

## News Release

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## **DOE Completes Treatment of Remediated Nitrate Salts**

LOS ALAMOS, N.M.,— The Department of Energy's (DOE) Environmental Management Los Alamos Field Office (EM-LA) and Los Alamos National Security, LLC (LANS), in collaboration with and support from the National Nuclear Security Administration's (NNSA) Los Alamos Field Office, have successfully completed treatment of the remediated nitrate salts (RNS) at Los Alamos National Laboratory (LANL).

"Safe and successful completion of the RNS treatment is due to effective partnering between multiple organizations and demonstrates the way DOE strives to conduct operations in a high hazard environment," EM-LA Manager Doug Hintze said.

These RNS drums contained an incompatible combination of nitrate salt waste mixed with an organic absorbent. The organic absorbent was improperly added during repackaging to absorb liquids and to reduce the oxidizing potential of the nitrate salts. As a result, the drums needed to be treated to allow safe disposition of the waste at the Waste Isolation Pilot Plant (WIPP).

Treatment of the 60 RNS drums began this past May at the Waste Characterization, Reduction, and Repackaging Facility. The process involved removing the RNS waste from

drums and mixing it with water and zeolite—an inert material—to render the waste non-reactive. The resulting mixture is in solid form and repackaged in new drums in accordance with WIPP requirements. The treated RNS was repackaged in drums that are being stored at LANL, and will eventually be shipped to WIPP for disposal.

"The project team was committed to safety throughout the entire treatment process. Their focus and attention to detail ensured that the treatment of the RNS drums was completed in a safe and efficient manner. The project was not only a top priority of EM-LA, NNSA and LANL, but of the entire DOE complex," EM-LA Director, Completion of Project Delivery Dave Nickless said.

Throughout the process, the safety of the workers, the public and the environment was the top priority. EM-LA and the NNSA Los Alamos Field Office provided federal oversight during the treatment process to ensure operations were performed safely and per procedure.

"This is a huge accomplishment," said NNSA Los Alamos Field Office Manager Steve Goodrum. "DOE and the lab committed major resources to the unique challenges presented by the RNS waste treatment process. It is a relief to complete this project and apply those resources to other cleanup efforts."

An improperly packaged RNS drum from LANL was the cause of the February 2014 radiological event at WIPP. DOE investigations into the WIPP radiological event determined that the incompatible mixture containing organic absorbent within the RNS drum created a heat-generating chemical reaction, resulting in a temperature and pressure buildup that caused the drum to breach.

"We're grateful for the opportunity to help resolve the hazardous situation inadvertently created by our environmental management operation back in 2014," said Randy Erickson,

LANS' Associate Director of Environmental Management. "I would like to express my personal appreciation to the men and women on my team for their professionalism dedication and efforts which lead to this important work being completed in a safe manner."

