

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 17, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaué
SUBJECT: Los Alamos Report for Week Ending July 17, 2015

DNFSB Staff Activity: On Wednesday, D.K. Andersen, B.K. Caleca, R.L. Jackson, A.P. Poloski, and J.L. Shackelford conducted a teleconference with Field Office and LANL personnel in an attempt to identify the technical basis associated with LANL's recommendation to de-scope the upgrade of the Active Confinement Ventilation System for the Plutonium Facility (see 6/5/15 weekly).

Weapons Engineering Tritium Facility–Configuration Management: On Monday, facility personnel conducted a fact-finding following the declaration of a Potential Inadequacy of the Safety Analysis (PISA) associated with the uninterruptible power supply (UPS) to a portion of the oxygen monitoring system (OMS). Specifically, as part of troubleshooting an error message, the system engineer discovered one of the safety significant OMS appliances to be plugged into the non-UPS power strip on its instrument rack. Notable points discussed include the following: (1) unlike other UPS outlets in the facility, this UPS strip had no obvious indication (e.g., red color receptacles) and was identical in appearance to the non-UPS strip located next to it; (2) the work package used to install this appliance in March 2014 specified only to ensure the cord reached the UPS strip, rather than ensure that workers connected it with the UPS strip specified by its identifier; (3) the previous version of the Technical Safety Requirements for the OMS included an operability statement associated with UPS power; however, this requirement was removed in the current version and apparently was never translated into a specific surveillance action; and (4) there is not a configuration managed list of safety loads to the UPS. Facility management directed an extent of condition review for the tritium monitoring system, which also uses safety significant plug-in appliances required to be on the UPS.

Waste Characterization Remediation and Repackaging Facility–Maintenance: On Monday, facility personnel conducted a fact-finding regarding the PISA associated with degradation of the facility roof resulting from flooding. Last week, after observing standing water within the facility, personnel observed about 8–10" of standing water on the roof and requested a priority maintenance response. The facility is currently in COLD STANDBY mode. Maintenance personnel resolved a plug in the roof drain and performed mitigation efforts within the facility. Notable points discussed include the following: (1) no preventive maintenance routines are currently in place for the roof; (2) management initiated a work order for corrective maintenance to repair the leaking roof in October 2014; however, the package was never finalized; and (3) a separate effort to replace the roof this spring was cancelled due to conflicting construction in the area. The Site Representatives note that the formal in-service inspection does not explicitly direct review of roof drains and that effective drainage is necessary to prevent the accumulation of rain and snow loads that may exceed the structure's design basis. Facility management is working to replace or repair the roof, initiating additional repairs for damage to the drywall ceiling, increasing the frequency of rounds while in COLD STANDBY, and starting qualification processes to increase the number of operators for these rounds to more than one.

Plutonium Facility–Emergency Management: On Thursday, Plutonium Facility management participated in a tabletop exercise with Los Alamos Fire Department and LANL emergency management and security personnel to work through evaluation and recovery of the facility following a criticality accident (see 5/22/15 weekly). Participants identified a number of meaningful improvements and worked through potential pitfalls of managing the recovery following the initial evacuation.