

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 6, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending May 6, 2016

Area G–Inappropriately Remediated Nitrate Salts (RNS): This week, Area G personnel conducted their Management Self-Assessment (MSA) for pressure relief device installation as part of implementation of phase 2 of revision 5 of the Evaluation of the Safety of the Situation (ESS). The MSA team observed work evolutions covering assembly of the pressure relief device and its installation on a simulated RNS waste drum, reviewed documents, and conducted interviews. The team also observed an evaluated emergency drill (Type III) that involved work crew and operations center response to the discovery of a pressurized bag in a simulated RNS drum during pressure relief device installation. The team expects to brief their results on Monday and installation activities should commence soon thereafter following closure of any pre-start issues. While this represents important progress on improving the safe storage of the RNS waste, much remains to be done to complete implementation of revision 5 of the ESS. Additionally, the NNSA Field Office has yet to review and approve revision 6 of the ESS (which covers the wildland fire threat), and the EM Field Office has yet to produce a project plan for the RNS final treatment effort.

Area G–Operations: On Wednesday, Area G personnel responded to two abnormal events that occurred during the planned window for the evaluated drill. The events were the discovery of two drums labeled as radioactive and missing their bungs and a third drum labeled as empty that spilled unknown solid materials. In both cases, responders found no industrial hygiene or radiological issues. The operations center staff responded well and was likely aided by their pre-drill posture. As such, the operations center was manned above typical levels and had informed the workforce to suspend normal calls and in-person queries. Area G management expects to conduct a fact-finding next week on these events.

Plutonium Facility–Restart Activity: Plutonium Facility personnel commenced their MSA for pyrochemistry operations, which includes metal chlorination, multiple-cycle/direct oxide reduction, metal coalescence, chloride melt preparation, salt distillation, and molten salt extraction. The current schedule anticipates the commencement of the contractor readiness assessment in July, which is currently paced by completion of revised criticality safety evaluations expected in June. LANL management recently briefed NNSA Headquarters on a proposal to remove the aqueous processing activities from the formal restart project. If this change is approved, the project hopes to be complete by the end of the fiscal year. Following completion, management has indicated the intent to reprioritize criticality safety and conduct of operations resources across the balance of the facility that did not undergo formal readiness.

The NNSA Field Office chartered a Line Management Review Team to shadow this pyrochemistry MSA and follow-on Contractor Readiness Assessment. The team is comprised of NNSA headquarters and Field Office personnel and is tasked with evaluating the robustness of LANL's readiness process. The team has been directed to develop a summary report documenting their conclusions and to make a recommendation to the Startup Authorization Authority on LANL's readiness to proceed with the Federal Readiness Assessment.