



Los Alamos National Laboratory
 P.O. Box 1663, MS M969
 Los Alamos, NM 87545
 505-667-8160

EPC-Waste Management Programs

Symbol: EPC-DO: 23-143

Date: April 25, 2023

LA-UR: 23-24306

Mr. Rick Shean, Acting Chief
 Hazardous Waste Bureau
 New Mexico Environment Department
 2905 Rodeo Park Drive East, Building 1
 Santa Fe, NM 87505-6313

Subject: Final Report – Destruction of Unstable Container at TA-03, Los Alamos National Laboratory

Dear Mr. Shean:

On April 20, 2023, Triad National Security, LLC, in coordination with the U.S. Department of Energy National Nuclear Security Administration Los Alamos Field Office, requested approval from the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) to treat an unstable chemical container at Technical Area 03 (TA-03) at the Los Alamos National Laboratory (EPA ID# NM0890010515) by emergency detonation. On April 20, 2023, the NMED-HWB granted Emergency Authorization for treatment by detonation, *Emergency Permit # 2023-02*.

While performing a routine assessment of time-sensitive chemical containers at TA-03, Building 2322, an unstable chemical container of Isopropanol was determined to have hazardous concentrations of peroxides (1000-2000 parts per million). The Emergency Management Operations Group and the Emergency Management Response Group determined the safest response was onsite emergency treatment in a NABCO Total Containment Vessel, given the current state of the container and the inherent hazard of the respective peroxides properties that made the container shock sensitive. Treatment was conducted at TA-03 in accordance with Title 40 of the Code of Federal Regulations §270.61. Because the emergency treatment was conducted in a gas tight vessel, there was no release to the environment. The destruction was completed on April 20, 2023, at 8:47 p.m., in a controlled and safe manner. Emergency treatment was effective, and no residue or other hazardous materials remained after treatment.

The emergency permit application, submitted via email to the NMED-HWB on April 20, 2023, is included as Attachment 1 of this letter. Please contact Patrick L. Padilla at (505) 412-0462 or by email at plpadilla@lanl.gov if you have questions.

Sincerely,

JESSICA
 MOSELEY (Affiliate)

Digitally signed by JESSICA
 MOSELEY (Affiliate)
 Date: 2023.04.25 09:09:09
 -06'00'

Jessica Moseley
 Group Leader

Attachment: Emergency Permit Application

Copy: Rick Shean, NMED-HWB, Santa Fe, NM, rick.shean@env.nm.gov
Stephen Connolly, NMED-HWB, Santa Fe, NM, stephen.connolly@env.nm.gov
Neelam Dhawan, NMED-HWB, Santa Fe, NM, neelam.dhawan@env.nm.gov
Siona Briley, NMED-HWB, Santa Fe, NM, siona.briley@env.nm.gov
Mitchell Schatz, NMED-HWB, Santa Fe, NM, mitchell.schatz@env.nm.gov
Caitlin Martinez, NMED-HWB, Santa Fe, NM, caitlin.martinez@env.nm.gov
Theodore A. Wyka, NA-LA, theodore.wyka@nnsa.doe.gov
Stephen Hoffman, NA-LA, stephen.hoffman@nnsa.doe.gov
Jason Saenz, NA-LA, jason.saenz@nnsa.doe.gov
Karen E. Armijo, NA-LA, karen.armijo@nnsa.doe.gov
Adrienne L. Nash, NA-LA, adrienne.nash@nnsa.doe.gov
Robert A. Gallegos, NA-LA, robert.gallegos@nnsa.doe.gov
Steven A. Coleman, Triad, ALDESHQ, scoleman@lanl.gov
James D. Coy, Triad, ESHQSS-INT, jcoy@lanl.gov
Jeannette T. Hyatt, Triad, EWP, jhyatt@lanl.gov
Sylvia de la Sancha, Triad, EWP, sdelasancha@lanl.gov
Jennifer E. Payne, Triad, EPC-DO, jpayne@lanl.gov
Kristen A. Honig, Triad, EPC-DO, khonig@lanl.gov
Andie McLaughlin-Kysar, Triad, EPC-DO, andiek@lanl.gov
Christian M. Rittner, Triad, EM-RESP, crittner@lanl.gov
Robert O. Thornton, Triad, EM-OPS, rthornton@lanl.gov
Aaron R. Brick, Triad, EM-OPS, abrick@lanl.gov
Ronnie A. Garcia, Triad, WM-DO, ronnieg@lanl.gov
Jessica L. Moseley, Triad, EPC-WMP, jmoseley@lanl.gov
Patrick L. Padilla, Triad, EPC-WMP, plpadilla@lanl.gov
Cecilia Trujillo, Triad, EPC-WMP, ceciliat@lanl.gov
rcra-prr@lanl.gov
eshq-dcrm@lanl.gov
epccorrespondence@lanl.gov
lasomailbox@nnsa.doe.gov

COPY

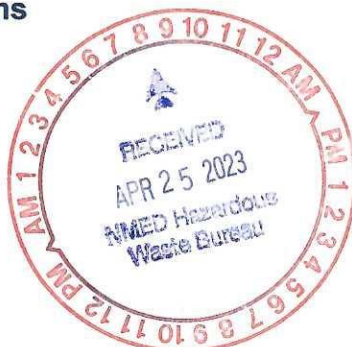


Los Alamos National Laboratory
P.O. Box 1663, MS M969
Los Alamos, NM 87545
505-667-8160

EPC-Waste Management Programs

Symbol: EPC-DO: 23-143
Date: April 25, 2023
LA-UR: 23-24306

Mr. Rick Shean, Acting Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313



Subject: Final Report – Destruction of Unstable Container at TA-03, Los Alamos National Laboratory

Dear Mr. Shean:

On April 20, 2023, Triad National Security, LLC, in coordination with the U.S. Department of Energy National Nuclear Security Administration Los Alamos Field Office, requested approval from the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) to treat an unstable chemical container at Technical Area 03 (TA-03) at the Los Alamos National Laboratory (EPA ID# NM0890010515) by emergency detonation. On April 20, 2023, the NMED-HWB granted Emergency Authorization for treatment by detonation, *Emergency Permit # 2023-02*.

While performing a routine assessment of time-sensitive chemical containers at TA-03, Building 2322, an unstable chemical container of Isopropanol was determined to have hazardous concentrations of peroxides (1000-2000 parts per million). The Emergency Management Operations Group and the Emergency Management Response Group determined the safest response was onsite emergency treatment in a NABCO Total Containment Vessel, given the current state of the container and the inherent hazard of the respective peroxides properties that made the container shock sensitive. Treatment was conducted at TA-03 in accordance with Title 40 of the Code of Federal Regulations §270.61. Because the emergency treatment was conducted in a gas tight vessel, there was no release to the environment. The destruction was completed on April 20, 2023, at 8:47 p.m., in a controlled and safe manner. Emergency treatment was effective, and no residue or other hazardous materials remained after treatment.

The emergency permit application, submitted via email to the NMED-HWB on April 20, 2023, is included as Attachment 1 of this letter. Please contact Patrick L. Padilla at (505) 412-0462 or by email at plpadilla@lanl.gov if you have questions.

Sincerely,

JESSICA
MOSELEY (Affiliate)
Digitally signed by JESSICA
MOSELEY (Affiliate)
Date: 2023.04.25 09:09:09
-06'00'

Jessica Moseley
Group Leader

Attachment: Emergency Permit Application

Attachment 1

Emergency Permit Application

EPC-DO-23-143
LA-UR-23-24306

<p>Email Application To: stephen.connolly@env.nm.gov dave.cobrain@env.nm.gov</p> <p>NMED-Hazardous Waste Bureau 2905 Rodeo Park Drive East, Bldg. 1 Santa Fe, New Mexico, 87505</p> <p>Phone: 505-470-8495 Fax: 505-476-6030</p> <p>https://www.env.nm.gov/hazardous-waste/</p>	<p>Emergency Permit Application</p> 	<p>For Department use only:</p> <p>Date Received:</p> <p>Reviewed/Issued by:</p> <p>Date Issued:</p> <p>ER Permit No.:</p> <p>Final Report Submitted:</p> <p>Public Notice Date:</p>
---	--	---

This application is submitted for the destruction of:

- Unstable Hazardous Waste
 Other _____

Emergency destruction of waste materials is allowed when performed in accordance with 20.4.1.900 NMAC, incorporating 40 CFR § 270.1(c)(3), under an emergency permit issued by the New Mexico Environment Department (NMED) in accordance with 20.4.1.900 NMAC incorporating 40 CFR § 270.61.

40 CFR § 270.61 Emergency Permits.

a) Notwithstanding any other provision of this part or part 124, in the event NMED finds an imminent and substantial endangerment to human health or the environment NMED may issue a temporary emergency permit:

- (1) To a non-permitted facility to allow treatment, storage, or disposal of hazardous waste or
- (2) to a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit.

(b) This emergency permit:

- (1) May be oral or written. If oral, it shall be followed in five days by a written emergency permit;
- (2) Shall not exceed 90 days in duration;
- (3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;
- (4) May be terminated by the NMED at any time without process if he or she determines that termination is appropriate to protect human health and the environment;
- (5) Shall be accompanied by a public notice published under § 124.10(b) including:
 - (i) Name and address of the office granting the emergency authorization;
 - (ii) Name and location of the permitted Hazardous Waste Management (HWM) facility;
 - (iii) A brief description of the wastes involved;
 - (iv) A brief description of the action authorized and reasons for authorizing it; and
 - (v) Duration of the emergency permit; and
- (6) Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this part and 40 CFR parts 264 and 266.

Section 1: Facility Information		EPA ID #: NM0890010515	
Facility Name: Los Alamos National Laboratory		Name of Person Requesting Permit: Patrick L. Padilla	
Facility Address (If no facility address, please provide latitude/longitude): Bikini Atoll Road, Bldg SM-30 Los Alamos, NM 87545			
E-mail Address: ppadilla@lanl.gov		Phone Number: 505-412-0462	
Section 2: Description of Emergency Situation:			
<p>The Los Alamos National Laboratory (LANL) Environmental Protection and Compliance Division (EPC-DO) personnel were notified on April 19, 2023 by the Emergency Management Operations Group (EM-OPS) personnel that an unstable 4-liter container of Isopropanol was identified at Technical Area 03, Building 2322 (TA-03-2322). On Tuesday, April 18, 2023, EM-OPS and HAZMAT were contacted to respond to TA-03-2322 for a hazmat assessment. Upon assessment and testing for peroxide concentration, the chemical container results were between 1000-2000 ppm for peroxides and was determined to have hazardous concentrations of peroxides. Hazmat also observed a visual concentration of a semi-solid substance collecting at the bottom of the bottle.</p> <p>EM-OPS has determined that there is no safe or viable path forward to dispose of the container of concern outside of destruction, given its current state and inherent properties that make it shock sensitive.</p> <p>LANL EM-OPS personnel have determined the unstable chemical is shock sensitive and poses an imminent and substantial endangerment to human health and the environment and is requesting permission from the NMED-HWB to conduct emergency treatment in accordance with 40 CFR 270.1(c)(3). Upon completion of emergency treatment, all remaining residual material, if any, will be collected and properly managed.</p>			

Section 3: Specific List of Waste to be Destroyed:

The waste description must consist of the following information:

- Container volume and description (e.g. glass bottles, metal cans, steel tanks)
- the chemical name
- the manufacturer (if available)
- the hazardous waste codes
- the quantity (liters, gallons, etc.) to be treated
- approximate age of the material
- a description of the physical state of the chemical. (e.g. solid, liquid, crystalized, etc.).

Container Size	Type	*Chemical	CAS #	Manufacturer	Waste Code	Quantity	Age	Physical State
4-Liters	Plastic	2-Propanol associated with organic peroxide	67-63-0	Sigma-Aldrich Chemical Company	D001, D003	3.5-Liters	4-5 Years	Liquid

***Provide NMED with Safety Data Sheets /Waste Profiles and pictures of chemicals to be destroyed, if possible.**

Section 4: Final Report:

Please be advised that a Final Report must be submitted to NMED within 5 days after destruction is completed and include the following elements:

1. Name, EPA ID #, and location of the permitted facility;
2. A brief description of the wastes involved;
3. A brief description of the action authorized and reasons for request;
4. Location of the destruction, and
5. A brief description of disposal of residue, if applicable.