

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 25, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: R.K. Verhaagen and J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending December 25, 2015

The Year on a Page: The Site Representatives' summary of the key happenings of 2015:

- Activities at Area G remain largely curtailed due to several unresolved inadequacies in the safety basis. Foremost of these issues, LANL personnel are working to accelerate final "render-safe" treatment of the inappropriately remediated nitrate salt wastes after EM and NNSA personnel raised questions on the adequacy of the controls for the continued safe storage of these materials.
- The Weapons Engineering Tritium Facility (WETF) performed gas transfer activities for the first time in nearly 8 years. Additionally, facility personnel completed a number of risk reduction activities and repackaged several tritium containers that were approaching their pressure limits.
- Plutonium Facility (PF-4) personnel successfully restarted four activity groupings. While these operations were of a low level of complexity, facility personnel have demonstrated an ability to prepare adequately the necessary people, procedures, and equipment. The balance of PF-4 operations, including significantly more complicated activities, will undergo restart in 2016.
- LANL's ability to process and store transuranic waste remains significantly impaired because of safety basis issues at Area G and the closure of the Waste Isolation Pilot Plant. This situation is hindering risk reduction activities at PF-4, the Chemistry and Metallurgy Research building, and WETF. To mitigate the situation, LANL management initiated transuranic waste storage on the outdoor pads at PF-4 and accelerated the schedule to commence operations at the new Transuranic Waste Facility.
- The NNSA Field Office filled several key positions, but continues to experience difficulty maintaining adequate staffing levels. The EM Field Office stood up operations and established a bridge contract for environmental cleanup activities.
- PF-4 personnel continued execution of important upgrades to the building's seismic safety posture. Notably, they placed reinforcing wraps on 7 of 27 roof girders with additional wraps in progress. They also upgraded the stands for three gloveboxes housing pyrochemical furnace equipment.
- Confinement Vessel Disposition project personnel finalized cleanout of the first sphere and completed most of the steps for a second sphere. The project's goal of completing three spheres was impeded by issues associated with the safety basis and transuranic waste storage.
- NNSA and EM raised questions on the performance of pipe overpack containers in fire scenarios at Area G resulting in complex-wide actions and experimental testing to improve the technical basis for crediting these containers in a safety basis.
- Staffing levels for the Nuclear Criticality Safety and Safety Basis divisions continue to hamper resolution of longstanding safety issues across the laboratory.