



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: February 13, 2009

RE: All Creatures Loved Pet Crematory / 177-27322-00115

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER-AM.dot12/3/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Ms. Christina Bohlander  
All Creatures Loved Pet Crematory  
705 N. Third Street  
Cambridge City, IN 47327

February 13, 2009

Re: Exempt Construction and Operation Status,  
177-27322-00115

Dear Ms. Bohlander:

The application from All Creatures Loved Pet Crematory, received on January 2, 2009, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary animal remains crematory located at 13271 W. US 40, Cambridge City, IN 47327 is classified as exempt from air pollution permit requirements:

- (a) One (1) Power-Pack Junior crematory incinerator for animal remains, with multiple chambers, with a maximum raw material input of 75 pounds per hour (lbs/hr) of animal remains and cardboard container, approved for construction in 2009, and using natural gas at a rate of 1.9 MMBtu per hour as a supplementary fuel.

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:
  - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (b) Pursuant to 326 IAC 4-2-2, the crematory incinerator shall:
  - (1) Consist of primary and secondary chambers or the equivalent;
  - (2) Be equipped with a primary burner unless burning only wood products;
  - (3) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
  - (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Administrator;
  - (5) The crematory incinerator shall not emit particulate matter in excess of five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air

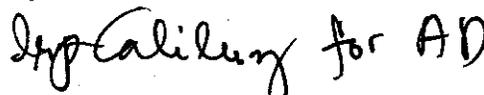
because the maximum solid waste capacity is less than two hundred (200) pounds per hour;

- (6) If any of the above requirements (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation; and
  - (7) The incinerator is exempt from requirement (5) if subject to a more stringent particulate matter emissions limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.
- (c) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

This exemption is the first air approval issued to this source. A copy of the Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions on this matter, please contact Summer Keown, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5175 or at 1-800-451-6027 (ext 4-5175).

Sincerely,



Alfred C. Dumauval, Ph. D., Section Chief  
Permits Branch  
Office of Air Quality

ACD/SJK

cc: File - Wayne County  
Wayne County Health Department  
Air Compliance Section  
Compliance Data Section  
Permits Administrative and Development  
Billing, Licensing and Training Section

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for an Exemption

<b>Source Description and Location</b>
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<b>Source Name:</b>	<b>All Creatures Loved Pet Crematory</b>
<b>Source Location:</b>	<b>13271 W. US 40, Cambridge City, IN 47327</b>
<b>County:</b>	<b>Wayne</b>
<b>SIC Code:</b>	<b>6553</b>
<b>Exemption No.:</b>	<b>177-27322-00115</b>
<b>Permit Reviewer:</b>	<b>Summer Keown</b>

On January 2, 2009, the Office of Air Quality (OAQ) received an application from All Creatures Loved Pet Crematory related to the construction and operation of a new crematory incinerator.

<b>Existing Approvals</b>
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There have been no previous approvals issued to this source.

<b>County Attainment Status</b>
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The source is located in Wayne County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Wayne County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

Wayne County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

**Background and Description of Emission Units and Pollution Control Equipment**

The Office of Air Quality (OAQ) has reviewed an application, submitted by All Creatures Loved Pet Crematory on January 2, 2009, relating to the construction of a crematory incinerator for animal remains.

The following is a list of the new emission unit:

- (a) One (1) Power-Pack Junior crematory incinerator for animal remains, with multiple chambers, with a maximum raw material input of 75 pounds per hour (lbs/hr) of animal remains and cardboard container, approved for construction in 2009, and using natural gas at a rate of 1.9 MMBtu per hour as a supplementary fuel.

**Enforcement Issues**

There are no pending enforcement actions related to this source.

**Emission Calculations**

See Appendix A, pages 1 and 2, of this TSD for detailed emission calculations.

**Permit Level Determination – Exemption**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
crematory incinerator	1.15	1.15	1.15	0.41	0.49	0.49	1.64	negl.	negl.
natural gas combustion	0.02	0.06	0.02	negl.	0.83	0.05	0.70	negl.	negl.
<b>Total PTE of Entire Source</b>	<b>1.17</b>	<b>1.21</b>	<b>1.17</b>	<b>0.41</b>	<b>1.32</b>	<b>0.54</b>	<b>2.34</b>	<b>negl.</b>	<b>negl.</b>
Exemptions Levels	5	5	5	10	10	5 or 10	25	25	10
Registration Levels	25	25	25	25	25	25	100	25	10

negl. = negligible

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

<b>Federal Rule Applicability Determination</b>
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New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Incinerators, 40 CFR 60, Subpart E (326 IAC 12), are not included in the permit, since the incinerator has a charging rate of less than fifty (50) tons per day.
- (b) The requirements of the New Source Performance Standard for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 (40 CFR 60, Subpart Eb) are not included in this permit, because the incinerator does not have a combustion capacity greater than 250 tons per day of municipal solid waste.
- (c) The requirements of the New Source Performance Standard for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After January 20, 1996 (40 CFR 60, Subpart Ec) are not included in this permit, because the crematory incinerator is not a hospital/medical/infectious waste incinerator as defined in 40 CFR 60.51c.
- (d) The requirements of the New Source Performance Standard for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001 (40 CFR 60, Subpart AAAA) are not included in this permit, because the incinerator does not have a combustion capacity greater than 35 tons per day of municipal solid waste or refuse-derived fuel.
- (e) The requirements of the New Source Performance Standard for Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001 (40 CFR 60, Subpart CCCC) are not included in this permit, because the crematory incinerator is not a commercial and industrial solid waste incineration (CISWI) unit as defined in 40 CFR 60.2265.
- (f) The requirements of the New Source Performance Standard for Other Solid Waste Incineration Units (40 CFR 60, Subpart EEEE) are not included in this permit. The incinerator does not meet the definition of a small municipal waste combustion unit or an institutional waste incineration unit provided in 40 CFR 60.2977.
- (g) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (h) The requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Waste Combustors (40 CFR 63, Subpart EEE) are not included in this permit, because the crematory incinerator is not considered a hazardous waste incinerator as defined in 40 CFR 63.1201.
- (i) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (j) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)  
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (h) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

Incinerator

- (i) 326 IAC 4-2-2 (Incinerators: requirements)  
Pursuant to 326 IAC 4-2-2, the crematory incinerator shall:
  - (1) Consist of primary and secondary chambers or the equivalent;
  - (2) Be equipped with a primary burner unless burning only wood products;
  - (3) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
  - (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Administrator;
  - (5) The crematory incinerator shall not emit particulate matter in excess of five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air because the maximum solid waste capacity is less than two hundred (200) pounds per hour;
  - (6) If any of the above requirements (1) through (5) are not met, then the owner or operator shall stop charging the incinerators until adjustments are made that address the underlying cause of the deviation; and
  - (7) The incinerators are exempt from requirement (5) if subject to a more stringent particulate matter emissions limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.
- (j) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)  
326 IAC 6-2 applies to sources of indirect heating. The crematory incinerator is not considered a source of indirect heating. Therefore, 326 IAC 6-2 does not apply.
- (k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(2), incineration is exempt. Therefore, 326 IAC 6-3 does not apply to the crematory incinerator
- (l) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)  
The Permittee does not have the potential to emit more than one hundred (100) tons per year of particulate matter, or actual emissions greater than ten (10) tons per year. Therefore, 326 IAC 6.5 does not apply to the crematory incinerator.
- (m) 326 IAC 9-1 (Carbon Monoxide Emission Limits)  
This stationary source, constructed after the applicability date of March 21, 1972, is not subject to the requirements of 326 IAC 9-1-2(a)(3), since the crematory incinerator burns pathological waste and does not burn refuse consisting of more than 50 percent municipal type waste (household, commercial/retail, and/or institutional waste).
- (n) 326 IAC 11-6 (Hospital/Medical/Infectious Waste Incinerators)  
The crematory incinerator is not subject to the requirements of 326 IAC 11-6, since it is considered a pathological waste combustor and not a hospital/medical/infectious waste combustor.
- (o) 326 IAC 11-8 (Commercial and Industrial Solid Waste Incineration Units)  
The crematory incinerator is not considered a Commercial and Industrial Incineration Unit. Therefore, 326 IAC 11-8 does not apply.

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on January 2, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 177-27322-00115. The staff recommends to the Commissioner that this Exemption be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Summer Keown at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations  
Crematory Incinerator**

**Company Name:** All Creatures Loved Pet Crematory  
**Address City IN Zip:** 13271 W. US 40, Cambridge City, IN 47327  
**Permit Number:** 177-27322-00115  
**Reviewer:** Summer Keown  
**Date:** January 8, 2009

Throughput  
lbs/hr

Throughput  
tons/yr

75.0

328.5

Emission Factor in lb/ton	Pollutant						
	PM*	PM2.5*	PM10*	SO2	NOx	VOC	CO
7.0	7.0	7.0	7.0	2.5	3.0	3.0	10.0
Potential Emission in tons/yr	1.15	1.15	1.15	0.41	0.49	0.49	1.64

**Methodology**

PM is assumed to be equal to PM10 and PM2.5.

Emission factors are from AP42, Table 2.1-12.

Throughput (tons/yr) = Throughput (lbs/hr) \* 8760 hr/yr \* 1 ton/2000 lbs

Potential emissions (tons/yr) = Emission factor (lb/ton) \* Throughput (tons/yr) \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Company Name:** All Creatures Loved Pet Crematory  
**Address City IN Zip:** 13271 W. US 40, Cambridge City, IN 47327  
**Permit Number:** 177-27322-00115  
**Reviewer:** Summer Keown  
**Date:** January 8, 2009

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.9

16.6

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM2.5*	PM10*	SO2	NOx	VOC	CO
	1.9	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.02	0.06	4.99E-03	0.83	0.05	0.70

\*PM is assumed to be equal to PM2.5. PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) \* 8760 hrs/yr \* 1 MMCF/1,000 MMBtu

Emission Factors are from AP42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3

Potential Emissions (tons/yr) = Throughput (MMCF/yr) \* Emission Factor (lb/MMCF) / 2,000 lb/ton