

Facility ID: 1318048638 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

[Go to Part II for Emissions Unit N001](#)  
[Go to Part II for Emissions Unit N002](#)

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Facility ID: 1318048638 Emissions Unit ID: N001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Multiple chamber incinerator for cremation of human remains.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	(PTI 13-04696 issued on 1/18/2007)	
	OAC rule 3745-17-09(B)	Particulate emissions (PE) shall not exceed 0.10 pound per 100 pounds of material charged.
	OAC rule 3745-17-09(C)	The human cremation multiple chamber incinerator, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
	ORC 3704.03(T)(4)	See A.2.a and A.2.b below.

**2. Additional Terms and Conditions**

- (a) The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx, SOx, CO, and VOC from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.  
 The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.10 pound PE per 100 pounds of material charged under OAC rule 3745-17-09(B).  
 The stack shall be designed to minimize any building down wash impacts from emissions and/or odors on employees and nearby residences. The design shall meet good engineering practices so as not to result in excessive concentrations of air contaminants and/or odors in locations at, near or, in such a configuration, as to affect any air intake for heating and cooling of buildings or at operable windows or doors.

**B. Operational Restrictions**

1. The crematory shall not be charged until the temperature of the secondary combustion chamber reaches 1600 degrees Fahrenheit. The secondary chamber shall allow for a 1.0 second (or more) retention time at 1600 degrees Fahrenheit.
2. During a cremation burn, the temperature of the secondary combustion chamber shall be maintained at a minimum of 1600 degrees Fahrenheit.
3. The permittee shall not charge the incinerator with "infectious waste" as defined in OAC rule 3745-75-01(C)(2).
4. The human cremation multiple chamber incinerator, including all associated equipment and monitoring equipment, shall be installed, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).
5. The permittee shall burn only natural gas in this emissions unit.
6. The permittee shall only burn human remains and associated paper/wood products waste in this emissions unit. The paper products must be free from all plastics and all other foreign materials, and the wood products must not be preservative-treated wood and also must not contain any foreign materials. No plastic bags or other types of plastic materials shall be burned, except for containers containing no more than 0.5 percent by weight

of chlorinated plastics that have been used as a container for the remains being cremated.

7. The crematorium shall not be operated unless the temperature monitoring devices are operating properly.
  8. The stack shall be designed to minimize any building down wash impacts from emissions and/or odors on employees and nearby residences. The design shall meet good engineering practices so as not to result in excessive concentrations of air contaminants and/or odors in locations at, near or, in such a configuration, as to affect any air intake for heating and cooling of buildings or at operable windows or doors.
  9. This crematorium shall be operated only by properly trained personnel. A copy of all the training records for each operator shall be maintained on file as long as that operator is employed for that job and shall be immediately available to the Cleveland Division of Air Quality (CDAQ) upon request.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall operate and maintain a continuous temperature monitor which measures the combustion temperature within the secondary combustion chamber when the emissions unit is in operation. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturers recommendations, instructions, and applicable operating manual(s). The permittee shall collect and record for each cremation, the temperature of the secondary chamber.
  2. The permittee shall inspect this incinerator semi-annually using preventive maintenance procedures recommended by the equipment manufacturer. Each inspection shall include a written log which documents the findings of the inspection and identifies any needed repairs to the unit. If repairs are needed, the incinerator shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit.
  3. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- D. Reporting Requirements**
1. The permittee shall submit temperature deviation (excursion) reports that identify all periods of time during which the secondary combustion chamber exhaust gas temperatures did not comply with the temperature limitation specified above, including:
    - a. the date of the excursion;
    - b. the time interval over which the excursion occurred;
    - c. the temperature values during the excursion;
    - d. the cause(s) for the excursion; and
    - e. the corrective action which has been or will be taken to prevent similar excursions in the future.This report shall be submitted to the CDAQ within thirty (30) days of the excursion.
  2. The permittee shall submit deviation (excursion) reports to the CDAQ that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- E. Testing Requirements**
1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 % opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method  
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
    - b. Emission Limitation  
PE shall not exceed 0.10 pound per 100 pounds of material charged.Applicable Compliance Method:

If required by the CDAQ or Ohio EPA, the permittee shall demonstrate compliance by testing in accordance with Methods 1-5 of CFR Part 60, Appendix A.
- F. Miscellaneous Requirements**
1. None

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Facility ID: 1318048638 Emissions Unit ID: N002 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Multiple chamber incinerator for cremation of human remains.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	(PTI 13-04696 issued on 1/18/2007)	
	OAC rule 3745-17-09(B)	Particulate emissions (PE) shall not exceed 0.10 pound per 100 pounds of material charged.
	OAC rule 3745-17-09(C)	The human cremation multiple chamber incinerator, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
	ORC 3704.03(T)(4)	See A.2.a and A.2.b below.

**2. Additional Terms and Conditions**

- (a) The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx, SOx, CO, and VOC from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.  
 The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.10 pound PE per 100 pounds of material charged under OAC rule 3745-17-09(B).  
 The stack shall be designed to minimize any building down wash impacts from emissions and/or odors on employees and nearby residences. The design shall meet good engineering practices so as not to result in excessive concentrations of air contaminants and/or odors in locations at, near or, in such a configuration, as to affect any air intake for heating and cooling of buildings or at operable windows or doors.

**B. Operational Restrictions**

1. The crematory shall not be charged until the temperature of the secondary combustion chamber reaches 1600 degrees Fahrenheit. The secondary chamber shall allow for a 1.0 second (or more) retention time at 1600 degrees Fahrenheit.
2. During a cremation burn, the temperature of the secondary combustion chamber shall be maintained at a minimum of 1600 degrees Fahrenheit.
3. The permittee shall not charge the incinerator with "infectious waste" as defined in OAC rule 3745-75-01(C)(2).
4. The human cremation multiple chamber incinerator, including all associated equipment and monitoring equipment, shall be installed, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).
5. The permittee shall burn only natural gas in this emissions unit.
6. The permittee shall only burn human remains and associated paper/wood products waste in this emissions unit. The paper products must be free from all plastics and all other foreign materials, and the wood products must not be preservative-treated wood and also must not contain any foreign materials. No plastic bags or other types of plastic materials shall be burned, except for containers containing no more than 0.5 percent by weight of chlorinated plastics that have been used as a container for the remains being cremated.
7. The crematorium shall not be operated unless the temperature monitoring devices are operating properly.
8. The stack shall be designed to minimize any building down wash impacts from emissions and/or odors on employees and nearby residences. The design shall meet good engineering practices so as not to result in excessive concentrations of air contaminants and/or odors in locations at, near or, in such a configuration, as to affect any air intake for heating and cooling of buildings or at operable windows or doors.
9. This crematorium shall be operated only by properly trained personnel. A copy of all the training records for each operator shall be maintained on file as long as that operator is employed for that job and shall be immediately available to the Cleveland Division of Air Quality (CDAQ) upon request.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor which measures the combustion

temperature within the secondary combustion chamber when the emissions unit is in operation. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturers recommendations, instructions, and applicable operating manual(s). The permittee shall collect and record for each cremation, the temperature of the secondary chamber.

2. The permittee shall inspect this incinerator semi-annually using preventive maintenance procedures recommended by the equipment manufacturer. Each inspection shall include a written log which documents the findings of the inspection and identifies any needed repairs to the unit. If repairs are needed, the incinerator shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit.
3. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

**D. Reporting Requirements**

1. The permittee shall submit temperature deviation (excursion) reports that identify all periods of time during which the secondary combustion chamber exhaust gas temperatures did not comply with the temperature limitation specified above, including:
  - a. the date of the excursion;
  - b. the time interval over which the excursion occurred;
  - c. the temperature values during the excursion;
  - d. the cause(s) for the excursion; and
  - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

This report shall be submitted to the CDAQ within thirty (30) days of the excursion.

2. The permittee shall submit deviation (excursion) reports to the CDAQ that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 % opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation

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

Applicable Compliance Method:

If required by the CDAQ or Ohio EPA, the permittee shall demonstrate compliance by testing in accordance with Methods 1-5 of CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

1. None