

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 30, 2009

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending January 30, 2009

Management: This week, LANL management announced an impending organizational change affecting the Radioactive Liquid Waste Treatment Facility (RLWTF). Programmatic ownership of RLWTF will transfer from the Associate Director (AD) for Environmental Programs to the AD for Stockpile Manufacturing and Support. Responsibility for maintaining and protecting the RLWTF safety basis will also transfer from the Facility Operations Director (FOD) for Environmental and Waste Management Operations (who also oversees solid transuranic waste facilities such as Area G, the WCCR repackaging facility, and the RANT shipping facility) to the Plutonium Facility FOD. Formal transfer of responsibility for RLWTF is expected to occur as early as next week.

Weapons Engineering Tritium Facility (WETF): On Thursday, approximately 100 gallons of water was inadvertently released from a pressurized safety significant fire suppression system during a corrective maintenance activity. The work package for this activity incorrectly identified lock-out/tag-out for an isolation valve associated with a different wet pipe fire suppression system. Once maintenance personnel recognized the system was pressurized, the correct isolation valve was closed, which stopped the release of water. WETF personnel then entered the Limiting Condition for Operation (LCO) for the second fire suppression system (that was now isolated) and access to the WETF complex was controlled due to the potential for contamination. Subsequent samples concluded that the water was not contaminated and clean-up efforts were conducted. Actions were taken Thursday afternoon to return both of the fire suppression systems to service and exit the LCOs. On Friday, WETF management declared a stand-down of all maintenance activities to evaluate and address the potential for similar issues. Criteria for release of these packages are being developed and will be applied based on work priority and risk. LANL investigation of the event is on-going.

Transuranic Waste Operations: NNSA site office personnel recently performed a safety system oversight assessment on waste drums that are credited in the safety bases for Area G, RANT, and WCCR. These drums serve as a key engineered barrier for preventing release of material at risk at LANL's solid transuranic waste facilities, especially at Area G where these drums are typically the only form of robust safety class containment. Preliminary findings presented at an assessment outbrief this week identified a number of issues that the site office asserts could challenge the ability of the waste drums to perform their credited safety functions. One such finding concludes that LANL drum closure procedures do not conform to the drum manufacturer's closure instructions, thus invalidating the required DOT Type A certification of the drum. LANL personnel are reviewing the preliminary report for factual accuracy and to determine appropriate responses to identified issues.

Federal Oversight: Assessments performed by site office safety system oversight (SSO) engineers, like the one described above, have been effective in identifying issues and latent deficiencies in credited safety systems at LANL. SSO engineers are also performing valuable reviews and providing useful feedback on important deliverables (e.g. Vital Safety System Assessments and System Design Descriptions) produced to support implementation of LANL's Conduct of Engineering program. However, the number of these types of assessments and reviews is limited by SSO resources. The site office is currently staffed with two SSO engineers versus an identified need of 6.5 full time equivalents. The on-going NNSA hiring freeze is impacting the ability to fill these key vacancies.