



11/26/2014

DANIEL H BECKER
Western Reserve Cremation Svc DBA Angel's Rest Pet Crem
26 SEXTON ST
STRUTHERS, OH 44471

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0250090823
Permit Number: P0118089
Permit Type: Renewal
County: Mahoning

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for**

**Western Reserve Cremation Svc DBA Angel's Rest Pet
Crem**

Facility ID:	0250090823
Permit Number:	P0118089
Permit Type:	Renewal
Issued:	11/26/2014
Effective:	11/26/2014
Expiration:	10/21/2024



**Division of Air Pollution Control
Permit-to-Install and Operate**

for

Western Reserve Cremation Svc DBA Angel's Rest Pet Crem

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Authorization

Facility ID: 0250090823
Application Number(s): A0052285
Permit Number: P0118089
Permit Description: PTIO renewal for three natural gas-fired human and pet crematory incinerators.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 11/26/2014
Effective Date: 11/26/2014
Expiration Date: 10/21/2024
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Western Reserve Cremation Svc DBA Angel's Rest Pet Crem
26 SEXTON ST
Struthers, OH 44471

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

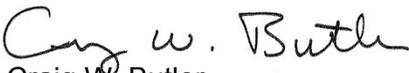
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0118089

Permit Description: PTIO renewal for three natural gas-fired human and pet crematory incinerators.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

N001

Animal Crematory Incinerator #1

P0085744

Not Applicable

Emissions Unit ID:

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

N003

Human Crematory Incinerator #1

P0085745

Not Applicable

Emissions Unit ID:

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

N005

Human Crematory Incinerator #2

02-21974

Not Applicable



Final Permit-to-Install and Operate
Western Reserve Cremation Svc DBA Angel's Rest Pet Crem
Permit Number: P0118089
Facility ID: 0250090823
Effective Date: 11/26/2014

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
Western Reserve Cremation Svc DBA Angel's Rest Pet Crem
Permit Number: P0118089
Facility ID: 0250090823
Effective Date: 11/26/2014

B. Facility-Wide Terms and Conditions



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



Final Permit-to-Install and Operate
Western Reserve Cremation Svc DBA Angel's Rest Pet Crem
Permit Number: P0118089
Facility ID: 0250090823
Effective Date: 11/26/2014

C. Emissions Unit Terms and Conditions



1. N001, Animal Crematory Incinerator #1

Operations, Property and/or Equipment Description:

Crawford Animal Crematory Model C-1000 rated at 150 lbs/hr.

- a) 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.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-2588)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 5% opacity except for six-minutes during any continuous sixty-minute period during which the opacity shall not exceed 10%.
b.	OAC rule 3745-17-09(B)	PE shall not exceed 0.10 pound per 100 pounds of material charged.
c.	OAC rule 3745-17-09(C)	The incinerator and all associated equipment and grounds shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
d.	OAC rule 3745-17-07(A)	The visible PE limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(E)	See b)(2)a.



- (2) Additional Terms and Conditions
 - a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C) because the process weight rate of this emissions unit is equal to or less than 1000 pounds per hour.
- c) Operational Restrictions
 - (1) The permittee shall use only natural gas as fuel in this emissions unit.
 - (2) The average hourly charge rate shall not exceed 150 pounds of material per hour based on the time needed to complete cremation of the charge amount.
 - (3) This cremation unit must be equipped with an afterburner, achieving at least 1.0 seconds of retention time in the secondary chamber that shall be used at all times the cremation unit is in operation.
 - (4) The permittee shall install, operate, and properly maintain a temperature gauge which continuously monitors the temperature of the afterburner exit gas. The cremation unit shall not be operated unless the temperature monitoring device is operating properly.
 - (5) This cremation unit shall be installed, operated, and maintained in accordance with the manufacturer's specifications. This includes but is not limited to:
 - a. During start-up, the temperature controller for the afterburner exit gas shall be set to at least the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit.
 - b. For the first cremation of the day, or for subsequent cremations after the unit has entered or completed the cool-down state, the afterburner exit gas temperature must reach the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit, as measured by the afterburner exit gas indicator, before ignition of the primary burner to start the cremation; and
 - c. The afterburner exit gas temperature shall be maintained at or above the minimum temperature noted above during the entire cremation cycle except for the brief period of time when the charge is inserted into the primary chamber allowing excess air to enter the cremation unit.
 - (6) Ashes shall be removed from the primary chamber on a daily basis.
 - (7) To the extent possible, non-combustible material (except for personal items requested to be included by the family) shall be removed from the material charged to this cremation unit.
 - (8) This cremation unit shall not be used to dispose of any "medical or infectious waste" as defined in OAC rule 3745-75-01.
 - (9) The crematory stack shall be designed to minimize any building downwash impacts from emissions and/or odors on employees and nearby residences, businesses, or public or private spaces. 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.

- (10) The incinerator shall be operated only by adequately trained personnel.
- (11) The smoke alarm shall be operated at all times the incinerator is in operation and shall be maintained in accordance with the recommendations of the manufacturer.
- (12) The opacity monitor shall be operated at all times the incinerator is in operation and shall be maintained in accordance with the recommendations of the manufacturer.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall perform daily checks, when the cremation unit is in operation and when the weather conditions allow, for any visible particulate emissions from the afterburner stack serving this cremation unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any observed visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
- (2) The permittee shall maintain daily records of the following information for this cremation unit:
 - a. for each cremation, record all periods of time during which the temperature of the afterburner exit gas dropped below 1600 degrees Fahrenheit, except as noted in c)(5)c. above;
 - b. the weight of each charge;
 - c. the amount of time needed to complete cremation for each charge; and
 - d. a log of the time and date the ash is removed from the cremation unit.
- (3) The permittee shall inspect the cremation unit using preventative maintenance procedures recommended by the equipment manufacturer. The inspections should be done at least semi-annually (more often if recommended by the equipment manufacturer). Each inspection shall include a written log which documents the findings of the inspection and identifies any needed cleaning or repairs to both the primary burner and afterburner chambers. If cleaning or repairs are needed, the cremation unit shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit.
- (4) Copies of contractor's invoices of maintenance and repairs shall be maintained on site for no less than five (5) years.



- (5) 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 cremation unit.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. The PER shall include identification of the following:
 - a. the day(s) and time(s) during which the afterburner temperature dropped below 1600 degrees Fahrenheit during operation of the cremation unit, the actual temperature values during the excursion, and the corrective actions that were taken to achieve proper operating temperature;
 - b. the day(s) during which visible particulate emissions were observed from the afterburner stack and the corrective action(s) taken to eliminate the visible emissions; and
 - c. the day(s) during which a fuel other than natural gas was burned in the cremation unit, including the type and quantity of fuel used.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
PE shall not exceed 0.10 pound per 100 pounds of material charged.

Applicable Compliance Method:

If required, compliance with the hourly emissions limitation shall be demonstrated by performing an emission test in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(8).



b. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 5% opacity except for six-minutes during any continuous sixty-minute period during which the opacity shall not exceed 10%.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) In accordance with ORC section 4717.13(A)(9), the permittee shall not cremate animals in a cremation chamber in which dead human bodies or body parts are cremated and the permittee shall not cremate dead human bodies or human body parts in a cremation chamber in which dead animals are cremated.



2. N003, Human Crematory Incinerator #1

Operations, Property and/or Equipment Description:

B&L Systems Human Crematory Phoenix II Model rated at 150 lbs/hr.

- a) 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.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-8064)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.
b.	OAC rule 3745-17-09(B)	PE shall not exceed 0.10 pound per 100 pounds of material charged.
c.	OAC rule 3745-17-09(C)	The incinerator and all associated equipment and grounds shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
d.	OAC rule 3745-17-07(A)	The visible PE limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(E)	See b)(2)a.



- (2) Additional Terms and Conditions
 - a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C) because the process weight rate of this emissions unit is equal to or less than 1000 pounds per hour.
- c) Operational Restrictions
 - (1) The permittee shall use only natural gas as fuel in this emissions unit.
 - (2) The average hourly charge rate shall not exceed 150 pounds of material per hour based on the time needed to complete cremation of the charge amount.
 - (3) This cremation unit must be equipped with an afterburner, achieving at least 1.0 seconds of retention time in the secondary chamber that shall be used at all times the cremation unit is in operation.
 - (4) The permittee shall install, operate, and properly maintain a temperature gauge which continuously monitors the temperature of the afterburner exit gas. The cremation unit shall not be operated unless the temperature monitoring device is operating properly.
 - (5) This cremation unit shall be installed, operated, and maintained in accordance with the manufacturer's specifications. This includes but is not limited to:
 - a. During start-up, the temperature controller for the afterburner exit gas shall be set to at least the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit.
 - b. For the first cremation of the day, or for subsequent cremations after the unit has entered or completed the cool-down state, the afterburner exit gas temperature must reach the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit, as measured by the afterburner exit gas indicator, before ignition of the primary burner to start the cremation; and
 - c. The afterburner exit gas temperature shall be maintained at or above the minimum temperature noted above during the entire cremation cycle except for the brief period of time when the charge is inserted into the primary chamber allowing excess air to enter the cremation unit.
 - (6) Ashes shall be removed from the primary chamber on a daily basis.
 - (7) To the extent possible, non-combustible material (except for personal items requested to be included by the family) shall be removed from the material charged to this cremation unit.
 - (8) This cremation unit shall not be used to dispose of any "medical or infectious waste" as defined in OAC rule 3745-75-01.
 - (9) The crematory stack shall be designed to minimize any building downwash impacts from emissions and/or odors on employees and nearby residences, businesses, or public or private spaces. 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.

- (10) The incinerator shall be operated only by adequately trained personnel.
 - (11) The heat timer model MLS-A smoke alarm shall be operated at all times the incinerator is in operation and shall be maintained in accordance with the recommendations of the manufacturer.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall perform daily checks, when the cremation unit is in operation and when the weather conditions allow, for any visible particulate emissions from the afterburner stack serving this cremation unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any observed visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
 - (2) The permittee shall maintain daily records of the following information for this cremation unit:
 - a. for each cremation, record all periods of time during which the temperature of the afterburner exit gas dropped below 1600 degrees Fahrenheit, except as noted in c)(5)c. above;
 - b. the weight of each charge;
 - c. the amount of time needed to complete cremation for each charge; and
 - d. a log of the time and date the ash is removed from the cremation unit.
 - (3) The permittee shall inspect the cremation unit using preventative maintenance procedures recommended by the equipment manufacturer. The inspections should be done at least semi-annually (more often if recommended by the equipment manufacturer). Each inspection shall include a written log which documents the findings of the inspection and identifies any needed cleaning or repairs to both the primary burner and afterburner chambers. If cleaning or repairs are needed, the cremation unit shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit.
 - (4) Copies of contractor's invoices of maintenance and repairs shall be maintained on site for no less than five (5) years.



- (5) 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 cremation unit.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. The PER shall include identification of the following:
 - a. the day(s) and time(s) during which the afterburner temperature dropped below 1600 degrees Fahrenheit during operation of the cremation unit, the actual temperature values during the excursion, and the corrective actions that were taken to achieve proper operating temperature;
 - b. the day(s) during which visible particulate emissions were observed from the afterburner stack and the corrective action(s) taken to eliminate the visible emissions; and
 - c. the day(s) during which a fuel other than natural gas was burned in the cremation unit, including the type and quantity of fuel used.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with the hourly emissions limitation shall be demonstrated by performing an emission test in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(8).
 - b. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 5%



opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) In accordance with ORC section 4717.13(A)(9), the permittee shall not cremate animals in a cremation chamber in which dead human bodies or body parts are cremated and the permittee shall not cremate dead human bodies or human body parts in a cremation chamber in which dead animals are cremated.



3. N005, Human Crematory Incinerator #2

Operations, Property and/or Equipment Description:

FT III Human Crematory rated at 300 lbs/hr.

- a) 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.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-21974)	Particulate emissions (PE) emissions shall not exceed 0.3 lb/hr and 1.31 tons per year. Carbon monoxide (CO) emissions shall not exceed 1.5 lbs/hr and 6.57 tons per year. Nitrogen oxides (NO _x) emissions shall not exceed 0.45 lb/hr and 1.97 tons per year. Organic compounds (OC) emissions shall not exceed 0.45 lb/hr and 1.97 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 0.38 lb/hr and 1.64 tons per year. Visible PE from the stack serving this



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emissions unit shall not exceed 5% opacity except for six-minutes during any continuous sixty-minute period during which the opacity shall not exceed 10%.
c.	OAC rule 3745-17-09(B)	PE shall not exceed 0.10 pound per 100 pounds of material charged.
d.	OAC rule 3745-17-09(C)	The incinerator and all associated equipment and grounds shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
e.	OAC rule 3745-17-07(A)	The visible PE limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06(E)	See b)(2)c.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C) because the process weight rate of this emissions unit is equal to or less than 1000 pounds per hour.

c) Operational Restrictions

- (1) The permittee shall use only natural gas as fuel in this emissions unit.
- (2) The average hourly charge rate shall not exceed 300 pounds of material per hour based on the time needed to complete cremation of the charge amount.
- (3) This cremation unit must be equipped with an afterburner, achieving at least 2.0 seconds of retention time in the secondary chamber that shall be used at all times the cremation unit is in operation.
- (4) The permittee shall install, operate, and properly maintain a temperature gauge which continuously monitors the temperature of the afterburner exit gas. The cremation unit shall not be operated unless the temperature monitoring device is operating properly.
- (5) This cremation unit shall be installed, operated, and maintained in accordance with the manufacturer's specifications. This includes but is not limited to:
 - a. During start-up, the temperature controller for the afterburner exit gas shall be set to at least the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit.



- b. For the first cremation of the day, or for subsequent cremations after the unit has entered or completed the cool-down state, the afterburner exit gas temperature must reach the minimum temperature recommended by the manufacturer, but not less than 1600 degrees Fahrenheit, as measured by the afterburner exit gas indicator, before ignition of the primary burner to start the cremation; and
 - c. The afterburner exit gas temperature shall be maintained at or above the minimum temperature noted above during the entire cremation cycle except for the brief period of time when the charge is inserted into the primary chamber allowing excess air to enter the cremation unit.
- (6) Ashes shall be removed from the primary chamber on a daily basis.
 - (7) To the extent possible, non-combustible material (except for personal items requested to be included by the family) shall be removed from the material charged to this cremation unit.
 - (8) This cremation unit shall not be used to dispose of any "medical or infectious waste" as defined in OAC rule 3745-75-01.
 - (9) The crematory stack shall be designed to minimize any building downwash impacts from emissions and/or odors on employees and nearby residences, businesses, or public or private spaces. 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.
 - (10) The incinerator shall be operated only by adequately trained personnel.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall perform daily checks, when the cremation unit is in operation and when the weather conditions allow, for any visible particulate emissions from the afterburner stack serving this cremation unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any observed visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
 - (2) The permittee shall maintain daily records of the following information for this cremation unit:
 - a. for each cremation, record all periods of time during which the temperature of the afterburner exit gas dropped below 1600 degrees Fahrenheit, except as noted in c)(5)c. above;
 - b. the weight of each charge;



- c. the amount of time needed to complete cremation for each charge; and
 - d. a log of the time and date the ash is removed from the cremation unit.
- (3) The permittee shall inspect the cremation unit using preventative maintenance procedures recommended by the equipment manufacturer. The inspections should be done at least semi-annually (more often if recommended by the equipment manufacturer). Each inspection shall include a written log which documents the findings of the inspection and identifies any needed cleaning or repairs to both the primary burner and afterburner chambers. If cleaning or repairs are needed, the cremation unit shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit.
- (4) Copies of contractor's invoices of maintenance and repairs shall be maintained on site for no less than five (5) years.
- (5) 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 cremation unit.
- e) Reporting Requirements
- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
 - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (3) The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. The PER shall include identification of the following:
 - a. the day(s) and time(s) during which the afterburner temperature dropped below 1600 degrees Fahrenheit during operation of the cremation unit, the actual temperature values during the excursion, and the corrective actions that were taken to achieve proper operating temperature;
 - b. the day(s) during which visible particulate emissions were observed from the afterburner stack and the corrective action(s) taken to eliminate the visible emissions; and
 - c. the day(s) during which a fuel other than natural gas was burned in the cremation unit, including the type and quantity of fuel used.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with the hourly emissions limitation shall be demonstrated by performing an emission test in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(8).

b. Emissions Limitation:

PE emissions shall not exceed 0.3 lb/hr and 1.31 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$\begin{aligned} \text{PE (lb/hr)} &= 0.10 \text{ lbs/100 lbs charged} \times 300 \text{ lbs/hr} \\ \text{PE (tons/year)} &= \text{PE (lb/hr)} \times 8760 \text{ hr/year} \times 1/2000 \text{ lb/ton} \end{aligned}$$

If required, compliance with the hourly emissions limitation shall be demonstrated by performing an emission test in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(8).

c. Emissions Limitation:

CO emissions shall not exceed 1.5 lbs/hr and 6.57 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$\begin{aligned} \text{CO (lb/hr)} &= 10 \text{ lbs/ton} \times 300 \text{ lbs/hr} \times 1/2000 \text{ lb/ton} \\ \text{CO (tons/year)} &= \text{CO (lb/hr)} \times 8760 \text{ hr/year} \times 1/2000 \text{ lb/ton} \end{aligned}$$

The CO emission factor of 10.0 pounds per ton was taken from AP-42, Table 2.1-12.

If required, compliance with the hourly emissions limitation shall be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and either 10 or 10B, as appropriate.



d. Emissions Limitation:

NO_x emissions shall not exceed 0.45 lb/hr and 1.97 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$\begin{aligned}\text{NO}_x \text{ (lb/hr)} &= 3 \text{ lbs/ton} \times 300 \text{ lbs/hr} \times 1/2000 \text{ lb/ton} \\ \text{NO}_x \text{ (tons/year)} &= \text{NO}_x \text{ (lb/hr)} \times 8760 \text{ hr/year} \times 1/2000 \text{ lb/ton}\end{aligned}$$

The NO_x emission factor of 3.0 pounds per ton was taken from AP-42, Table 2.1-12.

If required, compliance with the hourly emissions limitation shall be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

e. Emissions Limitation:

OC emissions shall not exceed 0.45 lb/hr and 1.97 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$\begin{aligned}\text{OC (lb/hr)} &= 3 \text{ lbs/ton} \times 300 \text{ lbs/hr} \times 1/2000 \text{ lb/ton} \\ \text{OC (tons/year)} &= \text{OC (lb/hr)} \times 8760 \text{ hr/year} \times 1/2000 \text{ lb/ton}\end{aligned}$$

The OC emission factor of 3.0 pounds per ton was taken from AP-42, Table 2.1-12.

If required, compliance with the hourly emissions limitation shall be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and either 25 or 25A, as appropriate.

f. Emissions Limitation:

SO₂ emissions shall not exceed 0.38 lb/hr and 1.64 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$\begin{aligned}\text{SO}_2 \text{ (lb/hr)} &= 2.5 \text{ lbs/ton} \times 300 \text{ lbs/hr} \times 1/2000 \text{ lb/ton} \\ \text{SO}_2 \text{ (tons/year)} &= \text{SO}_2 \text{ (lb/hr)} \times 8760 \text{ hr/year} \times 1/2000 \text{ lb/ton}\end{aligned}$$

The SO₂ emission factor of 2.5 pounds per ton was taken from AP-42, Table 2.1-12.



If required, compliance with the hourly emissions limitation shall be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 5% opacity except for six-minutes during any continuous sixty-minute period during which the opacity shall not exceed 10%.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) In accordance with ORC section 4717.13(A)(9), the permittee shall not cremate animals in a cremation chamber in which dead human bodies or body parts are cremated and the permittee shall not cremate dead human bodies or human body parts in a cremation chamber in which dead animals are cremated.