alamos Neutron Science Center (LANSCE): On Tuesday, the NNSA Accident Investigation Board (AIB), in accordance with DOE Order 225.1B, received an in-brief from LANL personnel and began their investigation into the recent LANSCE contamination event involving Technetium-99. The investigation will continue next week and the team will provide a final report to NA-1 by the end of September.

LANL also continued recovery plan activities this week. All known areas of contamination outside of Technical Area-53 have been decontaminated. Detailed surveys are being conducted for the Lujan Center Experimental Area and other contaminated areas at LANSCE to develop and execute decontamination plans.

Plutonium Facility – Seismic Safety: This week, LANL concluded that the Potential Inadequacy of the Safety Analysis (PISA) identified last week based on the results of the static non-linear analysis did represent an Unreviewed Safety Question. LANL is preparing an Evaluation of the Safety of the Situation for submittal to the site office for this issue. The static non-linear analysis has also been communicated to the peer review team. LANL personnel will be meeting with this team later this month to discuss the results and any peer review comments.

Chemistry and Metallurgy Research (CMR) Building: CMR management declared a Technical Safety Requirement (TSR) violation this week based on an obstructed sprinkler head in the Wing 9 basement. The obstructed sprinkler head was identified in October 2011 and a non-conformance report was written for the issue; however, no operability determination was performed at that time. After the issue was recognized by the CMR engineering manager earlier this week, an immediate operability determination was performed and the sprinkler head was determined to be inoperable. Appropriate actions were taken to enter the TSR Limiting Condition of Operation for the affected area. A work order was written to remove the obstruction and CMR management exited the Limiting Condition of Operation following execution of the work.

CMR personnel conducted an extent of condition review and concluded that other non-conformance reports did not impact TSR Limiting Conditions of Operation. In addition, the LANL procedure for non-conformance reports has changed recently to drive evaluation of potential safety basis impacts that should help preclude similar issues in the future.

Transuranic Waste Operations: LANL recently submitted a safety basis change to the site office to allow an increase in the material at risk (MAR) for sort, segregate and size reduction (SSSR) activities at Area-G. The change will increase the MAR limit from 2.5 to 18 plutonium equivalent curies (PE-Ci). In addition, the safety basis change does not include plume meander in the consequence evaluation consistent with comments from the site office. Approximately 70 above-ground waste containers at Area G that cannot be remediated at the WCCR repackaging facility (e.g., fiberglass reinforced boxes and large metal containers) exceed the 2.5 PE-Ci SSSR MAR limit. The safety basis change will allow LANL to process approximately 2/3 of the 70 transuranic waste containers.