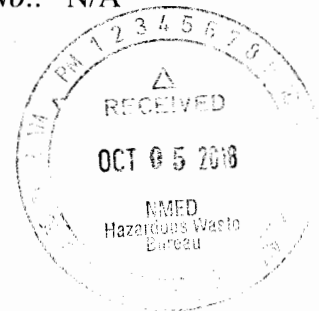




**Environmental Protection & Compliance Division**  
**Los Alamos National Laboratory**  
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Date: **OCT 04 2018**  
Symbol: EPC-DO: 18-356  
LA-UR: 18-29168  
Locates Action No.: N/A

Mr. John E. Kieling  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303



**Subject: Additional Information Regarding Emergency Treatment at TA-35-85, Los Alamos National Laboratory**

Dear Mr. Kieling:

The purpose of this letter is to provide additional information regarding the decision to conduct emergency treatment at Technical Area (TA) 35-85. On September 14, 2018, Los Alamos National Security (LANS), in coordination with the Department of Energy (DOE), requested approval from the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) to treat two potentially unstable containers of hazardous waste at TA-35 by emergency detonation. The NMED-HWB provided written authorization for the treatment, Emergency Permit # 18-001 on September 14, 2018. As required by the Emergency Permit, the DOE and LANS submitted a five-day written report. Following is additional information concerning the incident that led to the emergency destruction.

The incident occurred on September 14, 2018 at approximately 9:00 a.m. in TA-35, Building 35-85. At that time, an employee was synthesizing a polymer using 1, 3-diazide-2, 2-dinitro-propane using a 50 milliliter (ml) round bottom flask. The employee weighed out ~1.3 grams (g) of liquid diazide, and moved the flask into a hood and added ~1.8 g of solid alkyne. The employee then added 161 milligram (mg) of copper catalyst to the reaction mixture. The flask ruptured due to a chemical reaction causing the employee to receive multiple lacerations injuries.

After the incident, the LANS Emergency Management Team along with chemical subject matter experts inspected the hood and determined that two additional small round bottom flasks contained the same material. As detailed in the five-day report, on-site emergency treatment by detonation was performed in



a total containment vessel under the Emergency Permit. Emergency treatment was conducted in accordance with the Emergency Permit and completed at 1:15 p.m. on the same day (September 14, 2018) in a controlled and safe manner.

Based on the facility's analysis of the incident, the hood where the reaction took place did not have a filter system. The reaction using 1, 3-diazide-2, 2-dinitro-propane resulted in a total vaporization producing only nitrogen, carbon dioxide and water. Consequently, there were no releases of hazardous constituents to the environment, and no waste residual or other hazardous materials remained after the incident. Emergency treatment by detonation in a total containment vessel was effective and no waste residual or other hazardous materials remained after treatment.

Please contact Patrick L. Padilla of the LANS at (505) 667-3932 if you have questions or need additional information.

Sincerely,



Peter H. Carson  
Group Leader

PHC/PLP/AME

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