## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.



Michael R. Pence Governor

ice

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: June 3, 2013

RE: St. Vincent Fishers Hospital / 057-32818-00084

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

## Notice of Decision: Approval - Effective Immediately

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 IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require 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 of 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.dot12/03/07



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## NEW SOURCE REVIEW PERMIT AND SOURCE SPECIFIC OPERATING AGREEMENT OFFICE OF AIR QUALITY

## St. Vincent Fishers Hospital 13861 Olio Road Fishers, Indiana 46037

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this New Source Review (NSR) Permit and Source Specific Operating Agreement (SSOA).

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-9 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Source Specific Operating Agreement (SSOA) under 326 IAC 2-9.

Source Specific Operating Agreement No. S057-32818-00084						
Issued by:						
Britanan Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date:	June 3,	2013			

#### **SECTION A**

#### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits pursuant to 326 IAC 2.

#### A.1 General Information

The Permittee owns and operates a stationary general medical and surgical hospital.

Source Address: General Source Phone Number:	136861 Olio Road, Fishers, Indiana 46037 317-338-3264
SIC Code:	8062
County Location:	Hamilton County
Source Location Status:	Nonattainment for PM 2.5
	Attainment for all other criteria pollutants
Source Status:	Source Specific Operating Agreement (SSOA)
	Not 1 of 28 Source Categories

#### A.2 Source Summary

This stationary source consists of the following:

- (a) External Combustion Sources [326 IAC 2-9-13]
- (b) Internal Combustion Sources [326 IAC 2-9-14]
- A.3 New Source Review and SSOA Applicability [326 IAC 2-9-1] [326 IAC 2-1.1-3(d)]
  - (a) This source, otherwise required to have a permit under 326 IAC 2-5.1, 326 IAC 2-5.5, 326 IAC 2-6.1, 326 IAC 2-7, or 326 IAC 2-8, has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Source Specific Operating Agreement (SSOA) under 326 IAC 2-9.
  - (b) Pursuant to 326 IAC 2-9-1(g), the source may apply for up to four (4) different SSOAs contained in 326 IAC 2-9.
  - (c) Pursuant to 326 IAC 2-1.1-3(d), this New Source Review Permit is required for the following:
    - (a) External combustion sources complying with 326 IAC 2-9-13
    - (b) Internal combustion sources complying with 326 IAC 2-9-14

#### **SECTION B**

#### GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

# B.2 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

#### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.
- B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

## B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

#### B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of

requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

- B.8 Prior Permits Superseded [326 IAC 2-1.1-9.5]
  - (a) All terms and conditions of permits established prior to SSOA No. S057-32818-00084 and issued pursuant to permitting programs approved into the state implementation plan have been either:
    - (1) incorporated as originally stated,
    - (2) revised, or
    - (3) deleted.
  - (b) All previous registrations and permits are superseded by this permit.
- B.9 Annual Notification [326 IAC 2-9-1(d)] Pursuant to 326 IAC 2-9-1(d):
  - (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this SSOA.
  - (b) The annual notice shall be submitted in the format attached no later than January 30 of each year to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, IN 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- B.10 Source Modification Requirement [326 IAC 2-9-1(e)]
  Pursuant to 326 IAC 2-9-1(e), before the Permittee modifies its operations in such a way that it will no longer comply with the applicable restrictions and conditions of this SSOA, it shall obtain the appropriate approval from IDEM, OAQ under 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-4.1, 326 IAC 2-5.1, 326 IAC 2-6.1, 326 IAC 2-7, and 326 IAC 2-8.
- B.11 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1] Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:
  - (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.12 Permit Revocation [326 IAC 2-1.1-9] [326 IAC 2-9-1(j)]

- (a) Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
  - (1) Violation of any conditions of this permit.
  - (2) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
  - (3) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
  - (4) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
  - (5) For any cause which establishes in the judgment of IDEM the fact that continuance of this permit is not consistent with purposes of this article.
- (b) Pursuant to 326 IAC 2-9-1(j), noncompliance with any applicable provision 326 IAC 2-9 or any requirement contained in this SSOA may result in the revocation of this SSOA and make this source subject to the applicable requirements of a major source.

#### **SECTION C**

#### SOURCE OPERATION CONDITIONS

Entire Source

#### Emission Limitations and Standards [326 IAC 2-9]

C.1 Opacity [326 IAC 5-1]

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, unless otherwise stated in this SSOA:

- (a) 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.
- (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.
- C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee 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 (Fugitive Dust Emissions).

#### Testing Requirements [326 IAC 2-9)]

- C.3 Performance Testing [326 IAC 3-6]
  - (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11] [326 IAC 2-9]

C.3 Compliance with Applicable Requirements [326 IAC 2-9-1(i)]

Pursuant to 326 IAC 2-9-1(i), the owner or operator is hereby notified that this operating agreement does not relieve the Permittee of the responsibility to comply with the provisions of any applicable federal, state, or local rules, or any New Source Performance Standards (NSPS), 40 CFR Part 60, or National Emission Standards for Hazardous Air Pollutants (NESHAP), 40

#### CFR Part 61 or 40 CFR Part 63.

#### Record Keeping and Reporting Requirements [326 IAC 2-9]

#### C.4 General Record Keeping Requirements [326 IAC 2-9-1(f)]

Pursuant to 326 IAC 2-9-1(f), records of all required monitoring data, reports and support information required by this SSOA shall be physically present or electronically accessible at the source location for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### C.5 Reporting Requirements [326 IAC 2-9-1(h)]

Pursuant to 326 IAC 2-9-1(h), any exceedance of any requirement contained in this operating agreement shall be reported, in writing, within one (1) week of its occurrence. Said report shall include information on the actions taken to correct the exceedance, including measures to reduce emissions, in order to comply with the established limits. If an exceedance is the result of a malfunction, then the provisions of 326 IAC 1-6 apply.

#### SECTION D

#### **OPERATION CONDITIONS**

Operation Description: External Combustion Sources [326 IAC 2-9-13]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-9]

#### D.1 External Combustion Sources Limitations [326 IAC 2-9-13(b)(2)(A)] [326 IAC 2-9-13(c)]

- (a) Pursuant to 326 IAC 2-9-13(b)(2)(A), the fuel usage for the external combustion units at this source shall be limited as follows:
  - 1) less than nine hundred seventy-six million cubic feet (976 MMcf) of natural gas, based on a straight twelve (12) month total, and
  - (2) less than one hundred seventeen kilogallons (117 kgal) of #1 or #2 distillate oil, or any combination of #1 or #2 oil, per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-9-13(c), sources must be able to demonstrate compliance no later than thirty (30) days after receipt of a written request by IDEM, OAQ, or U.S. EPA. No other demonstration of compliance shall be required. A source specific operating agreement is not required for these sources.

#### D.2 Opacity [326 IAC 2-9-13(b)(1)]

Pursuant to 326 IAC 2-9-13(b)(1), the visible emissions from the source shall not exceed twenty percent (20%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

#### **Record Keeping and Reporting Requirements**

D.3 Record Keeping Requirements

To document the compliance status with Condition D.1, the source shall keep the following records for the external combustion units:

- (a) the monthly hours operated for each external combustion unit; and
- (b) records of the annual fuel usage for each external combustion unit.

Section C - General Record Keeping Requirements of this SSOA contains the Permittee's obligations with regard to the records required by this condition.

#### SECTION E

#### **OPERATION CONDITIONS**

Operation Description: Internal Combustion Sources [326 IAC 2-9-14]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-9]

#### E.1 Internal Combustion Sources Limitation [326 IAC 2-9-14(a)(1)] [326 IAC 2-9-14(b)]

- (a) Pursuant to 326 IAC 2-9-14(a)(2), the fuel usage for internal combustion units at this source shall be limited to less than three hundred seventy-six and seventy-two hundredths (376.72) kilogallons of diesel fuel per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-9-14(b), sources must be able to demonstrate compliance no later than thirty (30) days after receipt of a written request by IDEM, OAQ, or U.S. EPA. No other demonstration of compliance shall be required. A source specific operating agreement is not required for these sources.

#### **Record Keeping and Reporting Requirements**

#### E.2 Record Keeping Requirements

To document the compliance status with Condition E.1, the source shall keep the following records for the internal combustion units:

- (a) the monthly hours operated for each internal combustion unit; and
- (b) records of the annual fuel usage for each internal combustion unit.

Section C - General Record Keeping Requirements of this SSOA contains the Permittee's obligations with regard to the records required by this condition.

#### **SECTION F**

#### **OPERATION CONDITIONS**

Operation Description:

(a) Two (2) Emergency Generator Engines, EG-1 and EG-2, diesel-fired, 800kW (1072 hp) each, constructed in 2013.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- F.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]
  - Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart A.
  - (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

 F.2 New Source Performance Standards (NSPS) for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Subpart 60, Subpart IIII][326 IAC 12]
 The requirements of the New Source Performance Standard for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart (IIII) (326 IAC 12), are applicable for the diesel-fired generators, identified as EG-1 and EG-2.

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII of this permit, which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart IIII:

- (a) 40 CFR 60.4200
- (b) 40 CFR 60.4205
- (c) 40 CFR 60.4206
- (b) 40 CFR 60.4207
- (d) 40 CFR 60.4208
- (e) 40 CFR 60.4209
- (f) 40 CFR 60.4211
- (g) 40 CFR 60.4212
- (h) 40 CFR 60.4213
- (i) 40 CFR 60.4214
- (k) 40 CFR 60.4218
- (I) 40 CFR 60.4219
- (m) Tables 1 through 8

#### **SECTION G**

#### **OPERATION CONDITIONS**

Operation Description:

(a) Two (2) Emergency Generator Engines, EG-1 and EG-2, diesel-fired, 800kW each, constructed in 2013.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- G.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR 63, Subpart A]
  - Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part
    63, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20 1, except as otherwise specified in 40 CFR 63, Subpart ZZZZ.
  - (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

G.2 Stationary Reciprocating Internal Combustion Engines - NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ of this permit, which are incorporated by reference as 326 IAC 20, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ

- (a) 40 CFR 63.6580
- (b) 40 CFR 63.6585
- (c) 40 CFR 63.6590(a)
- (d) 40 CFR 63.6585(e)
- (e) 40 CFR 63.6585(b)
- (f) 40 CFR 63.6590(c)

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

#### SOURCE SPECIFIC OPERATING AGREEMENT (SSOA) ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-9.

Company Name:	St. Vincent Fishers Hospital
Address:	13861 Olio Road
City:	Fishers, Indiana 46037
Phone #:	317-338-3264
SSOA #:	S057-32818-00084

I hereby certify that St. Vincent Fishers Hospital is:

I hereby certify that St. Vincent Fishers Hospital is:

☐ still in operation.☐ no longer in operation.

☐ in compliance with the requirements of SSOA S057-32818-00084.

□ not in compliance with the requirements of SSOA S057-32818-00084.

Authorized Individual (typed):	
Title:	
Signature:	
Date:	

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:		

Mail to: Permit Administration and Support Section

Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

St. Vincent Fishers Hospital 13861 Olio Road Fishers, IN 456037

#### Affidavit of Construction

I,		, being duly sworn upon my oath, depose and say:
	(Name of the Authorized Representation	/e)
1.	l live in	County, Indiana and being of sound mind and over twenty-one
	(21) years of age, I am competent to g	ive this affidavit.
_		
2.	I hold the position of(Ti	tle) for
3.	By virtue of my position with	, I have personal (Company Name)
		(Company Name)
	knowledge of the representations cont	ained in this affidavit and am authorized to make these representations
	on behalf of	ompany Name)
4.		Hospital, located at 136861 Olio Road, Fishers, IN 46037, completed
		d surgical Hospital on in conformity with the pplication received by the Office of Air Quality on February 11, 2013, and
		ce Review Permit and SSOA No. 057-32818-00084 issued on
	· ·	
5.	Additional were (operations/facilities)	constructed/substituted as described in the attachment to this document
		the construction approval. (Delete this statement if it does not apply.)
Further Affiant sa		
		ns contained in this affidavit are true, to the best of my information
and belief.		
		Signature
		Date .
STATE OF INDI	ANA)	Date
	)SS	
COUNTY OF	)	
Subscr	ibed and sworn to me, a notary public i	n and for County and State of
Indiana on this	day of	, 20
My Commission	expires:	<u>.</u> .
		Signature

Name (typed or printed)

## Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Review (NSR) Permit and a Source Specific Operating Agreement (SSOA)

#### Source Description and Location

Source Name:
Source Location:
County:
SIC Code:
Operation Permit No.:
Permit Reviewer:

St. Vincent Fishers Hospital 13861 Olio Road, Fishers, IN 46037 Hamilton 8062 S057-32818-00084 Daniel W Pell

The Office of Air Quality (OAQ) has reviewed an application, submitted by St. Vincent Fishers Hospital on February 8, 2013, for a New Source Review (NSR) Permit and a Source Specific Operating Agreement (SSOA) for a proposed expansion of the hospital for the operation of a stationary 40 bed in-patient hospital.

#### **Existing Approvals**

There have been no previous approvals issued to this source.

#### Permit Level Determination – NSR and SSOA

This source is obtaining a New Source Review (NSR) Permit and Source Specific Operating Agreement (SSOA) for approval to construct (pursuant to 326 IAC 2-5.1-3) and operate (pursuant to 326 IAC 2-9), since the source-wide limited potential to emit of one or more criteria pollutants is greater than twenty-five (25) tons per year.

This source consists of the following operations:

- (a) External combustion sources complying with 326 IAC 2-9-13
  - (1) Three (3) dual fuel fired condensing boilers, identified as B1 to B3, constructed in 2013 with a maximum heat input capacity of 2 MMBtu/hr each.
  - (2) Two (2) natural gas fired low pressure boilers, identified as SB-1 to SB-2, constructed in 2013 with a maximum heat input capacity of 0.85 MMBtu/he each.
  - (3) Two (2) dual fuel domestic hot water heaters, identified as DHW-1 & DHW-2, constructed in 2012 With a maximum heat input capacity of 1 MMBtu/hr each.

Based on emission factors from EPA's Compilation of Air Pollutant Emission Factors AP-42, Chapter 1, External Combustion Sources, IDEM has determined that external combustion sources complying with the fuel usage limitations contained in this SSOA will have a limited PTE of SO<sub>2</sub> and NOx greater than twenty-five (25) tons per year.

- (b) Internal combustion sources complying with 326 IAC 2-9-14
  - (1) Two (2) 800 Kw each diesel fired emergency generators, identified as EG-1 & EG-2, constructed in 2013.

Based on emission factors from EPA's Compilation of Air Pollutant Emission Factors AP-42, Chapter 3, Stationary Internal Combustion Sources, IDEM has determined that internal combustion sources complying with the fuel usage limitations contained in this SSOA have a limited PTE of SO<sub>2</sub> and NOx greater than twenty-five (25) tons per year.

For a source that operates under 326 IAC 2-9 (Source Specific Operating Agreement Program), the source is required to comply with the pre-established emission limitations and standards contained in the specific SSOA(s) under 326 IAC 2-9. For a detailed description of the requirements specific to each SSOA, see 326 IAC 2-9.

#### Enforcement Issues

There are no pending enforcement actions related to this source.

#### Federal Rule Applicability Determination

New Source Performance Standards (NSPSs)

#### External Combustion Sources (Boilers B1-B3, Low Pressure Boilers SB-1 & SB-2)

(a) The natural gas-fired boilers and the dual-fuel fired boilers are not subject to the New Source Performance Standards for Small Industrial Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), which is incorporated by reference as 326 IAC 12, because each have a maximum heat input capacity less than 10 MMBtu/hr.

#### Internal Combustion Sources (Emergency Generators EG-1 & EG-2)

(b) The requirements of the New Source Performance Standard for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart (IIII) (326 IAC 12), are applicable for the diesel-fired emergency generators, identified as EG-1 and EG-2, as they were constructed and permitted in 2013.

The emergency diesel fired generators identified as EG-1 & EG-2 are subject to the following portion of 40 CFR 60, Subpart IIII:

- (1) 40 CFR 60.4200
- (2) 40 CFR 60.4205
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209
- (7) 40 CFR 60.4211
- (8) 40 CFR 60.4212
- (9) 40 CFR 60.4213
- (10) 40 CFR 60.4214
- (11) 40 CFR 60.4218
- (12) 40 CFR 60.4219
- (13) Tables 1 through 8
- (c) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the SSOA.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

#### Internal Combustion Sources (Emergency Generators EG-1 & EG-2)

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20] for Stationary Reciprocating Internal Combustion Engines are applicable to the diesel-fired emergency generators, identified as EG-1 and EG-2.

The emergency diesel fired generators identified as EG-1 & EG-2 are subject to the following portion of 40 CFR 63, Subpart ZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)
- (4) 40 CFR 63.6585(e)
- (5) 40 CFR 63.6585(b)
- (6) 40 CFR 63.6590(c)
- (e) There are no other 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)

(e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to 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 2-9 (Source Specific Operating Agreement Program) SSOA applicability is discussed under the Permit Level Determination – SSOA section above.
- (b) 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.
- (c) 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.
- (d) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) The requirements of 326 IAC 6-5 are not included in the SSOA, since each of the SSOAs contained under 326 IAC 2-9 (Source Specific Operating Agreement Program) that limit fugitive emissions include pre-established fugitive dust control measures.

#### Compliance Determination, Monitoring, Record Keeping, and Reporting Requirements

For a source that operates under 326 IAC 2-9 (Source Specific Operating Agreement Program), the source is required to comply with the pre-established emission limitations and standards, compliance determination, compliance monitoring, and record keeping and reporting requirements contained in the specific SSOA(s) under 326 IAC 2-9. For a detailed description of the requirements specific to each SSOA, see 326 IAC 2-9.

#### **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 February 8, 2013.

The operation of this source shall be subject to the conditions of the attached proposed New Source Review (NSR) Permit and SSOA No. S057-32818-00084. The staff recommends to the Commissioner that this NSR Permit and SSOA be approved.

#### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Daniel W Pell 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) 234-8532 or toll free at 1-800-451-6027 extension 4-8532.
- (b) A copy of the findings is available on the Internet at: <u>http://www.in.gov/ai/appfiles/idem-caats/</u>
- (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: <a href="https://www.in.gov/idem">www.in.gov/idem</a>

#### **Appendix A: Emissions Calculations** Three (3) Heating Hot Water Boilers at 2 MMBH Each - Dual Fuel (Natural Gas and #2 Fuel Oil) MM BTU/HR <100 Natural Gas Combustion Calculations Only (B-1, B-2, & B-3)

Company Name: St. Vincent Fishers Hospital Address City IN Zip: 13861 Olio Road, Fishers, IN 46037 Permit Number: 32818 **Pit ID:** 057-00084 Reviewer: Daniel W Pell **Date:** 4/5/2013

Heat Input Capacity MMBtu/hr	HH∨ mmBtu	Potential Throughput MMCF/yr
	mmscf	
6.0	1020	51.5

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.05	0.20	0.20	0.02	2.58	0.14	2.16

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 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

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 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

### **HAPS Calculations**

	HAPs - Organics					
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics
Potential Emission in tons/yr	5.411E-05	3.092E-05	1.932E-03	4.638E-02	8.760E-05	4.848E-02

		HAPs - Metals					
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals	
Potential Emission in tons/yr	1.288E-05	2.834E-05	3.607E-05	9.791E-06	5.411E-05	1.412E-04	
					Total HAPs	4.862E-02	
Methodology is the same as above.					Worst HAP	4.638E-02	

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

#### **Greenhouse Gas Calculations**

		Greenhouse Gas				
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2			
Potential Emission in tons/yr	3,092	0.1	0.1			
Summed Potential Emissions in tons/yr		3,092				
CO2e Total in tons/yr	3,111					

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42. Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

#### Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) Three (3) Heating Hot Water Boilers at 2 MMBH Each - Dual Fuel (Natural Gas and #2 Fuel Oil) #2 Fuel Oil Emissions Calculations Only (B-1, B-2, & B-3)

Address, City IN Zip: Permit Number: Plt ID:	St. Vincent Fishers Hospital 13861 Olio Road, Fishers, IN 46037 32818 057-00084 Daniel W. Pell
Date:	4/5/2013
Potential Thro	S = Weight % Sulfur

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year		S = Weight % 0.5	Sulfur	Potential Thro gals/year	pughput	
6	375.428571		375428.571				
				Pollutant			
	PM*	PM10	direct PM2.5	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.3	1.3	71 <i>(14</i> 2.0S)	20.0	0.20	5.0
Potential Emission in tons/yr	0.38	0.43	0.24	13.33	3.75	0.04	0.94

#### Methodology

MOHAMMAD: 1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Potential Throughput (gals/year) = Heat Input Capacity (MMBtu/hr) x 1000 x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 5/10 (see erata file)

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal. Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

#### **Greenhouse Gas Calculations**

	Greenhouse Gas					
Emission Factor in lb/kgal	CO2	CH4	N2O			
Emission Factor in kg/mmBtu	73.96	0.0006	0.003			
Potential Emission in tons/yr	4,434.1	0.0	0.2			
Summed Potential Emissions in tons/yr	4,434					
CO2e Total in tons/yr	4,491					

#### Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Bituminous Coal Combustion Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (gal/yr) x Emission Factor (kg/MMBtu) x 0.145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/y N2O GWP (310).

CO2 and N2O Emission (tons/yr) = Throughput (gal/yr) X Emission Factor (kg/mmBtu) x .145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs CH 4 Emission (tons/yr) = Throughput (gal/yr) X Emission Factor (kg/mmBtu) x .145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs

#### Appendix A: Emissions Calculations Two (2) Low Pressure Boilers at 0.85 MMBH Each - Natural Gas MM BTU/HR <100 Natural Gas Combustion Calculations (SB-1 & SB-2)

Company Name:St. Vincent Fishers HospitalAddress City IN Zip:13861 Olio Road, Fishers, IN 46037Permit Number:32818Plt ID:057-00084Reviewer:Daniel W PellDate:4/5/2013

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu	MMCF/yr
	mmscf	_
1.7	1020	14.6

	Pollutant							
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100	5.5	84	
					**see below			
Potential Emission in tons/yr	0.01	0.06	0.06	0.00	0.73	0.04	0.61	

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 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

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 Potential Throughput (MMCE) – Heat Input Capacity (MMRtu/br) x 8,760 bro/ur x 1, MMCE/1, 020 MMRtu

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

#### **HAPS Calculations**

	HAPs - Organics								
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics			
Emission Factor in Ib/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03				
Potential Emission in tons/yr	1.533E-05	8.760E-06	5.475E-04	1.314E-02	2.482E-05	1.374E-02			

	HAPs - Metals								
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals			
Potential Emission in tons/yr	3.650E-06	8.030E-06	1.022E-05	2.774E-06	1.533E-05	4.000E-05			
	•			•	Total HAPs	1.378E-02			
Methodology is the same as above.					Worst Single HAP	1.314E-02			

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

#### **Greenhouse Gas Calculations**

		Greenhouse Gas	
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	876	0.0	0.0
Summed Potential Emissions in tons/yr		876	
CO2e Total in tons/yr		881	

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64. Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A. Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

#### Appendix A: Emissions Calculations Two (2) Domestic Hot Water Heaters at 1 MMBH Each - Dual Fuel (Natural Gas and #2 Fuel Oil) MM BTU/HR <100 Natural Gas Combustion Calculations Only (DHW-1 & DHW-2)

Company Name: St. Vincent Fishers Hospital Address City IN Zip: 13861 Olio Road, Fishers, IN 46037 Permit Number: 32818 **Pit ID:** 057-00084 **Reviewer:** Daniel W Pell **Date:** 4/5/2013

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu	MMCF/yr
	mmscf	
2.0	1020	17.2

	Pollutant								
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	СО		
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100 **************	5.5	84		
					**see below				
Potential Emission in tons/yr	0.02	0.07	0.07	0.01	0.86	0.05	0.72		

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 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

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 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

#### **HAPS** Calculations

	HAPs - Organics							
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics		
Potential Emission in tons/yr	1.804E-05	1.031E-05	6.441E-04	1.546E-02	2.920E-05	1.616E-02		

		HAPs - Metals							
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals			
Potential Emission in tons/yr	4.294E-06	9.447E-06	1.202E-05	3.264E-06	1.804E-05	4.706E-05			
					Total HAPs	1.621E-02			
Methodology is the same as above.					Worst HAP	1.546E-02			

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

#### **Greenhouse Gas Calculations**

	Greenhouse Gas					
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2			
Potential Emission in tons/yr	1,031	0.0	0.0			
Summed Potential Emissions in tons/yr	1,031					
CO2e Total in tons/yr	1,037					

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

CO 5.0

0.31

#### Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) Two (2) Domestic Hot Water Heaters at 1 MMBH Each - Dual Fuel (Natural Gas and #2 Fuel Oil) #2 Fuel Oil Emissions Calculations Only (DHW-1 & DHW-2)

	Reviewer:	13861 Olio R 32818 057-00084	oad, Fishers, IN	V 46037			
Heat Input Capacity MMBtu/hr	Potential Thro kgals/year	Potential ThroughputS = Weight % SulfurPotential Throughputkgals/year0.5gals/year					
2	125.142857				125142.857		
				Pollutant			
Emission Factor in lb/kgal	PM* 2.0	PM10 2.3	direct PM2.5 1.3	SO2 71 (142.0S)	NOx 20.0	VOC 0.20	
Potential Emission in tons/yr	0.13	0.14	0.08	4.44	1.25	0.01	

#### Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Potential Throughput (gals/year) = Heat Input Capacity (MMBtu/hr) x 1000 x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 5/10 (see erata file)

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal. Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

#### **Greenhouse Gas Calculations**

	G	reenhouse Ga	IS
Emission Factor in lb/kgal	CO2	CH4	N2O
Emission Factor in kg/mmBtu	73.96	0.0006	0.003
Potential Emission in tons/yr	1,478.0	0.0	0.1
Summed Potential Emissions in tons/yr		1,478	
CO2e Total in tons/yr		1,497	

#### Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Bituminous Coal Combustion Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (gal/yr) x Emission Factor (kg/MMBtu) x 0.145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/y N2O GWP (310).

CO2 and N2O Emission (tons/yr) = Throughput (gal/yr) X Emission Factor (kg/mmBtu) x .145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs CH 4 Emission (tons/yr) = Throughput (gal/yr) X Emission Factor (kg/mmBtu) x .145 MMBtu/gal x 1lbs/0.454 kg x 1 ton/2000 lbs

5.91E-03

#### Appendix A: Emission Calculations Large Reciprocating Internal Combustion Engines - Diesel Fuel Two (2) Electrical Generators at 800kW (1072 HP each) (EG-1 & EG-2) Output Rating (>600 HP) Maximum Input Rate (>4.2 MMBtu/hr)

Company Name:St. Vincent Fishers HospitalAddress City IN Zip:13861 Olio Road, Fishers, IN 46037Permit Number:32818Plt ID:057-00084Reviewer:Daniel W. PellDate:4/5/2013

#### B. Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	2144.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	1,072,000
Sulfur Content (S) of Fuel (% by weight)	0.500

		Pollutant							
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO		
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	4.01E-04	4.05E-03	2.40E-02	7.05E-04	5.50E-03		
				(.00809S)	**see below				
Potential Emission in tons/yr	0.38	0.21	0.21	2.17	12.86	0.38	2.95		

\*PM10 emission factor in lb/hp-hr was calculated using the emission factor in lb/MMBtu and a brake specific

fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.4-1 (updated10/96)).

\*\*NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

#### Hazardous Air Pollutants (HAPs)

		Pollutant						
							Total PAH	
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	HAPs***	
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06	
Potential Emission in tons/yr	2.91E-03	1.05E-03	7.24E-04	2.96E-04	9.46E-05	2.96E-05	7.95E-04	

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel

consumption of 7,000 Btu / hp-hr (AP-42 Table 3.4-3 (updated 10/96)).

## Green House Gas Emissions (GHG)

	Pollutant				
	CO2	CH4	N2O		
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06		
Potential Emission in tons/yr	6.22E+02	3.40E-02	4.98E-03		

Summed Potential Emissions in tons/yr	6.22E+02
CO2e Total in tons/yr	6.24E+02

Potential Emission of Total HAPs (tons/yr)

#### Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4.

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] \* [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

## Appendix A: Emission Calculations Potential to Emit of Entire Source

Company Name:St. Vincent Fishers HospitalSource Address:13861 Olio Road, Fishers, IN 46037Permit Number:057-32818-00084Reviewer:Daniel W. PellDate:4/5/2013

		Potential to Emit of Entire Source (tons/year)								
	РМ	PM10	PM2.5	SO2	NOx	VOC	CO	GHG total	Worst HAP	Total HAP
Condensing Boilers B-1, B- 2, B-3 (NG & FO2)	0.38	0.43	0.24	13.33	3.75	0.14	2.16	4491	Hexane 0.0463	0.049
Low Pressure Steam Boilers SB-1, SB-2 (NG)	0.01	0.06	0.06	0.00	0.73	0.04	0.61	881	Hexane 0.0131	0.014
Domestic Hot Water Heaters DHW-1, DHW- 2 (NG & FO2)	0.13	0.14	0.08	4.44	1.25	0.05	0.72	1497	Hexane 0.0154	0.016
Diesel Engines EG-1, EG-2 (FO2)	0.38	0.21	0.21	2.17	12.86	0.38	2.95	624	Benzene 0.0510	0.001
Total	0.89	0.85	0.60	19.94	18.60	0.61	6.45	7,493	Hexane 0.1258	0.079

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.



Michael R. Pence Governor 100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

*Thomas W. Easterly* Commissioner

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

- TO: Victor Detienne St. Vincent Fishers Hospital 13861 Olio Rd. Fishers. Indiana 46037
- DATE: June 3, 2013
- FROM: Matt Stuckey, Branch Chief Permits Branch Office of Air Quality
- SUBJECT: Final Decision SSOA - NSR 057-32818-00084

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: Bill Fenton, Department Director / St Vincent Fishers Hospital Brenda Matthews, Consultant / Keramida Environmental. Inc. 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

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June 3, 2013

TO: Hamilton East Public Library

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

Subject: Important Information for Display Regarding a Final Determination

## Applicant Name:St. Vincent Fishers HospitalPermit Number:057-32818-00084

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.** 

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures Final Library.dot 11/30/07



## Mail Code 61-53

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2		Bill Fenton Department Dir St Vincent Fishers Hospital 2001 W 86th St Indianapolis IN	46260 <i>(R</i> 0	O CAATS)							
3		Hamilton East Public Library 5 Municipal Drive Fishers IN 46037 (Library)									
4		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060	-5405 (Heal	th Department	)						
5		Hamilton County Board of Commissioners One Hamilton County Square Noblesville	N 46064 <i>(L</i>	ocal Official)							
6		Fishers Town Council and Town Manager 1 Municipal Dr. Fishers IN 46038 (Local Official)									
7		Brenda Mathew Keramida Environmental, Inc. 401 North College Indianapolis IN 46202 (Consultant)									
8		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 (Affected Party)									
9		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 (Affected Party)									
10		Jill Butterfield 17903 Spring Mill Rd Westfield IN 46074 (Affected Party)									
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