



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

November 9, 2004

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[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Faithful Friends In Passing / 005-20250-00093

FROM: Paul Dubenetzky  
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, Room 1049, 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.dot 9/16/03



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

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November 9, 2004

Ronald W. Shadley, Sr.  
Faithful Friends In Passing  
2621 North Boohers Court  
Columbus, IN 47203-9328

Dear Mr. Shadley:

Re: Exempt Construction and Operation Status,  
005-20250-00093

The application for Faithful Friends In Passing, received on October 13, 2004, has been reviewed. Based on the data provided and the provisions in 326 IAC 2-1.1-3, it has been determined that the following, to be located at 16250 E. State Road 46, Columbus, Indiana 47203-9644 is classified as exempt from air pollution permit requirements:

One (1) crematory incinerator for animal remains, identified as cremator #1, exhausting to stack 1, with a capacity of seventy-five (75) pounds of remains per hour, supplemented by propane or natural gas at a rate of 1.2 million British thermal units per hour (MMBtu/hr).

The following condition shall be applicable:

- (1) 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:
  - (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period 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.
- (2) Pursuant to 326 IAC 4-2-2 (Incinerators), the crematory incinerator shall:
  - (a) Consist of primary and secondary chambers or the equivalent;
  - (b) Be equipped with a primary burner unless burning wood products;
  - (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
  - (d) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in 326 IAC 4-2-2(c); and
  - (e) Not emit particulate matter (PM) in excess of five-tenths (0.5) pounds per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements. The Permittee operating the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

- (3) 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.

This exemption is the first air approval issued to this source.

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.

Sincerely,

Original signed by

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

NCB

cc: File - Bartholomew County  
Air Compliance Section Inspector - Vaughn Ison  
Permit Tracking  
Compliance Data Section  
Administrative and Development

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for an Exemption

### Source Background and Description

**Source Name:** Faithful Friends In Passing  
**Source Location:** 16250 E. State Road 46, Columbus, Indiana 47203-9644  
**County:** Bartholomew County  
**SIC Code:** 7261 (Funeral Service and Crematories)  
**Exemption No.:** 005-20250-00093  
**Permit Reviewer:** Nathan C. Bell

The Office of Air Quality (OAQ) has reviewed an application for Faithful Friends In Passing relating to the construction and operation of a new crematory incinerator for animal remains.

### Emission Units and Pollution Control Equipment

One (1) crematory incinerator for animal remains, identified as cremator #1, exhausting to stack 1, with a capacity of seventy-five (75) pounds of remains per hour, supplemented by propane or natural gas at a rate of 1.2 million British thermal units per hour (MMBtu/hr).

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
#1	Crematory Incinerator	17.0	1.2	1,500	800

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

A complete application for the purposes of this review was received on October 13, 2004.

Unless otherwise stated, information used in this review was derived from the application and additional information provided by the applicant.

### Emission Calculations

See Appendix A of this document for detailed emission calculations.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit (PTE) is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Criteria Pollutant	Potential to Emit (tons/year)
PM	negligible
PM-10	negligible
SO <sub>2</sub>	negligible
VOC	negligible
CO	0.10
NO <sub>x</sub>	0.12

HAP's	Potential To Emit* (tons/year)
Benzene	negligible
Dichlorobenzene	negligible
Formaldehyde	negligible
Hexane	negligible
Toluene	negligible
Lead	negligible
Cadmium	negligible
Chromium	negligible
Manganese	negligible
Nickel	negligible
Worst Single HAP	negligible
Combined HAP	negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) 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, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**County Attainment Status**

The source is located in Bartholomew County.

Criteria Pollutant	Status
PM-10	Attainment or Unclassifiable
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment or Unclassifiable
1-hour Ozone	Attainment or Unclassifiable
8-hour Ozone	Attainment or Unclassifiable
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

- (a) 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 the ozone standard. Bartholomew County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were

reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

- (b) Bartholomew County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	negligible
PM-10	negligible
SO <sub>2</sub>	negligible
VOC	negligible
CO	0.10
NO <sub>x</sub>	0.12
Single HAP	negligible
Combination HAPs	negligible

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the PTE of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

### Federal Rule Applicability

- (a) The crematory incinerator is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD. The crematory incinerator is part of the affected source for the small gaseous fuel subcategory, as defined by 40 CFR 63.7575, because it has a rated capacity of less than or equal to 10 million British thermal units per hour heat input. However, pursuant to 40 CFR 63.7506(c), there are no applicable requirements from 40 CFR 63 Subpart DDDDD and 40 CFR, Subpart A for the affected source for the small gaseous fuel subcategory.
- (b) This source is not subject to the requirements of 40 CFR 63 Subpart EEE (63.1200 through 63.1214), NESHAPs from Hazardous Waste Combustors (326 IAC 20-28-1), because the crematory incinerator is not considered a hazardous waste incinerator and the source is not a major source of HAPs.

- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 20 and 40 CFR Parts 61 and 63) included for this source.
- (d) This source is not subject to the requirements of 40 CFR 60 Subpart E (60.50 through 60.54), Standards of Performance for Incinerators (326 IAC 12), because the crematory incinerator has a charging rate less than fifty (50) tons per day and does not burn refuse consisting of more than 50 percent municipal type waste (household, commercial/retail, and/or institutional waste).
- (e) This source is not subject to the requirements of the following New Source Performance Standards (NSPS), because the crematory incinerator is considered a pathological waste combustor and is not considered a municipal waste combustor or hospital/medical/infectious waste incinerator:
  - (1) 40 CFR 60 Subpart Ea (60.50a through 60.59a), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after December 20, 1989 and on or before September 20, 1994 (326 IAC 12)
  - (2) 40 CFR 60 Subpart Eb (60.50b through 60.59b), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994, or for Which Modification or Reconstruction is commenced after June 19, 1996 (326 IAC 12)
  - (3) 40 CFR 60 Subpart Ec (60.50c through 60.58c), Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced after January 20, 1996 (326 IAC 12)
  - (4) 40 CFR 60 Subpart AAAA (60.1000 through 60.1465), Standards of Performance 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 (326 IAC 12)
- (f) The crematory incinerator is exempt from the requirements of 40 CFR 60 Subpart CCCC (60.2000 through 60.2265), Standards of Performance for Commercial and Industrial Solid Waste Incinerations Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001 (326 IAC 12), because these units are considered pathological waste incineration units (40 CFR 60.2020(a)).
- (g) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this source.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-6 (Emission Reporting)**

This source is not subject to the requirements of 326 IAC 2-6 (Emission Reporting), because it is located in Bartholomew County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

#### **326 IAC 2-4.1 and 326 IAC 2-7 (Major Sources of Hazardous Air Pollutants (HAP))**

This source is not subject to the requirements of 326 IAC 2-4.1, since this source was existing as of July 27, 1997, and 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.

#### **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:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period 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.

#### 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.

### **State Rule Applicability - Individual Facilities**

#### 326 IAC 4-2-2 (Incinerators)

Pursuant to 326 IAC 4-2-2 (Incinerators), the crematory incinerator shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in 326 IAC 4-2-2(c); and
- (e) Not emit particulate matter (PM) in excess of five-tenths (0.5) pounds per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements. The Permittee operating the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

#### 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(a)(2), incinerators are exempt from the requirements of 326 IAC 6-3.

#### 326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)

The crematory incinerator is not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

#### 326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

The crematory incinerator is not subject to the requirements of 326 IAC 8-1-6, since the potential to emit VOCs is less than twenty-five (25) tons per year.

### **Conclusion**

The construction and operation of this crematory incinerator for animal remains shall be subject to the conditions of the attached proposed Exemption No. 005-20250-00093.

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

**Company Name:** Faithful Friends In Passing  
**Address City IN Zip:** 16250 E. State Road 46, Columbus, Indiana 47203-9644  
**Permit Number:** 005-20250  
**Pit ID:** 005-00093  
**Reviewer:** Nathan C. Bell  
**Date:** October 22, 2004

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.2

10.5

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in lb/hr	2.3E-03	9.1E-03	7.2E-04	0.12	6.6E-03	0.10
Potential Emission in tons/yr	0.01	0.04	3.2E-03	0.53	0.03	0.44

\*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) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

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

**Small Industrial Boiler  
HAP Emissions**

**Company Name: Faithful Friends In Passing**  
**Address City IN Zip: 16250 E. State Road 46, Columbus, Indiana 47203-9644**  
**Permit Number: 005-20250**  
**Pit ID: 005-00093**  
**Reviewer: Nathan C. Bell**  
**Date: October 22, 2004**

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.104E-05	6.307E-06	3.942E-04	9.461E-03	1.787E-05

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.628E-06	5.782E-06	7.358E-06	1.997E-06	1.104E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.