

NOTICE OF ISSUANCE OF EMERGENCY PERMIT

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT
5TH FLOOR, L & C TOWER
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243-1535**

The Tennessee Department of Environment and Conservation's (TDEC) Division of Solid Waste Management (DSWM) has issued an emergency permit, Permit No. TNTMP-10-002, to Arnold Engineering Development Center, EPA I.D. Number: TN8570024044, located at 100 Kindel Drive, Arnold Air Force Base, Coffee County, Tennessee. This emergency permit was effective as of July 13, 2010. This permit is valid for 90 days and shall terminate on October 11, 2010. The emergency permit is for temporary storage and treatment by detonation of unexploded ordnance, with a hazardous waste code D003 (reactive).

The emergency permit under Tennessee Rule 1200-01-11-.07(1)(d) was warranted because improper management of the hazardous waste could result in an imminent and substantial endangerment to human health or the environment and because no authorized hazardous waste management facility will accept the hazardous waste due to it being listed as D003. The issuance of this permit has resulted in an environmental benefit by allowing the waste to be stored and treated in a controlled manner. This permit was issued in accordance with the provisions of the original Resource Conservation and Recovery Act and 1984 Amendments and was designed to protect human health and the environment.

Copies of the emergency permit are available for public inspection during normal business hours, 8:00 a.m. to 4:30 p.m., Monday through Friday, except legal holidays, at the Columbia Environmental Field Office, 1421 Hampshire Pike, Columbia, Tennessee 38401; telephone 931-380-3371 and at DSWM's Nashville Central Office located on the 5th Floor, L & C Tower, 401 Church Street, Nashville, Tennessee 37243-1535; telephone 615-532-0780. The emergency permit is also available for public inspection at the Coffee County Lannom Memorial Public Library, 312 North Collins Street, Tullahoma, TN (931-455-2460).

For further information contact: Mr. Roger Donovan; Corrective Action Section; Division of Solid Waste Management; Tennessee Department of Environment and Conservation; 5th Floor, L & C Tower; 401 Church Street; Nashville, Tennessee 37243-1535; telephone 615-532-0864; fax 615-532-0886 or e-mail to Roger.Donovan@tn.gov.

TDEC is committed to principles of equal opportunity, equal access and affirmative action. Contact the EEO/AA Coordinator or the ADA Coordinator at 1-888-867-2757 for further information. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

Persons who wish to be added to the DSWM's mailing list should request a [Mailing List Request](#) form by calling or writing: Public Participation Officer; Division of Solid Waste Management; Tennessee Department of Environment and Conservation; 5th Floor, L & C Tower; 401 Church Street; Nashville, Tennessee 37243-1535; telephone 615-532-0798; or e-mail Solid.Waste@tn.gov.

NOTICE ISSUED: October 15, 2010

NOTICE OF ISSUANCE OF EMERGENCY PERMIT

The Tennessee Department of Environment and Conservation's (TDEC) Division of Solid Waste Management (DSWM) has issued an emergency permit, Permit No. TNTMP-09-001, to Arnold Engineering Development Center, EPA I.D. Number TN8 57 002 4044, located at 100 Kindel Drive, Arnold Air Force Base, Coffee County, Tennessee. This 90-day temporary permit was effective as of January 29, 2009 and shall terminate on April 30, 2009. The permit is only for the on-site treatment of small quantities of newly discovered lab wastes that are assigned a hazardous waste code D003 for having the characteristic of reactivity. The need for the permit arose from the discovery of a lab bottle containing 32.5 grams of crystallized picric acid. This particular waste was treated by detonating in a trench at AEDC on January 30, 2009.

The emergency permit, issued under Tennessee Rule 1200-1-11-.07(1)(d), was warranted because the improper management of the hazardous waste could result in an imminent and substantial endangerment to human health or the environment, and because no authorized hazardous waste management facility will accept the hazardous waste due to being listed as a D003 waste. The issuance of this permit has resulted in an environmental benefit by allowing the waste to be stored and treated in a controlled manner. This permit modification is issued under the authority of the Tennessee Hazardous Waste Management Act of 1977, as amended, Tennessee Code Annotated, Section 68-212-101 et seq., and Tennessee Rule Chapter 1200-1-11, Hazardous Waste Management.

Copies of the emergency permit and fact sheet are available for public inspection through April 30, 2009 during normal business hours, 8:00 a.m. to 4:30 p.m., Monday through Friday, except legal holidays, at the Columbia Environmental Field Office, 2484 Park Plus Drive, Columbia, TN 38401 (931-380-3371) and at DSWM's Nashville Central Office located on the 5th Floor, L & C Tower, 401 Church Street, Nashville, TN 37243-1535 (615-532-0780). The emergency permit is also available for public inspection at the Coffee County Lannom Memorial Public Library, 312 North Collins Street, Tullahoma, TN (931-455-2460).

For further information contact: Mr. Roger Donovan; Corrective Action Section; Division of Solid Waste Management; Tennessee Department of Environment and Conservation; 5th Floor, L & C Tower; 401 Church Street; Nashville, Tennessee 37243-1535 (615-532-0863); fax 615-532-0886 or e-mail to Roger. Donovan@state.tn.us.

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Persons who wish to be added to the DSWM's mailing list should request a Mailing List Request form by calling or writing: Public Participation Officer; Division of Solid Waste Management; Tennessee Department of Environment and Conservation; 5th Floor, L & C Tower; 401 Church Street; Nashville, Tennessee 37243-1535; telephone 615-532-0798; or e-mail Solid.Waste@state.tn.us.

NOTICE ISSUED: February , 2009

FACT SHEET

EPA ID NUMBER: TN8 57-002-4044

FACILITY NAME: Arnold Engineering Development Center

PERMIT NUMBER: TNTMP-09-001

HAZARDOUS WASTE: Small quantities of newly discovered lab bottles or other containers with waste contents that are assigned the Hazardous Waste Code D003, characteristic of reactivity.

PERMIT CONTROLS: The conditions in this Permit were based on Standards Promulgated under the Tennessee Hazardous Waste Management Act (Tennessee Code Annotated 68-212-101 et seq.) and regulations promulgated thereunder by the Tennessee Solid Waste Disposal Control Board. These regulations are found in Tennessee Rule Chapter 1200-1-11, Hazardous Waste Management. The Permit duration is limited to ninety (90) days, January 29, 2007 through April 30, 2009.

PERMIT BASIS: On January 28, 2009, while inventorying a hazardous material storage cabinet, an employee at the Chemical/Metallurgical Lab discovered a glass container of picric acid with some crystallization. It was estimated that the container had approximately 50 grams of material. MSgt Miller, AEDC Munitions Superintendent/MASO, notified the Eglin AFB EOD unit. The EOD unit advised MSgt Miller that the crystals may initiate a detonation if they are broken or crushed. They advised as long as the jar remains undisturbed in the storage locker it should be fine until an EOD unit can arrive on-site to safely transport the material to a remote location on base for detonation. The storage room where the hazardous material locker is located was secured. No personnel would be allowed to enter the area until the material was safely removed. After contacting the Tennessee Department of Environment and Conservation, AEDC was provided verbal approval for an emergency permit to treat the waste.

At 9:36 a.m. on January 30, 2009, the Dobbins EOD Team transported the waste from the lab and detonated the 32.5 grams of unstable picric acid at a location south of the old hazardous waste storage bunker area in the southwest corner of the fenced area at AEDC. They dug a small trench, placed

the picric acid container in it, and then placed 2.5 lbs of C-4 with an explosive blasting cap over it. Pre- and post-detonation samples were taken and the analytical results for metals and explosive constituents will be accompanying the final report to TDEC. Any additional small quantities of newly discovered lab wastes assigned the D003 hazardous waste code, characteristic of reactivity, may be treated on-site under the terms of the permit.

Issuance of an emergency permit under Rule 1200-1-11-.07(1)(d) to Arnold Engineering Development Center, Arnold Air Force Base, Tennessee is warranted because the transportation of this waste off-site is too dangerous and is therefore, not an option. The issuance of this permit will result in an environmental benefit by allowing the waste to be treated in a controlled manner.



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
Fifth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243 - 1535

July 13, 2010

CERTIFIED MAIL 7008 1140 0003 5723 6249
RETURN RECEIPT REQUESTED

Michael T. Panarisi, Colonel, USAF, Commander
Arnold Engineering Development Center
100 Kindel Drive, Suite A-303
Arnold AFB, TN 37389-1303

RE: Emergency Permit
Arnold Engineering and Development Center
Arnold Air Force Base, Tennessee
EPA ID Number: TN8 57 002 4044
Tennessee Permit Number: TNTMP-10-002

Dear Colonel Panarisi:

Enclosed is a copy of the emergency permit authorizing the treatment of hazardous waste at the above referenced facility. Issuance of this permit is in accordance with Tennessee Hazardous Waste Management Rule 1200-01-11-.07(7)(i)2 and it is effective as of July 13, 2010. As required under Rule 1200-01-11-.08(3)(f), please submit \$2,400.00 to complete your emergency permit application.

If you have any questions, please contact Mr. Clayton Bullington of my staff at (615) 532-0859.

Sincerely,

A handwritten signature in black ink, appearing to read "William Krispin".

William Krispin
Environmental Program Manager
Permitting Section

cc: Mr. Jon Johnston, Chief, RCRA Programs and Materials Management, EPA, Region 4
Mr. Dennis Lampley, Manager, Columbia Field Office, Division
Ms. Jamie Burroughs, Manager, Treatment, Storage and Disposal Section, Division
Mr. William Krispin, Manager, Permitting Sections, Division
Mr. Roger Donovan, Environmental Specialist 4, Corrective Action Section, Division
Mrs. Pamela F. King, 704 CES/CEA, Arnold AFB

State of Tennessee
Department of Environment
and Conservation
Division of Solid Waste Management

Hazardous Waste Management Program
Fifth Floor, L & C Tower
401 Church Street
Nashville, TN 37243-1535

EMERGENCY PERMIT

Permittee: Arnold Engineering and Development Center
Owner/Operator: United States Air Force
EPA ID Number: TN8 57 002 4044
Permit Number: TNTMP-10-001

Pursuant to the Tennessee Hazardous Waste Management Act of 1977, as amended (Tennessee Code Annotated 68-212-101 et seq.), and regulations promulgated thereunder by the Tennessee Solid Waste Disposal Control Board found at Tennessee Rule Chapter 1200-01-11, Hazardous Waste Management, an emergency permit is issued to Arnold Engineering and Development Center (hereinafter called the Permittee), to operate an emergency hazardous waste storage and treatment facility for the management of hazardous waste, located at 100 Kindel Drive, Arnold Air Force Base, Coffee County, Tennessee. Under this emergency permit, the Permittee is authorized to store and treat at this location the hazardous wastes described in the "Specific Conditions" portions of this permit. This permit does not authorize the management of any other types or amounts of hazardous waste. This permit is effective as of July 13, 2010 and is valid for 90 days. It shall terminate on October 11, 2010.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein, including the applicable regulations from Rules 1200-01-11-.01 through .10, which are referenced herein. Applicable regulations are those which are in effect on the date of issuance of the permit.

This permit is based on the premise that the information submitted by the Permittee is accurate and that the facility will be operated as specified. The Permittee's failure to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time may be grounds for termination of this permit and potential enforcement action. The Commissioner may modify this permit if information is received which was not available at the time of permit issuance and which justifies the application of different permit conditions than at the time of issuance. The Permittee must inform the Commissioner of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of July 13, 2010.



Mike Apple, Director
Division of Solid Waste Management

July 13, 2010

Date

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of this emergency permit. Compliance with this emergency permit constitutes compliance, for the purposes of enforcement, with the Tennessee Hazardous Waste Management Act of 1977, as amended (T.C.A. Title 68, Chapter 212, Part 1). Issuance of this emergency permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of other State or local laws or regulations. This emergency permit does not convey any property rights of any sort or any exclusive privilege. Compliance with the terms of this emergency permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of the Federal Resource Conservation and Recovery Act of 1976 as amended (42 U.S.C.A. 6901 et seq., commonly referred to as RCRA), Sections 104, 106(a) and 107 of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C.A 9601 et seq., commonly known as CERCLA), Sections 68-212-206(a), 207 and 215(c) of the Tennessee Hazardous Waste Management Act of 1983 (T. C. A. Title 68, Chapter 212, Part 2), or any other law providing for protection of public health or the environment.

B. SEVERABILITY

The provisions of this emergency permit are severable, and if any provision of this emergency permit or the application of any provision of this emergency permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this emergency permit shall not be affected thereby.

C. DEFINITIONS

For the purpose of this emergency permit, terms used herein shall have the same meaning as those in Tennessee Rule Chapter 1200-01-11 (Hazardous Waste Management), unless this emergency permit specifically provides otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply: The Permittee must comply with all conditions of this emergency permit. Any noncompliance with the emergency permit constitutes a violation of the Act and is grounds for enforcement action, for the emergency permit termination, revocation and reissuance, or modification; or for denial of the emergency permit.
2. Duty to Reapply: If the Permittee wishes to continue an activity regulated by this emergency permit after the expiration date of this emergency permit, the Permittee must apply to obtain a new permit in accordance with Tennessee Rule 1200-01-11-.07(1)(d).

3. Need to Halt or Reduce Activity Not a Defense: It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this emergency permit.
4. Duty to Mitigate: In the event of noncompliance with the emergency permit the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.
5. Proper Operation and Maintenance: The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this emergency permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process control, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the emergency permit.
6. Permit Actions: This emergency permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for an emergency permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any existing emergency permit condition.
7. Duty to Provide Information: The Permittee shall furnish to the Commissioner, within a reasonable time, any relevant information which the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this emergency permit, or to determine compliance with this emergency permit. The Permittee shall also furnish to the Commissioner, upon request, copies of records required to be kept by this emergency permit.
8. Access by Commissioner: The Permittee shall allow the commissioner, or any authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - (a) Enter, at reasonable times, upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this emergency permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this emergency permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the conditions of this emergency permit;

- (d) Sample or monitor, at reasonable times, for the purposes of assuring compliance with this emergency permit or as otherwise authorized by the Act, any substances or parameters at any location; and
- (e) Make photographs for the purpose of documenting items of compliance or noncompliance at waste management units or, where appropriate to protect legitimate proprietary interest, make such photographs for him.

9. Monitoring and Records

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Procedures for sampling contaminated media must be those identified in the most recent version of the USEPA, Region 4, Science and Ecosystem Support Division's (SESD) Field Branches Quality System and Technical Procedures or an equivalent method approved by the Commissioner. Laboratory methods must be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, or an equivalent method approved by the Commissioner.
- (b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement, report, or certification.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.

10. Signatory Requirement: All applications, reports, or information submitted to the Commissioner shall be signed and certified. [See Rule 1200-01-11-.07(2)(a)7 through 10)].

II. SPECIFIC CONDITIONS FOR STORAGE AND TREATMENT

A. WASTE IDENTIFICATION

The Permittee may store and treat by detonation the following waste, subject to the terms of this emergency permit:

<u>Waste Description</u>	<u>EPA Waste Code</u>
Unexploded Ordnance	D003 (Reactive)

B. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this emergency permit as required by Rule 1200-01-11-.06(9)(b).

C. COMPATIBILITY OF WASTE WITH CONTAINERS

In accordance with Rule 1200-01-11-.06(9)(c), hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.

D. MANAGEMENT OF CONTAINERS

The Permittee shall assure that it is always handled, or stored in a manner that will not cause the container to rupture or leak as required by Rule 1200-01-11-.06(9)(d) until detonation is initiated.

E. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the treatment site to minimize the possibility of a fire, unplanned explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten public health or the environment.

F. SECURITY

The Permittee shall comply with the security provisions of Rule 1200-01-11-.06(2)(e). The area is to be roped off and signs stating "Hazardous Waste Unauthorized Personnel Keep Out" or other similar legend that indicates that only authorized personnel are allowed to enter the active portion and that entry can be dangerous, must be installed. The legend must be legible from at least 25 feet.

G. GENERAL INSPECTION REQUIREMENTS

1. Schedule: The Permittee shall conduct inspections as required by Rule 1200-01-11-.06(2)(f)1.
2. Remedies: The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by Rule 1200-01-11-.06(2)(f).
3. Treatment: The Permittee shall conduct inspections daily until detonated as required by Rule 1200-01-11-.06(17).

H. PERSONNEL TRAINING

Contact with the waste will be limited to personnel adequately trained in the handling of the waste.

I. WASTE REMOVAL AND CLOSURE

1. All hazardous wastes covered by this permit must be treated to render them non-hazardous. Waste storage methods and time shall be limited as specified in the Munitions and Explosives of Concern Removal Action, Munitions Response Sites TG027 and TG028 and Soil Removal SR031 and SR032 or to the 90-day permit period, whichever is lesser.
2. The treatment site must be visually inspected after the waste is treated for any evidence of residue. Any contamination or hazardous residue shall be removed and handled in an appropriate manner.
3. If the visual inspection indicates, or there are other reasons that suggest contamination or hazardous residues may remain, the Permittee must perform sampling of the treatment site to confirm that hazardous constituents were not released to the environment as a result of the treatment.
4. If sampling shows that there is residual contamination remaining in the soils at the treatment site, the Permittee is required to remove contaminated soils to below applicable clean-up standards.

J. TREATMENT

The Waste, as listed in subsection II.A, shall be rendered non-hazardous by detonation in an appropriately located place.

H. REPORTING REQUIREMENTS

Upon completion of treatment of the waste listed in II.A, the Permittee will submit to the Commissioner within 60 days a report summarizing the treatment of the wastes and any soil analytical data from the treatment unit.