

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 9, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending January 9, 2015

Plutonium Facility–Safety Systems: Late last month, LANL transmitted to the field office for review and approval the major modification determination for the Active Confinement Ventilation Upgrade Project (ACVUP). Based on feedback from the field office, LANL concluded that the ACVUP constituted a major modification to the safety basis. However, since the system’s safety function will remain to provide airflow via cascading differential pressures, LANL intends to submit a safety basis strategy at the end of this month that relies upon a graded approach. This will involve submittal of safety basis page changes developed against DOE-STD-1189 in lieu of a preliminary documented safety analysis. The ACVUP is a subproject under Phase III of the TA-55 Reinvestment Project with a pre-conceptual completion date of fiscal year 2024.

Also late last month, LANL transmitted a revision of the TA-55 Project Execution Strategy (PES). The PES serves to help integrate the scope, high-level schedules, and funding associated with the numerous capital and program-funded projects associated with actions necessary to reduce the mitigated offsite consequences from seismically-induced events to below the DOE Evaluation Guideline. The PES identifies the following scope for fiscal year 2015:

- Modify the sewer vent in the Bleed-off system to prevent the formation of ammonium nitrate on the ventilation system HEPA filters
- Seismic qualification for numerous replacement and spare components for safety systems
- Evaluation of options to equip gloveboxes with fire suppression in accordance with DOE and national consensus standards
- Modify the anchorages for various electrical and ventilation system components
- Improve the shear capacity of the interior roof girders
- Upgrade six stands of gloveboxes containing furnaces to meet Performance Category 3 requirements during the next two years

Emergency Management: On Thursday, LANL personnel conducted the annual emergency exercise at the Radioactive Liquid Waste Treatment Facility (RLWTF). This year’s scenario involved a postulated crash of a delivery truck carrying poisonous gas in the facility’s yard area. The event triggered an immediate facility evacuation to the outdoor muster point and response by the fire department and hazardous material team. This year, coordination of facility response was improved through an area-wide announcement transmitted from the TA-55 Operations Center alerting facility responders to assemble at the Facility Incident Command at the Radiological Laboratory Utility Office Building, which is down the block from RLWTF.

Plutonium Facility–Quality Assurance: This week, facility management declared another violation of a Technical Safety Requirement associated with material-at-risk (MAR) limits (see 11/7/14 weekly). In this instance, an extent of condition review revealed two locations that were not included in the MAR tracker database used to track limit compliance. Facility personnel attempted to correct the deficiencies in the database and to complete the required surveillance within 24 hours to maintain operability as allowed by the Documented Safety Analysis. Performance of the surveillance failed when MAR tracker was unable to process all necessary input data. As a result of the failure to complete this surveillance in the required time, normal facility operations had to be terminated. A causal analysis is being performed and the facility is implementing a configuration management plan to address MAR tracker software changes.