Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

6/2/2011

Diane Smith
GREAT LAKES CREMATORY
4701 HINCKLEY INDUSTRIAL PARKWAY
CLEVELAND, OH 44109

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1318007448
Permit Number: P0108009
Permit Type: Initial Installation
County: Cuyahoga

Dear Permit Holder:

Enclosed please find a final 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page,www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: CDAQ

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
GREAT LAKES CREMATORY

Facility ID:	1318007448
Permit Number:	P0108009
Permit Type:	Initial Installation
Issued:	6/2/2011
Effective:	6/2/2011
Expiration:	8/26/2018

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
GREAT LAKES CREMATORY

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Authorization

Facility ID: 1318007448
Application Number(s): A0041737
Permit Number: P0108009
Permit Description: This is an initial installation PTIO for a human cremation unit (N005) rated at 200 lbs/hr. This new cremation unit will be replacing N001.
Permit Type: Initial Installation
Permit Fee: $500.00
Issue Date: 6/2/2011
Effective Date: 6/2/2011
Expiration Date: 8/26/2018
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

GREAT LAKES CREMATORY
4701 HINCKLEY INDUSTRIAL PARKWAY
CLEVELAND, OH 44109

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108009
Permit Description: This is an initial installation PTIO for a human cremation unit (N005) rated at 200 lbs/hr. This new cremation unit will be replacing N001.

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

Emissions Unit ID:	**N005**
Company Equipment ID:	N005
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement.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 takenby 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 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 Cleveland Division of Air Quality 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[1] 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 emissions 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.

[1]Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

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.

C. Emissions Unit Terms and Conditions

1. N005

Operations, Property and/or Equipment Description:

Human Retort - Matthews Super Power Pak III (IE43-SPIII) - rated at 200 lbs/hr average and a total burner maximum rating of 1.9 mmBtu/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) as effective 11/30/01.	Particulate emissions (PE) shall not exceed 0.94 ton/year (tpy). SO_2 emissions shall not exceed 0.25 lb/hr and 1.1 tpy. NOx emissions shall not exceed 0.49 lb/hr and 2.13 tpy. VOC emissions shall not exceed 0.32 lb/hr and 1.4 tpy. CO emissions shall not exceed 1.16 lbs/hr and 5.06 tpy. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3) as effective 12/10/06.	See b)(2)b. below.
c.	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 rule.

d.	OAC rule 3745-17-09(B)	Particulate emissions (PE) shall not exceed 0.10 pound per 100 lbs of material charged.
e.	OAC rule 3745-17-09(C)	See b)(2)c. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation plan:

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx, SO_2, CO and OC emissions from this air contaminant source since the uncontrolled potentials to emit for NOx, SO_2, CO, and OC emissions are each less than 10 tons/year.

c. This cremation unit and all associated equipment and grounds shall be operated and maintained so as to prevent the emission of objectionable odors.

c) Operational Restrictions

(1) The average hourly charge rate shall not exceed 200 lbs of material per hour, based on the time needed to complete cremation of the charge amount.

(2) This cremation unit must be equipped with an afterburner, achieving at least 1.0 second retention time in the secondary chamber, that shall be used at all times this cremation unit is in operation.

(3) The permittee shall install, operate, and properly maintain a temperature gauge which continuously monitors the temperature of the afterburner exit gas.

(4) This 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 manufacture, but not less than 1600 degrees Fahrenheit;

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 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;

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; and

(6) The manufacturer's representative or another qualified training source shall provide adequate instruction to all operators of each new cremation unit and to new operators of existing cremation units including hands-on control of the unit for at least two operating cycles. The training shall include all of the following elements:

a. principles of combustion;

b. operating monitors and controls;

c. the proper operating sequence under normal conditions;

d. safety and operating procedures under foreseeable upset conditions (e.g., power or fuel interruption, burner malfunction, visible emissions, high and low temperature incidents, etc.);

e. regulatory requirements;

f. calibration, adjustment, and replacement of thermocouples;

g. preventive maintenance practices, procedures, and recommended frequencies; and

h. recordkeeping requirements and procedures.

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 upon request.

(7) Cremains shall be removed from the primary chamber on a daily basis.

(8) 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.

(9) This cremation unit shall not be used to dispose of any "medical or infectious waste" as defined in OAC rule 3745-75-01.

(10) The 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.

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 emissions 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, and the initials of the person who removed the ashes.

(3) The permittee shall inspect this cremation unit using preventive maintenance procedures recommended by the equipment manufacture. The inspection 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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

(2) The permittee shall include in the annual PER the following information:

a. for each day during which the secondary combustion chamber exhaust gas temperature drops 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.

(3) 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 Cleveland Division of Air Quality.

f) Testing Requirements

(1) Compliance with the emission limitations specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

20% opacity, as a six-minute average

<u>Applicable Compliance Method</u>:

If required, compliance shall be determined using 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. <u>Emission Limitation</u>:

0.10 pound of PE per 100 pounds of material charged

<u>Applicable Compliance Method</u>:

If required, compliance with the above limitations shall be determined by testing in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5 per OAC rule 3745-17-03(B)(8).

c. Emission Limitation:

SO_2 emissions shall not exceed 0.25 lb/hr and 1.1 tpy.

Applicable Compliance Method:

Compliance shall be determined based on the following calculations:

PE_1 = 200 lb/hr * 2.5 lb/ton * 1 ton/2000 lbs = 0.25 lb/hr

0.25 lb/hr * 8760 hr/year * 1 ton/2000 lbs = 1.095 TPY

PE_2 = 0.0006 lb/mmbtu * 1.9 mmbtu/hr = 0.001 lb/hr

0.001 lb/hr * 8760 hr/year * 1 ton/2000 lbs = 0.004 TPY

Total = 1.095 TPY + 0.004 TPY = 1.099 TPY

d. Emission Limitation:

NOx emissions shall not exceed 0.49 lb/hr and 2.13 tpy.

Applicable Compliance Method:

Compliance shall be determined based on the following calculations:

PE_1 = 200 lb/hr * 3 lb/ton * 1 ton/2000 lbs = 0.3 lb/hr

0.3 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 1.314 TPY

PE_2 = 0.098lb/mmbtu * 1.9 mmbtu/hr = 0.019 lb/hr

0.019 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 0.815 TPY

Total = 1.314 TPY + 0.815 TPY = 2.129 TPY

e. Emission Limitation:

VOC emissions shall not exceed 0.32 lb/hr and 1.4 tpy

Applicable Compliance Method:

Compliance shall be determined based on the following calculations:

PE_1 = 200 lb/hr* 3 lb/ton * 1 ton/2000 lbs = 0.3 lb/hr

0.3 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 1.314 TPY

PE_2 = 0.011 lb/mmbtu * 1.9 mmbtu/hr = 0.021 lb/hr

0.021 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 0.092 TPY

Total = 1.314 TPY + 0.092 TPY = 1.406 TPY

f. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.94 ton/year (tpy).

Applicable Compliance Method:

Compliance shall be determined based on the following calculations:

PE_1 = 200 lb/hr * 0.1 lb/100 lbs = 0.2 lb/hr

0.2 lb/hr * 8760 hrs/yr * 1 ton/2000 lbs = 0.88 TPY

PE_2 = 0.007 lb/mmbtu * 1.9 mmbtu/hr = 0.013 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 0.057 TPY

0.013 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 0.057 TPY

Total = 0.88 TPY + 0.057 TPY = 0.94 TPY

g. Emission Limitation:

CO emissions shall not exceed 1.16 lbs/hr and 5.06 tpy.

Applicable Compliance Method:

Compliance shall be determined based on the following calculations:

PE_1 = 200 lb/hr *10 lb/ton * 1 ton/2000 lbs = 1 lb/hr

1 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 4.380 TPY

PE_2 = 0.082 lb/mmbtu *1.9 mmbtu/hr = 0.16 lb/hr

0.16 lb/hr * 8760 hr/yr * 1 ton/2000 lbs = 0.683 TPY

Total = 4.380 TPY + 0.683 TPY = 5.063 TPY

Note: For all of the calculations above:

PE1 = Potential emissions from the incineration of remains

PE2 = Potential emissions from the burning of natural gas

Total = The sum of PE1 and PE2

All incineration emission factors for PE1 are from Table 2.1-12 of AP-42 (5th Edition).

All natural gas combustion emission factors for PE2 are from Table 1.4-1 and Table 1.4-2 of AP-42 (5th Edition).

g) Miscellaneous Requirements

(1) These terms and conditions shall be visibly posted near the incinerator.

(2) 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.