



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

TO: Interested Parties / Applicant

DATE: December 28, 2009

RE: Southlawn Cemetary / 141-28787-00569

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



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Mr. K. R. Palmer
Southlawn Cemetery
61430 U.S. 31 South
South Bend, IN 46614

December 28, 2009

Re: Exempt Construction and Operation Status,
141-28787-00556

Dear Mr. K. R. Palmer:

The application from Southlawn Cemetery, received on November 19, 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 crematory incinerator for animal remains located at 61430 U.S. 31 South, South Bend, IN 46614 is classified as exempt from air pollution permit requirements:

- (a) One (1) 2.4 MMBtu/hr natural gas fired crematory incinerator for animal remains, identified as 01, with a maximum design capacity of two hundred (200) pounds of remains per hour, with all emissions exhausted through a single twenty (20) inch diameter stack.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 4-2-2 (Incinerators):
 - (a) All incinerators shall comply with the following requirements:
 - (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 and 326 IAC 2.
 - (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection (c).
 - (5) Not emit particulate matter in excess of one (1) of the following:

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 incinerators with a maximum solid waste capacity of greater than or equal to two hundred (200) pounds per hour.
 - (6) If any of the requirements of subdivisions (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.

- (b) An incinerator is exempt from subsection (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P*, State Implementation Plan for Indiana.
 - (c) An owner or operator developing an operation and maintenance plan pursuant to subsection (a)(4) must comply with the following:
 - (1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in subsection (a)(5) and include the following:
 - (A) Procedures for receiving, handling, and charging waste.
 - (B) Procedures for incinerator startup and shutdown.
 - (C) Procedures for responding to a malfunction.
 - (D) Procedures for maintaining proper combustion air supply levels.
 - (E) Procedures for operating the incinerator and associated air pollution control systems.
 - (F) Procedures for handling ash.
 - (G) A list of wastes that can be burned in the incinerator.
 - (2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
 - (3) The operation and maintenance plan must be readily accessible to incinerator operators.
 - (4) The owner or operator of the incinerator shall notify the department, in writing, thirty (30) days after the operation and maintenance plan is initially developed pursuant to this section.
 - (d) The owner or operator of the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.
- (2) Pursuant to 326 IAC 5-1-2 (1) (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:

Opacity from a source or facility shall not exceed any of the following limitations, and, unless otherwise stated, opacity levels shall be observed in accordance with the procedures set forth in 326 IAC 5-1-4:

- (1) Sources or facilities of opacity located in areas not listed in 326 IAC 5-1-1(c) shall meet the following limitations:
 - (A) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period.
 - (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.

- (3) Pursuant to 326 IAC 5-1-4. (a) Determination of opacity from sources or facilities to which this rule applies shall be made in accordance with subdivision (1) as follows:
 - (1) Determination of opacity by means of visible emissions readings shall be made in accordance with 40 CFR 60, Appendix A, Method 9.
- (4) 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. 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

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 Jeff Scull, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-6544 or at 1-800-451-6027 (ext 4-6544).

Sincerely,



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

ACD/jws

cc: File - St. Joseph County
St. Joseph County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for an Exemption

Source Description and Location
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Source Name:	Southlawn Cemetery
Source Location:	61430 U.S. 31 South, South Bend, IN 46614
County:	St. Joseph
SIC Code:	6553
Registration (or Exemption) No.:	141-28787-00556
Permit Reviewer:	Jeff Scull

On November 19, 2009, the Office of Air Quality (OAQ) received an application from Southlawn Cemetery related to the construction and operation of a new stationary crematory incinerator for animal remains.

Source Definition

This company consists of the following operations:

- (a) Southlawn Cemetery LLC is located at 61300 US 31 South, South Bend, IN 46614, Plant ID: 141-00556; and
- (b) Southlawn Cemetery is located at 61430 US 31 South, South Bend, IN 46614, Plant ID: 141-00569.

Southlawn Cemetery LLC (Southlawn) has a human funeral service and crematory located at their cemetery on 61300 US 31 South in South Bend. Southlawn will be opening a pet cemetery and pet crematory at 61430 US 31 South, about 1500 yards from their existing operation on March 15, 2009.

IDEM, OAQ has examined whether the two cemeteries and crematories are part of the same source. The term "source" is defined at 326 IAC 1-2-73. In order for these two operations to be considered one source, they must meet all three of the following criteria:

- (1) the two operations must be under common ownership or common control;
- (2) the two operations must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,
- (3) the two operations must be located on contiguous or adjacent properties.

Each operation is owned by the same corporation. Since the two operations have the same owner, common ownership and common control exists. The first element of the definition is met.

The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. The human funeral service, cemetery and crematory has the SIC Code 7261 for Funeral Service and Crematories. Its two-digit SIC Code is 72. The pet cemetery and crematory has the SIC Code 6553 for Animal Cemetery Operations. Its two-digit SIC Code is 65. IDEM, OAQ finds that the two operations do not have the same two-digit SIC code.

An operation is considered a support facility if at least fifty percent of its output is dedicated to the other operation. None of the work done at either operation will benefit the other. Neither one qualifies as a support facility. Since the two operations do not have the same two-digit SIC Code and neither one supports the other, they do not meet the second element of the definition.

The two operations are located on different properties about 1500 yards apart. There is no physical connection between the properties. There is no support relationship between the two operations. The two operations are not on contiguous or adjacent properties, so they do not meet the third element of the definition. Since the two operations do not meet all three of the elements of the definition, IDEM, OAQ finds that they are not part of the same source.

Therefore, based on this evaluation these operations will not be considered one (1) source, as defined by 326 IAC 2-7-1(22). This determination was initially made under Exemption No. 141-28787-00556.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard 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. St. Joseph 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) **PM 2.5**
St. Joseph 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, 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**
St. Joseph 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 Southlawn Cemetery on November 19, 2009, relating to the construction and operation of a new stationary crematory incinerator for animal remains. The source has applied for and will be issued an Exemption because the potential emissions of all criteria pollutants is below the exemption applicability thresholds.

The following is a list of the new emission unit and pollution control devices:

- (a) One (1) 2.4 MMBtu/hr natural gas fired crematory incinerator for animal remains, identified as 01, approved for construction in 2009, with a maximum design capacity of two hundred (200) pounds of remains per hour, using a secondary chamber with afterburner as control, with all emissions exhausted through a single twenty (20) inch diameter stack.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A 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 ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
01 Natural Gas Combustion	0.02	0.08	0.08	0.01	1.10	0.06	0.92	0.021	0.020 (n-Hexane)
01 Incineration	3.07	3.07	3.07	1.10	1.31	1.31	4.38	negl.	negl.
Total PTE of Entire Source	3.09	3.15	3.15	1.10	2.41	1.37	5.30	0.021	0.020 (n-Hexane)
Exemptions Levels	5	5	5	10	10	10	25	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.

Federal Rule Applicability Determination

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.

State Rule Applicability Determination

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 5-1-2(2) (Opacity Limitations)
Pursuant to 326 IAC 5-1-1(c)(6) (Opacity Limitations), Section 2(2) of this rule applies to sources or facilities located in St. Joseph County, the area north of Kern Road and east of Pine Road. This source is located in St. Joseph County south of Kern Road. Therefore, 326 IAC 5-1-2(2) does not apply.
- (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 November 19, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 141-28787-00556. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jeff Scull 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) 234-6544 or toll free at 1-800-451-6027 extension 4-6544.
- (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

**Appendix A: Emissions Calculations
Uncontrolled Potential to Emit Summary**

Company Name: Southlawn Cemetery
Address City IN Zip: 61430 U.S. 31 South, South Bend, IN 46614
Permit Number: 141-28787-00569
Plt ID: 141-00569
Reviewer: Jeff Scull
Date: 11/20/2009

Category	Uncontrolled Potential to Emit (tons/year)			
	Emissions Generating Activity			
	Pollutant	Incineration	Natural Gas Combustion	TOTAL
Criteria Pollutants	PM	3.07	0.02	3.09
	PM10/PM2.5	3.07	0.08	3.15
	SO2	1.10	0.01	1.10
	NOx	1.31	1.10	2.41
	VOC	1.31	0.06	1.37
	CO	4.38	0.92	5.30
Hazardous Air Pollutants	Chromium		1.5E-05	1.5E-05
	Manganese		4.2E-06	4.2E-06
	Nickel		2.3E-05	2.3E-05
	n-Hexane		0.020	0.020
	Toluene		3.7E-05	3.7E-05
	Benzene		2.3E-05	2.3E-05
	Dichlorobenzene		1.3E-05	1.3E-05
	Formaldehyde		8.2E-04	8.2E-04
	Lead		5.5E-06	5.5E-06
	Cadmium		1.2E-05	1.2E-05
	Totals	0	0.021	0.021
			Worse Case HAP	0.020

Uncontrolled total potential to emit are based on rated capacity at 8,760 hours/year.

**Appendix A: Emissions Calculations
Multiple Chamber Industrial Incinerators (Process Emissions)**

Company Name: Southlawn Cemetery
Address City IN Zip: 61430 U.S. 31 South, South Bend, IN 46614
Permit Number: 141-28787-00569
Plt ID: 141-00569
Reviewer: Jeff Scull
Date: 11/20/2009

Pollutant			PM*	PM10*/2.5	SO2	NOx**	VOC	CO
Emission Factor (lb/ton)			7.0	7.0	2.5	3.0	3.0	10.0
Emission Unit	Potential Throughput (lbs/hr)	Potential Throughput (tons/yr)	Uncontrolled Potential to Emit (tons/yr)					
			PM*	PM10*/2.5	SO2	NOx**	VOC	CO
crematory incinerator for animal remains, identified as 01	200	876.0	3.07	3.07	1.10	1.31	1.31	4.38
Totals			3.07	3.07	1.10	1.31	1.31	4.38

Methodology

Potential Throughput (tons/yr) = [Potential Throughput (lbs/hr)] x [8,760 hrs/yr] x [1ton/2000 lbs]

Uncontrolled Potential to Emit (tons/yr) = [Potential Throughput (tons/yr)] x [Emission Factor (lb/ton)] x [1 ton/2,000 lbs]

where:

Emission factors are from AP-42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

*No emission factor for PM10 available (assume PM = PM10)

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

Abbreviations

PM = Particulate Matter

NOx = Nitrous Oxides

PM10 = Particulate Matter (<10 um)

VOC - Volatile Organic Compounds

SO2 = Sulfur Dioxide

CO = Carbon Monoxide

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

Company Name: Southlawn Cemetery
Address City IN Zip: 61430 U.S. 31 South, South Bend, IN 46614
Permit Number: 141-28787-00569
Plt ID: 141-00569
Reviewer: Jeff Scull
Date: 11/20/2009

Emission Unit	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Combined Total Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Uncontrolled Potential to Emit (tons/yr)					
					PM*	PM10*/2.5	SO2	NOx**	VOC	CO
crematory incinerator for animal remains, identified as 01	1	2.5	2.5	21.90	0.021	0.083	0.007	1.095	0.060	0.920
Totals	1	2.5	2.5	21.90	0.021	0.083	0.007	1.095	0.060	0.920

Pollutant	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Emission Unit	Uncontrolled Potential to Emit (tons/yr)									
	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
crematory incinerator for animal remains, identified as 01	2.3E-05	1.3E-05	8.2E-04	0.020	3.7E-05	5.5E-06	1.2E-05	1.5E-05	4.2E-06	2.3E-05
Totals	2.3E-05	1.3E-05	8.2E-04	0.020	3.7E-05	5.5E-06	1.2E-05	1.5E-05	4.2E-06	2.3E-05

Uncontrolled Total HAPs (tons/yr) 0.021

Methodology

Potential Throughput (MMCF/yr) = [Combined Total Heat Input Capacity (MMBtu/hr)] x [8,760 hrs/yr] x [1 MMCF/1,000 MMBtu]

Uncontrolled Potential to Emit (tons/yr) = [Potential Throughput (MMCF/yr)] x [Emission Factor (lb/MMCF)] x [1 ton/2,000 lbs]

where:

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)

All emission factors are based on normal firing.

*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

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

MMCF = 1,000 MMBtu, MMCF = 1,000,000 Cubic Feet of Gas

Abbreviations

PM = Particulate Matter	NOx = Nitrous Oxides	DCB = Dichlorobenzene	Cr = Chromium
PM10 = Particulate Matter (<10 um)	VOC - Volatile Organic Compounds	Pb = Lead	Mn = Manganese
SO2 = Sulfur Dioxide	CO = Carbon Monoxide	Cd = Cadmium	Ni = Nickel



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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: KR Palmer
Southlawn Cemetary
61430 US 31 S
South Bend, IN 46614

DATE: December 28, 2009

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

SUBJECT: Final Decision
Exemption
141-28787-00569

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	MIDENNEY 12/28/2009 Southlawn Cemetery 141-28787-00569 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		KR Palmer Southlawn Cemetery 61430 US 31 S South Bend IN 46614 (Source CAATS) via confirmed delivery										
2		Mr. Charles L. Berger Attorney Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)										
3		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
4		Mr. Wayne Falda South Bend Tribune 255 W Colfax Ave South Bend IN 46626 (Affected Party)										
5		South Bend City Council / Mayors Office 227 W. Jefferson Blvd. South Bend IN 46601 (Local Official)										
6		St. Joseph County Board of Commissioners 227 West Jefferson Blvd, South Bend IN 46601 (Local Official)										
7		St. Joseph County Health Department 227 W Jefferson Blvd, Room 825 South Bend IN 46601-1870 (Health Department)										
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