



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
CUYAHOGA COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 13-04589**

**Fac ID: 1318008447**

**DATE: 2/23/2006**

Laumer Crematory and Services, LLC  
Alan Laumer  
27584 Marquette Boulevard  
North Olmsted, OH 44070

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

CLAA



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**Permit To Install  
Terms and Conditions**

**Issue Date: 2/23/2006  
Effective Date: 2/23/2006**

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**FINAL PERMIT TO INSTALL 13-04589**

Application Number: 13-04589  
Facility ID: 1318008447  
Permit Fee: **\$500**  
Name of Facility: Laumer Crematory and Services, LLC  
Person to Contact: Alan Laumer  
Address: 27584 Marquette Boulevard  
North Olmsted, OH 44070

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4100 Broadway Avenue  
Cleveland, Ohio**

Description of proposed emissions unit(s):  
**IE43 PPII UltraCremation Retort and Stack -- N001.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

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The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

#### **11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

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**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	.66
NO <sub>x</sub>	1.88

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**Laumer Crematory and Services, LLC**  
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Applicable Emissions  
Limitations/Control Measures

PE: 0.66 ton per year

Control requirement - see A.2.a

Visible particulate emissions from emissions unit N001 shall not exceed 5% opacity, as a six-minute average, except for six consecutive minutes in any continuous 60-minute period during which the opacity shall not exceed 10%, as a six-minute average.

The requirements of this rule include compliance with OAC Rules 3745-17-09(B) and 3745-17-09(C).

0.43 lbs/hour of NO<sub>x</sub> emissions  
and  
1.88 tons/year of NO<sub>x</sub>

The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05 (A)(3).

Particulate emissions shall not exceed 0.10 pound per 100 pounds of material charged.

See A.2.c

## **2. Additional Terms and Conditions**

- 2.a** The "Best Available Technology" (BAT) control requirement for emission unit N001 has been determined to be the use of an afterburner.
- 2.b** The human cremation multiple chamber incinerator, including all associated equipment and grounds, shall be designed, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
- 2.c** This incinerator and all associated equipment and grounds shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

## **B. Operational Restrictions**

- 1. The human cremation multiple chamber incinerator shall be installed, operated, and maintained in accordance with the manufacturer's specifications. The afterburner shall be designed to have a residence time of not less than one second at a minimum of 1400 degrees Fahrenheit, as measured by the afterburner indicator, before ignition of the burner to start the cremation.
  - a. during startup-the temperature controller for the afterburner shall be set at a minimum of 1400 degrees Fahrenheit; and
  - b. for the first cremation of the day, or for a subsequent cremation after the unit has entered or completed the cool-down state, the afterburner temperature must reach a minimum of 1400 degrees Fahrenheit, as measured by the afterburner indicator, before ignition of the burner to start the cremation.
- 2. The incinerator shall not be operated unless the temperature monitoring devices are operating properly.
- 3. The permittee shall not charge the incinerator with "infectious waste" as defined in OAC rule 3745-75-01 (C) (5).
- 4. To the extent possible, non-combustible material shall be removed from the material charged to this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall install, operate, and properly maintain a temperature gauge which monitors the temperature of the afterburner.
2. The permittee shall maintain daily records of the following information for emissions unit N001:
  - a. for each cremation, the temperature of the afterburner must be recorded just prior to main burner ignition

#### **D. Reporting Requirements**

1. In accordance with the general terms and conditions of this permit, the permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (CDAQ) that provides the following information:
  - a. for each day during which the afterburner exhaust gas temperature drop below the minimum temperature limitation:
    - i. the date of the excursion;
    - ii. the time interval during which each excursion occurred; and
    - iii. the temperature value during each excursion.

#### **E. Testing Requirements**

1. Compliance with the emission limits in Section A.1 of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation:

Visible particulate emissions shall not exceed 5%, as a six-minute average, except for six consecutive minutes in any continuous 60-minute period during which the opacity shall not exceed 10%, as a six-minute average.

Applicable Compliance Method:

**Laumer Crematory and Services, LLC**  
**PTI Application: 12-04599**  
**Issue:**

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**Emissions Unit ID: N001**

Compliance shall be determined using USEPA Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC Rule 3745-17-03(B)(1).

b. Emission Limitation:

0.10 lb particulate emissions (PE) per 100 pounds of material charged

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be determined through stack testing per OAC Rule 3745-17-03(B)(8) using Methods 1-5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.66 ton PE per year

Applicable Compliance Method:

The annual limitation was determined using the following equation at the maximum charge weight of 150 lb/hr and 8,760 hr/yr:

$$(0.10 \text{ lb PE}/100 \text{ lbs}) \times (150 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lb}) = 0.66 \text{ TPY PE}$$

Therefore, provided compliance is maintained with the short term emission limit (0.10 lb PE/100 lbs charged), compliance will be assumed with the annual emission limitation.

d. Emission Limitation:

0.43 lbs/hour of NO<sub>x</sub> emissions

Applicable Compliance Method

Compliance with the hourly NO<sub>x</sub> emission limitation shall be determined by summing the emission contribution for both incineration and natural gas combustion. First, multiply the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 2.1, table 2.1-12 (3.0 lbs NO<sub>x</sub>/ton material charged), by the capacity (150 tons charged/hr) and divide by 2000 lbs/ton. Second, multiply the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4, table 1.4-1 ((100 lbs NO<sub>x</sub>/mmcf) / (1,020 mmBtu/106 scf) = 0.098 lb NO<sub>x</sub>/mmBtu), by the mmBtu (2.0 mmBtu/hr). Then sum the two answers together to determine the total pound/hour emission rate.

e. Emission Limitation:

1.88 tons/year of NO<sub>x</sub> emissions

Applicable Compliance Method

The tons/year limitations were developed by multiplying the pound/hour by 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

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**Laum**

**PTI A**

**Issued: 2/23/2006**

Emissions Unit ID: **N001**

**F. Miscellaneous Requirements**

None.