DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 26, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director **FROM:** R.K. Verhaagen and J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending February 26, 2016

Chemistry and Metallurgy Research Building-Confinement Vessel Disposition (CVD)

Project: CVD project personnel recommenced cleanout operations following the implementation of necessary safety basis changes identified during previous operations and the removal of material-at-risk generated from the cleanout of the first two vessels. Ten vessels are slated for disposition. This week, CVD operators completed final assay of the second completed vessel. Additionally, operators performed the initial receipt assay and moved the third vessel into the enclosure in preparation for its cleanout. CVD personnel are on track to complete disposition of all ten vessels before the end of calendar year 2019.

Area G-Remediated Nitrate Salts: This week, the senior integrated project team hosted an Engineering Options Treatment Science Advisory Panel. The panel's chartered function is to provide a diversity of thought with respect to the technical and operational aspects of the treatment plans for the inappropriately remediated nitrate salt wastes. In particular, this included an evaluation of potential facilities and portable capabilities to be used for the treatment process. The panel's membership consisted of experts from Vanderbilt University, Lawrence Livermore National Laboratory, Idaho National Laboratory, Savannah River National Laboratory, Carlsbad Field Office, and several other parent contractor companies. They expect to deliver their report within 30 days.

Transuranic Waste Management: Earlier this month, LANL management transmitted an *Enduring Mission Waste Management Plan* to the NNSA Field Office, as previously requested (see 9/18/16 weekly). The plan provides LANL's strategy to safely, compliantly, and efficiently manage all forms of wastes at the laboratory. Notable points in the plan related to transuranic (TRU) waste include the following:

- The volume of the current TRU waste inventory at Area G is equivalent to approximately 17,900 55-gallon drums. Ultimate disposition of this waste to the Waste Isolation Pilot Plant (WIPP) will require 270 and 730 shipments for the aboveground and the belowground inventories, respectively.
- LANL forecasts the generation of approximately 6,950 drum equivalents of new waste during fiscal years 2015 through 2021, resulting in 315 shipments to WIPP. For this newly generated waste, the Materials Recycle and Recovery program generates the most waste by volume and the plutonium-238 program generates the most by radioactivity. Both of these programs largely support risk reduction activities within the Plutonium Facility.
- The resumption date for shipments from LANL to WIPP is unknown, as well as the number of shipments that LANL will be allocated. Further, the schedules for completion of seismic upgrades and safety basis revisions for the RANT Shipping Facility are currently unknown.
- Other key unknowns for planning purposes include the future rates for drum remediation and certification activities and the date on which retrieval and processing of belowground waste will commence.