

Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence

Carol S. Comer

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a Federally Enforceable State Operating Permit (FESOP) for Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines in Vanderburgh County

FESOP Renewal No.: F163-37136-00084

The Indiana Department of Environmental Management (IDEM) has received an application from Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines located at Bergdolt Road, Evansville, Indiana 47741 for a renewal of its FESOP issued on Janurary 31, 2007. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines to continue to operate its existing source.

This draft FESOP Renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Evansville Vanderburgh Public Library 200 SE Martin Luther King Jr. Blvd. Evansville, IN 47713

and

IDEM Southwest Regional Office 1120 N. Vincennes Avenue P.O. Box 128 Petersburg, IN 47567-0128

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing,



you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number No.: F163-37136-00084 in all correspondence.

Comments should be sent to:

Tamara Havics IDEM, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (800) 451-6027, ask for extension 2-8219 Or dial directly: (317) 232-8219 Fax: (317) 232-6749 attn: Tamara Havics

E-mail: THavics@idem.lN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Tamara Havics of my staff at the above address.

Jason R. Krawczyk, Section Chief

Permits Branch
Office of Air Quality



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence Governor



Carol S. Comer Commissioner

Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Bergdolt Road Evansville, Indiana 47741

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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 FESOP under 326 IAC 2-8.

Operation Permit No.: F163-37136-00084					
Issued by:	Issuance Date:				
Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality	Expiration Date:				



TABLE OF CONTENTS

SECTION A	SOURCE SUMMARY	4
A.1 A.2 A.3 A.4	General Information [326 IAC 2-8-3(b)] Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)] FESOP Applicability [326 IAC 2-8-2]	
SECTION B	GENERAL CONDITIONS	5
B.1 B.2 B.3 B.4 B.5 B.6 B.7 B.8 B.9 B.10 B.11 B.12 B.13 B.14 B.15 B.16 B.17 B.18 B.19 B.20 B.21 B.22	Definitions [326 IAC 2-8-1] Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)] Term of Conditions [326 IAC 2-1.1-9.5] Enforceability [326 IAC 2-8-6][IC 13-17-12] Severability [326 IAC 2-8-4(4)] Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)] Duty to Provide Information [326 IAC 2-8-4(5)(E)] Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)] Annual Compliance Certification [326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)] Annual Compliance Order Issuance [326 IAC 2-8-5(a)(1)] Compliance Order Issuance [326 IAC 2-8-5(b)] Preventive Maintenance Plan [326 IAC 2-8-5(b)] Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] Emergency Provisions [326 IAC 2-8-12] Prior Permits Superseded [326 IAC 2-8-12] Prior Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8] Permit Renewal [326 IAC 2-8-7(a)][326 IAC 2-8-8] Permit Renewal [326 IAC 2-8-3(h)] Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1] Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1] Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1] Transfer of Ownership or Operational Control [326 IAC 2-8-16][326 IAC 2-8-16	
SECTION C	SOURCE OPERATION CONDITIONS	
C.1 C.2 C.3 C.4 C.5 C.6 C.7	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2] Overall Source Limit [326 IAC 2-8] Opacity [326 IAC 5-1] Open Burning [326 IAC 4-1][IC 13-17-9] Incineration [326 IAC 4-2][326 IAC 9-1-2] Fugitive Dust Emissions [326 IAC 6-4] Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
Testi C.8	ng Requirements [326 IAC 2-8-4(3)] Performance Testing [326 IAC 3-6]	. 17
Com C.9	oliance Requirements [326 IAC 2-1.1-11]	. 17
Com C.10 C.11	Diance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]	. 18

DRAFT

	Correc C.12	tive Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]	18
	C.13 C.14	Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5] Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]	
	Record C.15 C.16	Keeping and Reporting Requirements [326 IAC 2-8-4(3)]	20
	Stratos C.17	Spheric Ozone Protection	21
SECTIO	ON D.1	EMISSIONS UNIT OPERATION CONDITIONS	22
	Emissi D.1.1 D.1.2 D.1.3	· ····································	22
	Record D.1.4 D.1.5	Keeping and Reporting Requirements [326 IAC 2-8-4(3)]	23
CERTIF	CATIO	N	24
EMERG	SENCY	OCCURRENCE REPORT	25
FESOP	Quarte	rly Report	27
FESOP	Quarte	rly Report	28
QUART	ERLY [DEVIATION AND COMPLIANCE MONITORING REPORT	29

DRAFT

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 through A.3 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 or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary electric generating facility.

Source Address: Bergdolt Road, Evansville, Indiana 47741

General Source Phone Number: (812) 491-4562

SIC Code: 4911 (Electric Services)

County Location: Vanderburgh

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit Program

Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) 11,500 KW General Electric gas turbine, identified as NE-1-1, exhausting to stack #1, installed in 1963;
- (b) One (1) 12,250 KW General Electric gas turbine, identified as NE-2-1, exhausting to stack #2, installed in 1964;
- (c) One (1) 320 HP diesel starter engine, identified as NE-1-2, exhausting to stack #3, installed in 1981; and
- (d) One (1) 300 HP diesel starter engine, identified as NE-2-2, exhausting to stack #4, installed in 1964.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Unpaved roadways.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

DRAFT

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F163-37136-00084, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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 [326 IAC 2-8-6][IC 13-17-12]

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 [326 IAC 2-8-4(4)]

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 [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (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 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

DRAFT

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
- (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 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, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit 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.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

DRAFT

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

DRAFT

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile 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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

DRAFT

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F163-37136-00084 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or

DRAFT

- (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
 - (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue

DRAFT

MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) 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.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

DRAFT

Indiana Department of Environmental Management Permit Administration and Support Section, 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, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)]

 The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- B.19 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][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:

 Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

DRAFT

- (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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Evansville, Indiana
Permit Reviewer: Tamara Havics

Page 14 of 30 F163-37136-00084

whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

DRAFT

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

DRAFT

C.4 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 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).

C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications 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

DRAFT

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC
14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are

applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation

The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 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. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

DRAFT

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

(a) For new units:

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.11 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.13 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

DRAFT

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

DRAFT

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:
 - (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

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 Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Evansville, Indiana

Permit Reviewer: Tamara Havics

DRAFT

Page 21 of 30 F163-37136-00084

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit 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.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

DRAFT

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) 11,500 KW General Electric gas turbine, identified as NE-1-1, exhausting to stack #1, installed in 1963:
- (b) One (1) 12,250 KW General Electric gas turbine, identified as NE-2-1, exhausting to stack #2, installed in 1964:
- (c) One (1) 320 HP diesel starter engine, identified as NE-1-2, exhausting to stack #3, installed in 1981; and
- (d) One (1) 300 HP diesel starter engine, identified as NE-2-2, exhausting to stack #4, installed in 1964.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP and PSD Minor Limits [326 IAC 2-8-4][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

Turbines:

- (a) Natural gas usage for the two (2) turbines (NE-1-1 and NE-2-1) combined shall be limited to 619.0 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) NO_x emissions from the two (2) turbines (NE-1-1 and NE-2-1) shall not exceed 320 pounds per million cubic feet (MMCF) natural gas combusted.
- (c) CO emissions from the two (2) turbines (NE-1-1 and NE-2-1) shall not exceed 82 pounds per million cubic feet (MMCF) natural gas combusted.

Starter Engines:

- (d) The two (2) diesel starter engines (NE-1-2 and NE-2-2) shall each be limited to 52 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.
- (e) NO_x emissions from the two (2) diesel starter engines (NE-1-2 and NE-2-2) combined shall not exceed 19.2 pounds per hour.
- (f) CO emissions from the two (2) diesel starter engines (NE-1-2 and NE-2-2) combined shall not exceed 4.23 pounds per hour.

Compliance with these limits combined with the potential to emit of NOx and CO from all other emission units, shall limit the source-wide total potential to emit NOx and CO to less than 100 tons per twelve (12) consecutive month period each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

DRAFT

D.1.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Emission Limitations), the particulate matter emissions from the two (2) gas turbines, identified as NE-1-1 and NE-2-1, and the two (2) diesel starter engines, identified as NE-1-2 and NE-2-2, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition..

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.4 Record Keeping Requirements [326 IAC 2-8-4(3)]

- (a) To document the compliance status with Condition D.1.1(a) and D.1.1(d), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with limits established in Conditions D.1.1(a) and D.1.1(d). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual natural gas usage per month for turbines (NE-1-1 and NE-2-1);
 - (3) Actual operating hours for the two (2) diesel starter engines (NE-1-2 and NE-2-2); and
 - (4) A certification, signed by the Permittee, that the records of the fuel supplier certifications represent all of the fuel combusted during the period.
- (b) Section C General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.5 Reporting Requirements [326 IAC 2-8-4(3)]

A quarterly summary of the information to document the compliance status with Conditions D.1.1(a) and D.1.1(d), shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).



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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Southern Indiana Gas and Electric Company (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Source Address: Bergdolt Road, Evansville, Indiana 47741

FESOP Permit No.: F163-37136-00084

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
□ Annual Compliance Certification Letter
□ Test Result (specify)
□ Report (specify)
□ Notification (specify)
□ Affidavit (specify)
□ Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH 100 North Senate Avenue MC 61-53 IGCN 1003

MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 Phone: (317) 233-0178 Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Southern Indiana Gas and Electric Company (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Source Address: Bergdolt Road, Evansville, Indiana 47741

FESOP Permit No.: F163-37136-00084

This form consists of 2 pages

Page 1 of 2

- ☐ This is an emergency as defined in 326 IAC 2-7-1(12)
 - The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-8-12

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

Page 2 of 2

If any of the following are not applicable, mark N/A

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:
Form Completed by:
Title / Position:
Phone:



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

FESOP Quarterly Report

Source Name:	Southern Indiana Gas and Electric Company (SIGECO)				
	Bergdolt Road-Northeast Gas Combustion Turbines				
Source Address:	Bergdolt Road, Evansville, Indiana 47741				

FESOP Permit No.: F163-37136-00084

Facility: Natural gas turbines (NE-1-1 and NE-2-1)

Parameter: Natural Gas Fuel Usage

Limit: Natural gas usage for the two (2) turbines combined shall be limited to 619.0

QUARTER : ______YEAR:_____

MMCF per twelve (12) consecutive month period.

	Column 1	Column 2	Column 1 + Column 2
Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage Previous 11 Months (MMCF)	Natural Gas Usage 12 Month Total (MMCF)

□ No deviation	occurred in this quarter.				
Deviation/s occurred in this quarter. Deviation has been reported on:					
Submitted by:					
Title / Position:					
Signature:					
Date:					
Phone:					

DRAFT

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

FESOP Quarterly Report

Source Name:	Southern	Indiana	Gas and	Electric	Company	(SIGECO)	
--------------	----------	---------	---------	----------	---------	----------	--

Bergdolt Road-Northeast Gas Combustion Turbines

Source Address: Bergdolt Road, Evansville, Indiana 47741

FESOP Permit No.: F163-37136-00084

Facility: Diesel Starter Engines (NE-1-2 and NE-2-2)

Parameter: Hours of Operation

Limit: The two (2) diesel starter engines, (NE-1-2 and NE-2-2), shall each be limited to

QUARTER: ______YEAR:_____

52 hours of operation per twelve (12) consecutive month period.

	Column 1		Colu	mn 2	Column 1 + Column 2	
Month	Hours of Operation This Month		Hours of Ope Previous	ration 11 Months	Hours of Operation 12 Month Total	
	NE-1-1	NE-2-2	NE-1-1	NE-2-2	NE-1-1	NE-2-2

□ No deviation occurred in this quarter.
Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted by:
Title / Position:
Signature:
Date:
Phone:



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:	ource Name: Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines					
Source Address:		Road, Evansville,		uibines		
FESOP Permit No.:	F163-3713	36-00084				
Mo	onths:	to	Year:			
				Page 1 of 2		
Section B -Emergen General Reporting. In the probable cause of required to be report shall be reported acc	cy Provisions Any deviation of the deviation ed pursuant to cording to the eport. Additio	s satisfies the rep from the require on, and the respo to an applicable r schedule stated anal pages may b	orting requirement ments of this perronse steps taken or requirement that or in the applicable e attached if neces	Proper notice submittal under nts of paragraph (a) of Section C-mit, the date(s) of each deviation, must be reported. A deviation exists independent of the permit, requirement and does not need to essary. If no deviations occurred, rting period".		
□ NO DEVIATIONS	OCCURRE	D THIS REPORT	ING PERIOD.			
☐ THE FOLLOWIN	G DEVIATIOI	NS OCCURRED	THIS REPORTIN	NG PERIOD		
Permit Requiremen	ıt (specify pe	rmit condition #)				
Date of Deviation:			Duration of D	eviation:		
Number of Deviation	ons:					
Probable Cause of	Deviation:					
Response Steps Ta	aken:					
Permit Requiremen	t (specify pe	rmit condition #)				
Date of Deviation: Duration of Deviation:						
Number of Deviation	ons:					
Probable Cause of	Deviation:					
Response Steps Ta	aken:					

DRAFT

Page 2 of 2

	3			
Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Form Completed by:				
Title / Position:				
Date:				
Phone:				

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: Southern Indiana Gas and Electric Company (SIGECO) Bergdolt

Road-Northeast Gas Combustion Turbines

Source Location: Bergdolt Road, Evansville, Indiana 47741

County: Vanderburgh

SIC Code: 4911 (Electric Services)
Permit Renewal No.: F163-37136-00084
Permit Reviewer: Tamara Havics

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines relating to the operation of a stationary electric generating facility. On April 29, 2016, Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines submitted an application to the OAQ requesting to renew its operating permit. Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines was issued its third FESOP Renewal No. F163-22863-00084 on January 31, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) One (1) 11,500 KW General Electric gas turbine, identified as NE-1-1, exhausting to stack #1, installed in 1963;
- (b) One (1) 12,250 KW General Electric gas turbine, identified as NE-2-1, exhausting to stack #2, installed in 1964:
- (c) One (1) 320 HP diesel starter engine, identified as NE-1-2, exhausting to stack #3, installed in 1981; and
- (d) One (1) 300 HP diesel starter engine, identified as NE-2-2, exhausting to stack #4, installed in 1964.

Insignificant Activities

The source has the following insignificant activities:

(a) Unpaved roadways.

Existing Approvals

Since the issuance of the FESOP No. F163-22863-00084 on January 31, 2007, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 163-25814-00084 on Januarry 30, 2008; and
- (b) Administrative Amendment No. 163-27631-00084 on April 3, 2009.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Attainment effective October 27, 2011, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Evansville area, including Vanderburgh 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 designation was revoked effective June 15, 2005.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO $_{\rm x}$) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO $_{\rm x}$ emissions are considered when evaluating the rule applicability relating to ozone. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO $_{\rm x}$ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$

Vanderburgh County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

Vanderburgh 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

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions					
Pollutant	Tons/year				
PM	Less than 100				
PM ₁₀	Less than 100				
PM _{2.5}	Less than 100				
SO ₂	Less than 100				
NO _x	Greater than 250				
VOC	Less than 100				
СО	Greater than 100				
Highest Single HAP	Less than 10 (formaldehyde)				
Total HAP	Less than 25				

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of NOx and CO is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's NOx and CO emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year.

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Page 4 of 10 Evansville, Indiana TSD for F163-37136-00084

Permit Reviewer: Tamara Havics

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
Process/ Emission Unit	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	СО	Total HAPs	Worst Single HAP
Natural Gas Turbines (2)	11.91	11.91	11.91	6.14	99.00	3.79	25.38	1.78	1.28 formaldehyde
Diesel Start-up Engines (2)	5.97	5.97	5.97	5.57	0.54	6.83	0.11	0.07	0.02 formaldehyde
Total PTE of Entire Source	17.89	17.89	17.89	11.70	99.54	10.62	25.49	1.86	1.30 formaldehyde
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

negl. = negligible

Federal Rule Applicability

Compliance Assurance Monitoring (CAM):

(a) 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.

New Source Performance Standards (NSPS):

- (a) The requirements of the New Source Performance Standard for Stationary Gas Turbines, 40 CFR 60, Subpart GG, are still not included in the permit for the two (2) gas turbines, identified as NE-1-1 and NE-2-1. Construction of these units commenced prior to October 3, 1977 and these units have not commenced modification or reconstruction following that date. Therefore, the two (2) gas turbines are not subject to the requirements of this subpart.
- (b) The requirements of the New Source Performance Standard for Electric Utility Steam Generating Units, 40 CFR 60, Subpart Da, are still not included in the permit for the two (2) gas turbines, identified as NE-1-1 and NE-2-1, because the units are not electric utility steam generating units as defined in 40 CFR 60.41Da.
- (c) The requirements of the New Source Performance Standard for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, are still not included in the permit for the two (2) gas turbines, identified as NE-1-1 and NE-2-1, because construction of these units commenced prior to February 18, 2005 and these units have not commenced modification or reconstruction following that date.

^{*} Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".

^{**}PM_{2.5} listed is direct PM_{2.5}.

Permit Reviewer: Tamara Havics

(23)

(24)

(25)

- (d) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII, are not included in the permit for the two (2) diesel starter engines, identified as NE-1-2 and NE-2-2, because construction of these units commenced prior to July 11, 2005.
- (e) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit renewal.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR 63, Subpart YYYY, are not included in the permit for the two (2) gas turbines, identified as NE-1-1 and NE-2-1, because the source is not a major source of HAP emissions.
- (b) The one (1) 320 HP diesel starter engine, identified as NE-1-2, is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82, because it is considered an existing non-emergency stationary reciprocating internal combustion engine (RICE), construction commenced before June 12, 2006, and it is located at an area source of hazardous air pollutants (HAP).

The one (1) 320 HP diesel starter engine, identified as NE-1-2, is subject the following applicable portions of the NESHAP for existing non-emergency stationary RICE (construction commenced before June 12, 2006), which has a site rating of greater than 300 brake horsepower (HP), but less than or equal to 300 brake horsepower (HP), at an area source of HAP:

```
40 CFR 63.6580
(1)
(2)
       40 CFR 63.6585
(3)
       40 CFR 63.6590(a)(1)(iii) and (iv)
(4)
       40 CFR 63.6595(a)(1), (b), and (c)
(5)
       40 CFR 63.6603(a) and (e)
(6)
       40 CFR 63.6604(a)
       40 CFR 63.6605
(7)
(8)
       40 CFR 63.6612
(9)
       40 CFR 63.6620(a), (d), (e), (f), (g), (h), and (i)
(10)
       40 CFR 63.6625 (g) and (h)
(11)
       40 CFR 63.6630(a), (b), and (c)
(12)
       40 CFR 63.6635
(13)
       40 CFR 63.6640(a), (b), and (e)
(14)
       40 CFR 63.6645 (a)(2), (g), and (h)
(15)
       40 CFR 63.6650
       40 CFR 63.6655
(16)
(17)
       40 CFR 63.6660
(18)
       40 CFR 63.6665
(19)
       40 CFR 63.6670
(20)
       40 CFR 63.6675
(21)
       Table 2d (item 2)
(22)
       Table 4 (items 1 and 3)
```

Table 5 (items 11 and 12)

Table 7 (item 1)

Table 8

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the souce except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

Permit Reviewer: Tamara Havics

(c) The one (1) 300 HP diesel starter engine, identified as NE-2-2, is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ), which is incorporated by reference as 326 IAC 20-82, because it is considered an existing non-emergency stationary reciprocating internal combustion engine (RICE), construction commenced before June 12, 2006, and it is located at an area source of hazardous air pollutants (HAP).

The one (1) 300 HP diesel starter engine, identified as NE-2-2, is subject the following applicable portions of the NESHAP for existing non-emergency stationary RICE (construction commenced before June 12, 2006), which has a site rating of less than or equal to 300 brake horsepower (HP) at an area source of HAP:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595(a)(1), (b), and (c)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e)(4)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640(a), (b), and (e)
- (10) 40 CFR 63.6655
- (11) 40 CFR 63.6660
- (12) 40 CFR 63.6665
- (13) 40 CFR 63.6670
- (14) 40 CFR 63.6675
- (15) Table 2d (item 1)
- (16) Table 6 (item 9)
- (17) Table 8

Note: Existing non-emergency compression ignition (CI) stationary RICE that have a site rating less than or equal to 300 brake horsepower (HP) and are located at an area source of HAP are not subject to numerical CO or formaldehyde emission limitations, but are only subject to work and management practices under Table 2d and Table 6.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 63.6640(f)(2)(ii) - (iii) of NESHAP Subpart ZZZZ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA's Guidance Memo: https://www3.epa.gov/airtoxics/icengines/docs/RICEVacaturGuidance041516.pdf

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as strikethrough text. At this time, IDEM is not making any changes to the permit's attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 63.6640(f)(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Page 7 of 10 Evansville, Indiana TSD for F163-37136-00084

Permit Reviewer: Tamara Havics

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source is subject to 326 IAC 1-5-2.

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source continues to be subject to 326 IAC 1-6-3.

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

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The source is not subject to the requirements of 326 IAC 2-4.1 because the potential to emit of any single HAP is limited to less than 10 tons per year and the potential to emit any combinations of HAPs is limited to less than 25 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 2-8-4 (FESOP)

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Page 8 of 10 Evansville, Indiana TSD for F163-37136-00084

Permit Reviewer: Tamara Havics

- (a) Natural gas usage for the two (2) turbines (NE-1-1 and NE-2-1) combined shall be limited to 619.0 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) NO_x emissions from the two (2) turbines (NE-1-1 and NE-2-1) shall not exceed 320 pounds per million cubic feet (MMCF) natural gas combusted
- (c) CO emissions from the two (2) turbines (NE-1-1 and NE-2-1) shall not exceed 82 pounds per million cubic feet (MMCF) natural gas combusted.
- (d) The two (2) diesel starter engines (NE-1-2 and NE-2-2) shall each be limited to 52 hours of operation per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) NO_x emissions from the two (2) diesel starter engines (NE-1-2 and NE-2-2) combined shall not exceed 19.2 pounds per hour.
- (f) CO emissions from the two (2) diesel starter engines (NE-1-2 and NE-2-2) combined shall not exceed 4.23 pounds per hour.

Compliance with these limits combined with the potential to emit of NOx and CO from all other emission units, shall limit the source-wide total potential to emit NOx and CO to less than 100 tons per twelve (12) consecutive month period each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

326 IAC 5-1 (Opacity Limitations)

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(2)

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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is not subject to the requirements of 326 IAC 6-5, because there the potential to emit of fugitive particulate emissions is less than 25 tons per year.

326 IAC 12 (New Source Performance Standards)

See Federal Rule Applicability Section of this TSD.

326 IAC 20 (Hazardous Air Pollutants)

See Federal Rule Applicability Section of this TSD.

State Rule Applicability - Individual Facilities

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The two (2) gas turbines, identified as NE-1-1 and NE-2-1, and the two (2) diesel starter engines, identified as NE-1-2 and NE-2-2, are not subject to the requirements of 326 IAC 6-2, because they are not sources of indirect heating.

326 IAC 6.5 (Particulate Emission Limitations Except Lake County)

The source is subject to the requirements of 326 IAC 6.5-1-2(a), because it is located in Vanderburgh County. Therefore, the particulate matter emissions from the two (2) gas turbines, identified as NE-1-1 and NE-2-1, and the two (2) diesel starter engines, identified as NE-1-2 and NE-2-2, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Permit Reviewer: Tamara Havics

Note: Previous permits included requirements for 326 IAC 6.5-8-13 (Southern Indiana Gas and Electric Company, Broadway Avenue Generating Station). However, 326 IAC 6.5-8-13 applies to a different location; only 326 IAC 6.5-1-2(a) applies to this source.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The two (2) gas turbines, identified as NE-1-1 and NE-2-1, and the two (2) diesel starter engines, identified as NE-1-2 and NE-2-2, are not subject to 326 IAC 326 IAC 7-1.1, because the SO₂ PTE (or limited SO₂ PTE) from each unit is less than 25 tons per year and 10 pounds per hour.

326 IAC 9-1 (Carbon Monoxide Emission Limits)

This source is subject to 326 IAC 9-1 because it is a stationary source of CO emissions commencing operation after March 21, 1972 and has CO emissions of more than 100 tons per year. There are no applicable CO emission limits, under this state rule, established for this type of operation.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance determination and/or compliance monitoring requirements applicable to this source.

Recommendation

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

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

An application for the purposes of this review was received on April 29, 2016.

Conclusion

The operation of this stationary electric generating shall be subject to the conditions of the attached FESOP Renewal No. F163-37136-00084.

Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines Page 10 of 10 Evansville, Indiana TSD for F163-37136-00084

Permit Reviewer: Tamara Havics

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Tamara Havics 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) 232-8219 or toll free at 1-800-451-6027 extension 2-8219.
- (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 Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations Summary

Company Name: Southern Indiana Gas and Electric Company (SIGECO)
Bergdolt Road-Northeast Gas Combustion Turbines

Address City IN Zip: Bergdolt Road, Evansville IN 47741

FESOP No.: F163-37136-00084
Reviewer: Tamara Havics
Date: 04/29/16

	Uncontrolled Potential Emissions (tons/year)									
	Emissions Ge	enerating Activity								
Pollutant	Natural Gas Turbines	Diesel Start-up Engines	TOTAL							
PM	11.91	5.97	17.89							
PM10	11.91	5.97	17.89							
PM2.5	11.91	5.97	17.89							
SO2	6.14	5.57	11.70							
NOx	577.60	84.18	661.78							
VOC	3.79	6.83	10.62							
СО	148.01	18.14	166.15							
total HAPs	1.78	0.07	1.86							
worst case single HAP	1.28	0.02	1.30							

Formaldehyde

Limited Potential Emissions (tons/year)									
	Emissions Ge	enerating Activity							
Pollutant	Natural Gas Turbines	Diesel Start-up Engines	TOTAL						
PM	11.91	5.97	17.89						
PM10	11.91	5.97	17.89						
PM2.5	11.91	5.97	17.89						
SO2	6.14	5.57	11.70						
NOx	99.04	0.50	99.54						
VOC	3.79	6.83	10.62						
СО	25.38	0.11	25.49						
total HAPs	1.78	0.07	1.86						
worst case single HAP	1.28	0.02	1.30						

Formaldehyde

Traffic consists of only maintenance vehicles at this peaking station. Therefore, fugitive emissions from unpaved roadways are assumed to be negligible and have not been calculated.

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source has accepted the following limits:

Natural gas usage for the two (2) turbines combined shall be limited to 619.0 MMCF per year. NO_x emissions from the turbines shall not exceed 320 lbs/MMCF gas combusted.

CO emissions from the turbines shall not exceed 82 lbs/MMCF gas combusted.

The two (2) diesel starter engines shall each be limited to 52 hours per year. Combined NO_x emissions from the starter engines shall not exceed 19.2 lbs/hr. Combined CO emissions from the starter engines shall not exceed 4.23 lbs/hr.

Appendix A: Emissions Calculations Natural Gas Combustion - Unlimited Emissions Two (2) Turbines, NE-1-1 and NE-2-1

Company Name: Southern Indiana Gas and Electric Company (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Address City IN Zip: Bergdolt Road, Evansville IN 47741

 Permit Number:
 F163-37136-00084

 Reviewer:
 Tamara Havics

 Date:
 04/29/16

	Potential Throughput	Potential Throughput	
	MMCF/hr	MMBtu/yr	MMBtu/hr
Turbine # 1	0.20	1,720,464	196.4
Turbine # 2	0.22	1,889,532	215.7
Total:	0.41	3,609,996	

		Pollutant							
Emission Factor in lb/MMBtu	PM* 6.60E-03	PM10* 6.60E-03	PM2.5* 6.60E-03	SO2** 3.40E-03	NOx 3.20E-01	VOC 2.10E-03	CO 8.20E-02		
Potential Emission in tons/yr	11.91	11.91	11.91	6.14	577.60	3.79	148.01		

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 assumed equal to PM10.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMBtu/yr) = Heat Input Capacity (MMCF/hr) x 8,760 hrs/yr x1000MMBtu/1MMCF

Emission Factors from AP 42, Chapter 3.1, Tables 3.1-1, 3.1-2a, SCC #2-01-002-01, 2-02-002-01, 2-2-002-03, 2-03-002-02, 2-03-002-03 (SUPPLEMENT B 10/96)

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

		HAPs - Organics							
Emission Factor in lb/MMcf	Benzene 1.2E-05	Ethylbenzene 3.2E-05	Formaldehyde 7.1E-04	Acetaldehyde 4.0E-05	Xylenes 6.4E-05	Toluene 1.3E-04			
Potential Emission in tons/yr	0.0217	0.0578	1.2815	0.0722	0.1155	0.2346			
	•	•			Total HAPs:	1 78			

Methodology is the same as above.

The seven highest organic HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 3.1.

Emission Factors from AP 42, Chapter 3.1, Tables 3.1-3, SCC # 2-01-002-01, 2-02-002-01, 2-2-002-03, 2-03-002-02, 2-03-002-03

^{**}Sulfur in fuel is assumed to be converted to SO2. Emission Factor for SO2 is .94S, S=percent sulfur in fuel. If S is not available, use .0034 lb/MMBtu for natural gas turbines.

Appendix A: Emissions Calculations Natural Gas Combustion - Limited Emissions Two (2) Turbines, NE-1-1 and NE-2-1

Company Name: Southern Indiana Gas and Electric Company (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Address City IN Zip: Bergdolt Road, Evansville IN 47741

 Permit Number:
 F163-37136-00084

 Reviewer:
 Tamara Havics

 Date:
 04/29/16

Potential Throughput
MMBtu/yr
3,609,996

Limited Throughput
MMCF/yr
619

		Pollutant							
	PM*	PM10*	PM2.5*	SO2**	NOx	VOC	CO		
Emission Factor in lb/MMBtu	6.60E-03	6.60E-03	6.60E-03	3.40E-03	-	2.10E-03	-		
Limited Emission Factor in lb/MMCF					320.00		82.00		
Potential Emission in tons/yr	11.91	11.91	11.91	6.14	99.04	3.79	25.38		

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 assumed equal to PM10.

Limited Potential Throughput (MMCF) = The source has accepted a source-wide limited throughput of 619 MMCF/yr NO_x emissions, combined, shall not exceed 320 pounds per million cubic feet (MMCF) natural gas combusted. CO emissions, combined, shall not exceed 82 pounds per million cubic feet (MMCF) natural gas combusted.

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMBtu) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1000MMBtu/1MMCF

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

Emission Factors from AP 42, Chapter 3.1, Tables 3.1-1, 3.1-2a, SCC #2-01-002-01, 2-02-002-01, 2-2-002-03, 2-03-002-02, 2-03-002-03 (SUPPLEMENT B 10/96)

		HAPs - Organics							
Emission Factor in lb/MMcf	Benzene 1.2E-05	Ethylbenzene 3.2E-05	Formaldehyde 7.1E-04	Acetaldehyde 4.0E-05	Xylenes 6.4E-05	Toluene 1.3E-04			
Potential Emission in tons/yr	0.02	0.06	1.28	0.07	0.12	0.23			
	•			1	Total HAPs:	1.783			

Methodology is the same as above.

The six highest organic HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 3.1.

 $Emission \ Factors \ from \ AP \ 42, \ Chapter \ 3.1, \ Table \ 3.1-3, \ SCC \ \# \ 2-01-002-01, \ 2-02-002-01, \ 2-2-002-03, \ 2-03-002-02, \ 2-03-002-03,$

^{**}Sulfur in fuel is assumed to be converted to SO2. Emission Factor for SO2 is .94S, S=percent sulfur in uel. If S is not available, use .034 lb/MMBtu for natural gas turbines.

Appendix A: Emission Calculations **Unlimited Emissions** Internal Combustion Engines - Diesel Fuel Turbine (>250 and <600 HP) Diesel Starter Engines, NE-1-2 and NE-2-2

Company Name: Southern Indiana Gas and Electric Company (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Address City IN Zip: Bergdolt Road, Evansville IN 47741

Permit Number: F163-37136-00084 Reviewer: Tamara Havics Date: 04/29/16

Emissions calculated based on output rating (hp)

Heat Input Potential Capacity Throughput Horsepower (hp) hp-hr/yr

2803200.0 320.0 2628000.0 300.0

Total: 5431200.0

	Pollutant							
Emission Factor in lb/hp-hr	PM* 0.0022	PM10* 0.0022	PM2.5* 0.0022	SO2 0.0021	NOx 0.0310	VOC 0.0025	CO 0.0067	
Potential Emission in tons/yr	5.97	5.97	5.97	5.57	84.18	6.83	18.14	

Hazardous Air Pollutants (HAPs)

				HAP Pollutant				
								Total PAH
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	HAPs**
Emission Factor in lb/hp-hr***	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	1.77E-02 7.77E-03 5.42E-03 7.43E-04 2.24E-02 1.46E-02 1.76E-03 3.19E-							3.19E-03
	•		Potential Emission of Total HAPs (tons/yr)					7.36E-02

^{*}PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable. PM2.5 assumed equal to PM10.

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.3-1, 3.4-1, 3.4-2, 3.4-3, and 3.4-4.

Potential Througput (hp-hr/yr) = hp * 8760 hr/yr

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

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

^{**}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 3.3-1).

Appendix A: Emission Calculations
Limited Emissions
Internal Combustion Engines - Diesel Fuel
Turbine (>250 and <600 HP)
Diesel Starter Engines, NE-1-2 and NE-2-2

Company Name: Southern Indiana Gas and Electric (SIGECO)

Bergdolt Road-Northeast Gas Combustion Turbines

Total:

Address City IN Zip: Bergdolt Road, Evansville IN 47741

Permit Number: F163-37136-00084
Reviewer: Tamara Havics
Date: 04/29/16

Emissions calculated based on output rating (hp)

Heat Input Capacity Horsepower (hp) 320.0 Potential Throughput

hp-hr/yr
2803200.0
2628000.0

Total: 5431200.0

Limited hours per year, each engine Limited Throughput hp-hr/yr 16640.0 15600.0

		Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO	
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	-	0.0025	-	
Limited Emission Factor, lb/hr					19.2		4.23	
Limited Potential Emission in tons/yr	5.97	5.97	5.97	5.57	0.50	6.83	0.11	

Limited Hours = The source has accepted a limit of 52 hours of operation, each.

NO_x emissions, combined, shall not exceed 19.2 pounds per hour.

CO emissions, combined, shall not exceed 4.23 pounds per hour.

Hazardous Air Pollutants (HAPs)

		Pollutant								
								Total PAH		
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	HAPs**		
Emission Factor in lb/hp-hr***	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06		
Limited Potential Emission in tons/yr	0.02	0.01	0.01	7.43E-04	0.02	0.01	1.76E-03	3.19E-03		
	Potential Emission of Total HAPs (tons/yr) 0.							0.07		

^{*}PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable. PM2.5 assumed equal to PM10.

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.3-1, 3.4-1, 3.4-2, 3.4-3, and 3.4-4. Limited Potential Througput (hp-hr/yr) = hp * 52 hr/yr

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

^{**}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 3.3-1).



We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence *Governor*

Carol S. Comer

September 19, 2016

Mr. Allen K. Rose Regulatory Compliance Specialist III – Environmental Vectren Corp., Wagner Operations Center 1 North Main Street Evansville, IN 47708

Re: Public Notice

SIGECO Bergdolt Rd.

Permit Level: FESOP - Renewal Permit Number: 163-37136-00084

Dear Mr. Rose:

Enclosed is a copy of your draft FESOP - Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Evansville Courier in Evansville, Indiana publish the abbreviated version of the public notice no later than September 21, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Evansville – Vanderburgh Public Library, 200 SE Martin Luther Jr. Boulevard, in Evansville, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Tamara Havics, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 2-8219 or dial (317) 232-8219.

Sincerely,

Víckí Bíddle

Vicki Biddle Permits Branch Office of Air Quality

Enclosures PN Applicant Cover letter 2/17/2016







We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence Governor Carol S. Comer

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

September 19, 2016

Evansville Courier P. O. Box 268 Evansville, Indiana 47702-0268

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Southern Indiana Gas and Electric Company (SIGECO) Bergdolt Road-Northeast Gas Combustion Turbines, Vanderburgh County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than September 21, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867 or dial 317-233-6867.

Sincerely,

Víckí Bíddle

Vicki Biddle Permit Branch Office of Air Quality

Permit Level: FESOP - Renewal Permit Number: 163-37136-00084

Enclosure

PN Newspaper.dot 2/17/2016







We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence Governor Carol S. Comer Commissioner

September 19, 2016

To: Evansville Vanderburgh Public Library

From: Matthew Stuckey, Branch Chief

Permits Branch Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air

Permit

Applicant Name: FESOP - Renewal Permit Number: 163-37136-00084

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures PN Library.dot 2/16/2016







We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence

Carol S. Comer Commissioner

Notice of Public Comment

September 19, 2016 SIGECO Bergdolt Road 163-37136-00084

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure PN AAA Cover.dot 2/17/2016





Mail Code 61-53

IDEM Staff	VBIDDLE 9/19/20	016		
	Bergdolt RdNorth	heast Gas Combustion Turbines	163-37136-00084 DRAFT	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAIEMO ONET	

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		Allen K Rose Bergdolt RdNortheast Gas Combustion Turbines Wagner Operations Ctr 1 N Main St Evansville IN 47708 (Source CAATS)									
2		Wayne D Games VP Power Supply Bergdolt RdNortheast Gas Combustion Turbines 1 Vectren Square Evansville IN 47708 (RO CAATS)									
3		Evansville City Council and Mayors Office 1NW MLK Blvd, Rm 302 Evansville IN 47708 (Local Official)									
4		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 (Local Official)									
5		Evansville Vanderburg Public Library 200 SE Martin Luther King Jr. Blvd Evansville IN 47708-1694 (Library)									
6		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)									
7		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 (Health Department)									
8		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)									
9		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)									
10		B.A. Laseke GZA GeoEnvironmental 11499 Chester Rd. Ste 511 Sharonville OH 45246 (Consultant)									
11		John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)									
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> Mail Manual Stooderd Mail (N) payable.
			mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.