

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 22, 2011

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending July 22, 2011

Plutonium Facility: Late last week, the site office manager signed the Safety Evaluation Report (SER) that approves the Justification for Continued Operations (JCO) associated with the increased seismic risk identified by the SAFER analysis of the Plutonium Facility. LANL plans to complete structural upgrades to address these issues by the end of the calendar year. The SER includes six conditions of approval including a requirement to reevaluate seismic performance with the roof drag strut modification complete. An interim report is scheduled for September with a final report in December. This evaluation will determine whether additional upgrades are required.

Weapons Engineering Tritium Facility (WETF): This week, WETF management declared a TSR violation based on the discovery that TSR-level glovebox leak checks had been performed using uncalibrated equipment. WETF TSRs require gloveboxes to be leak tested after modifications or maintenance. The WETF implementing procedure for leak testing gloveboxes did not require the leak test to be performed using calibrated pressure transducers. WETF management is evaluating the extent of condition of this problem in response to this discovery.

Transuranic Waste Operations: Area G currently houses approximately 400 fiberglass-reinforced plywood boxes containing legacy transuranic waste that is too large to fit in drums or standard waste boxes. To remediate these boxes, LANL Waste Disposition Project personnel have been working to reconfigure the processing line in Building 412 at Area G that had originally been established to remove prohibited articles from low activity (i.e. less than 2.5 ²³⁹Pu-equivalent curies) transuranic debris waste drums. This week, after successful completion of a Management Self Assessment, LANL management authorized processing and size reduction of waste from boxes with contents whose activity does not exceed the DOE Standard 1027 Hazard Category 3 threshold (0.52 ²³⁹Pu-equivalent curies). On Thursday, Area G personnel processed the first in a campaign of 17 less than Hazard Category 3 boxes inside the Building 412 confinement tent. Upon completion of this campaign, LANL management will initiate a Contractor Readiness Assessment and NNSA Readiness Assessment to authorize box processing at the Hazard Category 3 level.

Work Planning and Control: This week, LANL began an assessment of the site's Integrated Safety Management (ISM) and Integrated Work Management Systems. The assessment is being shadowed and reviewed by site office and NNSA-Headquarters personnel. The criteria review and approach document includes criteria for each of the ISM five steps for performing work.

Chemistry and Metallurgy Research (CMR) Building: Recently, LANL submitted the 2011 update of the CMR Documented Safety Analysis (DSA) and associated Technical Safety Requirements. This update includes reduced material-at-risk limits that were previously captured as a standing order such that the offsite dose consequence for bounding postulated accident scenarios are below the evaluation guideline. In addition, the submittal addresses several conditions of approval and comments previously identified by the site office. The site office is currently reviewing the updated DSA and TSR submittal.