



December 22, 2004

Certified Mail: 7000 0600 0023 5187 9390

Jerritt Clayton
Flanner and Buchanan Mortuaries
2950 North High School Road
Indianapolis, Indiana 46224

Re: Registered Construction and Operation Status, 097-19943-00550

Dear Mr. Clayton:

The application from Flanner and Buchanan Mortuaries, received on December 7, 2004, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following units at a crematory, located at 635 East Market Street, Indianapolis, Indiana 46224, are classified as registered:

- (a) Two (2) human cremation retorts, each with a maximum operating capacity of 100 pounds per hour (lbs/hr) of human remains, and each using natural gas as a supplemental fuel at maximum heat input capacity of 1.9 million Btu per hour (MMBtu/hr), using no control.
- (b) One (1) animal cremation retort, with a maximum operating capacity of 200 pounds (lbs/hr) of animal remains, and each using a natural gas as a supplemental fuel at a maximum heat input capacity of 2.35 million Btu per hour (MMBtu/hr), using no control.

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:
 - (1) Opacity shall not exceed an average of thirty percent (30%) 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 15 minutes (60 readings) in a 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.
- (b) Pursuant to 326 IAC 4-2-2 (Incinerators: requirements), the crematory shall:
 - (1) Consist of primary and secondary chambers or the equivalent.
 - (2) Be equipped with a primary burner.

- (3) Comply with 326 IAC 5-1 and 326 IAC 2.
- (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Commissioner.
- (5) Not emit particulate matter in excess of:
 - (A) 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 for the human cremation retorts.
 - (B) three-tenths (0.3) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for the animal cremation retort.
- (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.
- (7) The incinerator is exempt from requirement (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Office of Environmental Services (OES) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

and

**Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the IDEM, OAQ and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact Angelique Oliger at 327-2846 or aoliger@indygov.org.

Sincerely,

ORIGINAL SIGNED BY

John B. Chavez
Administrator

aco

cc: Files
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Flanner and Buchanan Mortuaries
Address:	635 East Market Street
City:	Indianapolis, Indiana 46224
Authorized individual:	Jerrit Clayton
Phone #:	(317) 387-7020
Registration #:	097-19943-00550

I hereby certify that Flanner and Buchanan Mortuaries is still in operation and is in compliance with the requirements of Registration 097-19943-00550.

Name (typed):
Title:
Signature:
Date:

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Indianapolis Office of Environmental Services
Air Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Flanner and Buchanan Mortuaries
635 East Market Street
Indianapolis, Indiana 46224

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____ .
(Title) (Company Name)
3. By virtue of my position with _____, I have personal knowledge of the representations
(Company Name)
contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)
4. I hereby certify that (? Company Name), (complete source location), Indiana, (zip code), has constructed the (? operation/facility) in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on (? date) and as permitted pursuant to Construction Permit No. 097-19943-00550, Plant ID No. 097-00550 issued on _____.
5. I hereby certify that (? company name) is now subject to the Title V program and will submit a Title V (or FESOP) operating permit application within twelve (12) months from the postmarked submission date of this Affidavit of Construction.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on
this _____ day of _____, 20_____.
My Commission expires:

Signature

Name (typed or printed)

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Flanner and Buchanan Mortuaries
Source Location: 635 East Market Street, Indianapolis, Indiana 46224
Mailing Address: 2950 North High School Road, Indianapolis, Indiana 46224
County: Marion
SIC Code: 7261, 0742
Operation Permit No.: 097-19943-00550
Permit Reviewer: Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from Flanner and Buchanan Mortuaries relating to the construction and operation of a crematory consisting of the following emissions units:

- (a) Two (2) human cremation retorts, each with a maximum operating capacity of 100 pounds per hour (lbs/hr) of human remains, and each using natural gas as a supplemental fuel at maximum heat input capacity of 1.9 million Btu per hour (MMBtu/hr), using no control.
- (b) One (1) animal cremation retort, with a maximum operating capacity of 200 pounds (lbs/hr) of animal remains, and each using a natural gas as a supplemental fuel at a maximum heat input capacity of 2.35 million Btu per hour (MMBtu/hr), using no control.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

A complete application for the purposes of this review was received on December 7, 2004.

Emission Calculations

See Appendix A (two pages) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit 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.”

Pollutant	Potential To Emit (tons/year)
PM	6.2
PM-10	6.3
SO ₂	2.2
VOC	2.7
CO	11.1
NO _x	5.3
Single HAP	negligible
Combination of HAPs	negligible

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter (PM) and PM-10 is equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.1-2.
- (b) 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.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
8-hour Ozone	basic attainment
1-hour Ozone	maintenance nonattainment
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore,

VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.

- (b) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO₂, NO₂, CO, and Lead. 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 326 IAC 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 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	6.2
PM10	6.3
SO ₂	2.2
VOC	2.7
CO	11.1
NO _x	5.3
Single HAP	negligible
Combination	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 potential to emit (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) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this permit. The crematory has a charge rate of less than fifty (50) tons per day. Therefore, the requirements of 40 CFR Part 60 Subpart E are not included in this permit.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) included in this permit. The crematory does not combust

hazardous waste as defined in 40 CFR 261. Therefore, the requirements of 40 CFR 63 Subpart EEE are not included in this permit.

State Rule Applicability - Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not subject to 326 IAC 2-1.1-5 because it has the potential to emit less than 100 tons of NO_x and less than 100 tons of VOC per year.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This source is not a major source. This source is not one (1) of the twenty-eight (28) listed source categories. The potential to emit each criteria pollutant from the entire source is less than 250 tons per year. Therefore, this source is a minor source and the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) are not applicable.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs, and construction occurred before July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Marion 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 4-2-2 (Incinerators: requirements)

Pursuant to 326 IAC 4-2-2, the cremation retorts shall:

- (1) Consist of primary and secondary chambers or the equivalent.
- (2) Be equipped with a primary burner.
- (3) Comply with 326 IAC 5-1 and 326 IAC 2.
- (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Commissioner.
- (5) Not emit particulate matter in excess of:
 - (a) 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 for the human cremation retorts.
 - (b) three-tenths (0.3) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for the animal cremation retort.
- (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.
- (7) The incinerator is exempt from requirement (5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.

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 thirty percent (30%) 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) 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 8-1-6 (New Facilities; General Reduction Requirements)

The Permittee has no individual facility with the potential to emit more than twenty-five (25) tons per year of VOCs. Therefore, 8-1-6 does not apply.

326 IAC 9-1-2 (Carbon Monoxide Emission Limits)

This facility is not subject to this 326 IAC 9-1-2 (a)(3) because it does not burn refuse.

Conclusion

The construction and operation of a crematory shall be subject to the conditions of the attached proposed Registration 097-19943-00550.

Appendix A: Emission Calculations
Incinerator

Company Name: Flanner and Buchanan Mortuaries
Address City IN Zip: 635 East Market Street, Indianapolis, Indiana 46224
Registration: 097-19943-00550
Reviewer: Angelique Oliger
Date: December 7, 2004

Throughput lbs/hr 400

Throughput
ton/yr
1752

Emission Factor in lb/ton	POLLUTANT				
	PM	SO2	CO	VOC	NOX
Potential Emissions in ton/yr	7.0	2.5	10.0	3.0	3.0
	6.1	2.2	8.8	2.6	2.6

Methodology

Emission factors are from AP 42 Table 2.1-12 Uncontrolled emission factors for industrial/commercial refuse combustors, other than municipal waste, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Emission Factor (lb/ton) * throughput(ton/yr)* 1 ton / 2000 lbs = Potential Emissions (tons/ yr)

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

Company Name: Flanner and Buchanan Mortuaries
Address City IN Zip: 635 East Market Street, Indianapolis, Indiana 46224
Registration: 097-19943-00550
Reviewer: Angelique Oligier
Date: December 7, 2004

	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
Cremator	1.9	
Cremator	1.9	
Pet cremator	2.35	
	6.2	53.9

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.1	0.2	0.0	2.7	0.1	2.3

*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