



**MARYLAND DEPARTMENT OF THE ENVIRONMENT
LAND and MATERIALS ADMINISTRATION**

**TEMPORARY EMERGENCY PERMIT
To Treat Potentially Unstable Waste Explosive**

Permit Number: E2024-1

EPA Identification Number (site): MDR3210021355

Permit Issuance Date

Oral Approval: November 21, 2024

Written Permit: November 22, 2024

Permit Expiration Date: February 19, 2025

Issued by:

Maryland Department of the Environment (MDE), Land and Materials Administration (LMA)
1800 Washington Boulevard, Suite 610
Baltimore, MD 21230-1719

Authority:

Code of Maryland Regulations (COMAR) 26.13.07.14

Permittees:

U.S. Army Garrison Aberdeen Proving Ground (APG)
(EPA ID No. MD3210021355)
Aberdeen Proving Ground, Maryland 21005-5001, as owner; and

U.S. Army Combat Capabilities Development Command Army Research Laboratory (ARL) as operator.

I. Actions Authorized

On-site chemical treatment in the Spesutie Island area of U.S. Army Garrison Aberdeen Proving Ground (APG) of approximately 35 pounds of Trimethylolethane Trinitrate (TMETN) (CAS Number 3032-55-1) to eliminate a potential risk that the material has become explosively unstable. The material to be treated is approximately 35 pounds of TMETN that is located in a

container at Army Research Lab (ARL) Bunker 1174 on Spesutie Island at APG in Harford County, Maryland. The asset in question is currently a hazardous material/Material Potentially Presenting an Explosive Hazard (MPPEH) and tracked in ARLs explosive inventory. The TMETN was used in a research program 10 years ago and was being stored for use in future research projects. There is no other TMETN on the inventory list.

II. Background Information

The U.S. Army Combat Capabilities Development Command Army Research Laboratory (ARL) at APG has approximately 35 pounds of Trimethylolethane Trinitrate (TMETN) (CAS No. 3032-55-1) in its chemical inventory. TMETN is an explosive material. The TMETN was used by the ARL in a research program 10 years ago and was being stored for use in future research projects.

Explosives safety experts with the Army are concerned that the TMETN may have become unstable over its lengthy storage time, making the material potentially subject to detonation initiated by friction or impact, preventing the material from being shipped off-site to a treatment facility. As an alternative to open detonation of the material to render it safe, ARL has proposed employing the services of a specialized contractor with expertise in the chemical neutralization of explosive compounds (MuniRem® Environmental, LLC) to perform contained chemical treatment of the TMETN in, and adjacent to, the bunker in which the TMETN is currently being stored. The U.S. Department of Defense has previously employed the services of the contractor at other sites to chemically treat waste explosives to render them safe.

III. Description of Waste

The material that may be treated under this Emergency Permit consists of a single container holding approximately 35 pounds of Trimethylolethane Trinitrate (TMETN) (CAS Number 3032-55-1). It is an unused commercial chemical product obtained from a supplier of industrial and laboratory chemicals. The material may have become unstable over the 10 years it has been in storage, presenting a detonation risk during handling.

IV. Standards with which Compliance is Required

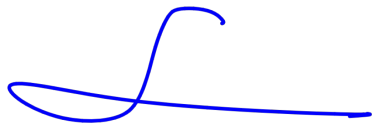
A. General Requirements

The Permittee shall comply with all applicable requirements of COMAR 26.13.01 – 26.13.07 in carrying out the action that is the subject of this permit.

B. Specific Conditions

1. The Permittee shall manage containers holding hazardous waste in accordance with the requirements of COMAR 26.13.05.09.
2. The Permittee shall maintain records of container inspections performed in accordance with COMAR 26.13.05.09E and shall make those records available to representatives of MDE upon request.
3. The Permittee shall maintain an operating record concerning actions taken in performing the hazardous waste treatment authorized by this permit, including records of amounts of waste treated and corresponding dates of treatment, analytical results used to confirm that treatment has been successful, information on characterization of any treatment residuals as to whether they meet the definition of hazardous waste, information on any circumstances that required implementation of the contingency plan required by Permit Condition IV.B.4, and any instances of non-compliance with the terms of this permit.
4. The Permittee shall:
 - a. Maintain a contingency plan that specifies the responses that will be made to emergency situations at the site, in accordance with COMAR 26.13.05.02B and C; and
 - b. Comply with the requirements of COMAR 26.13.05.02F and G concerning the duties of an emergency coordinator and emergency procedures, respectively.
5. The Permittee shall:
 - a. Provide the Solid Waste Program of the Land and Materials Administration with a schedule for the activities to be performed under this permit; and
 - b. Notify the Solid Waste Program of the Land and Materials Administration upon completion of the treatment that is the subject of this permit.
6. Following completion of the treatment that is the subject of this permit, the Permittee shall implement a closure procedure for the areas in which hazardous waste was managed under this permit to achieve the closure performance standard of COMAR 26.13.05.07B. The closure procedure shall include decontamination of contaminated areas and waste removal as necessary to achieve the closure performance standard, and verification that the closure performance standard has been met. The Permittee shall submit a report to the Solid Waste Program of the Land and Materials Administration documenting the implementation of the closure procedure and the attainment of the closure performance standard. The report shall be submitted not later than 120 days after the completion of the treatment activities that are the subject of this permit, unless the Land and Materials Administration agrees to a later deadline.
7. Within 90 days after the completion of the treatment authorized by this permit, the Permittee shall:

- a. Complete an evaluation of the chemical inventory of the ARL at APG as to whether there are additional materials that are potentially explosively unstable or that are approaching a time in storage that beyond which there is a significant risk of them becoming explosively unstable;
 - b. Submit a report to the Solid Waste Program of the Land and Materials Administration on the findings of the evaluation required by Permit Condition IV.B.7.a; and
 - c. Include a discussion in the report required by Permit Condition IV.B.7.b of whether revised procedures are needed to minimize the likelihood of materials in the chemical inventory of the ARL at APG becoming explosively unstable due to age or other factors.
8. The Permittee shall reimburse the Land and Materials Administration for the costs of publication of public notice associated with issuance of this temporary emergency permit. Invoices for these costs will be forwarded under separate cover.



Stephanie Cobb Williams, Acting Director
Land and Materials Administration

11/22/2024

Date signed