



ESHID-603381

Waste Management Programs Group

PO Box 1663, MS M969
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(505) 667-8160

Symbol: EPC-DO: 19-148
LA-UR: LA-UR: 19-24099
Date: MAY 06 2019

Mr. John E. Kieling
Hazardous Waste Bureau
New Mexico Environment Department
Santa Fe, NM 87505

Subject: Emergency Permit #19-001, Technical Area 3, SM-40, Los Alamos National Laboratory

Dear Mr. Kieling:


On May 2, 2019, Triad National Security, LLC (Triad), in coordination with the Department of Energy (DOE), requested approval from the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) to treat an unstable hazardous waste item at Technical Area (TA) 3 by emergency detonation. The NMED-HWB provided verbal authorization at 4:52pm on May 2, 2019 to proceed with the contained destruction. Written authorization was received from the NMED-HWB on May 3, 2019 titled *Emergency Authorization to Destroy Unstable Hazardous Waste Los Alamos National Laboratory, EPA ID# NM0890010515*.

On May 2, 2019, during a walk down of the facility, a 100 mL bottle of lithium borohydride in a tetrahydrofuran solution was identified. The bottle was determined to be approximately 15 years old and had crystallization around the cap of the bottle. The crystallization prohibited opening of the bottle for testing and any attempts to sample the visible crystallization may have caused an unintentional initiation of the suspected peroxide crystals. This condition posed an imminent and substantial endangerment to human health and the environment. In addition, the emergency management personnel determined that the safest response was to conduct on-site emergency treatment by detonation in a total containment vessel. Based on the facility's analysis of the incident, there were no releases of hazardous constituents to the environment.

As authorized by the Emergency Permit, treatment was conducted outside TA-3 SM40 in accordance with 40 CFR 270.61. The destruction was completed in a controlled and safe manner on May 2, 2019 at 6:05pm. The material was placed in a total containment vessel and wrapped in sheet explosives. Sufficient quantity and configuration of explosives was utilized to ensure the complete consumption of the material in question. The total containment vessel is gas tight and equipped with a remote sampling system to allow for post-blast analysis of the remaining gasses to confirm the complete consumption of the material. Emergency treatment was effective and no waste residual or other hazardous materials remained after treatment.

Please contact Patrick L. Padilla at (505) 667-3932 or by email at plpadilla@lanl.gov if you have questions.

Sincerely,



Enrique Torres
Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC
Los Alamos National Laboratory

ET/PLP/CLJ

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