



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: December 10, 2008
RE: SG Solutions, LLC / 167-17562-00091
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY AND VIGO COUNTY AIR POLLUTION CONTROL

**SG Solutions, LLC
444 West Sanford Avenue
West Terre Haute, Indiana 47885**

(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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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.

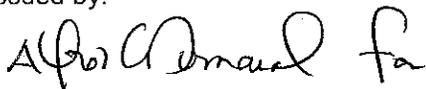
Operation Permit No.: T167-17562-00091	
Issued by:  Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality	Issuance Date: December 10, 2008 Expiration Date: December 10, 2013

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). 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 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary gasification plant.

Source Address:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
Mailing Address:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
General Source Phone Number:	(812) 535-6074
SIC Code:	2869
County Location:	Vigo
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Source Definition

IDEM has determined that Wabash Valley Combined Cycle Plant (Plant ID 167-00147) and SG Solutions, LLC (Plant ID 167-00091) are considered one "source" as defined at 326 IAC 1-2-73, because they meet all three of the following criteria:

- (1) the plants must be under common ownership or common control;

Wabash Valley Power Association owns the Wabash River Combined Cycle Plant. The gasification plant is owned by SG Solutions, LLC. Wabash Valley Power Association has an ownership interest in SG Solutions, LLC. There is common ownership between the combined cycle plant and the gasification plant.

- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other;

Wabash Valley Combined Cycle Plant operates under the two-digit SIC code, 49, for Electric, Gas and Sanitary Services. SG Solutions, LLC operates under the SIC code of 2869. However, the gasification plant sends 100% of its total output to the combined cycle plant. Pursuant to 326 IAC 2-7-1(22), the gasification plant meets the criteria of a support facility to the combined cycle plant.

- (3) the plants must be located on contiguous or adjacent properties.

Wabash Valley Combined Cycle Plant and SG Solutions, LLC are located on contiguous properties.

Since these two (2) plants are located on contiguous or adjacent property and have a supporting relationship, IDEM, OAQ has determined that these two (2) plants are considered one (1) single

source. Separate Part 70 Operating Permits will be issued to Wabash Valley Combined Cycle Plant (Plant ID 167-00147) and SG Solutions, LLC (Plant ID 167-00091) solely for administrative purposes.

A.3 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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

- (a) One (1) gasification plant capable of operating on coal, petroleum coke, or a blend of coal and petroleum coke, rated at 367,000 pounds of syngas produced per hour, consisting of gasification, high and low temperature heat recovery, sour waste treatment, oxygen unit and a flare.
 - (1) One (1) acid gas removal/sulfur recovery unit, identified as unit 1A, with a nominal capacity of 40,000 pounds of acid gas per hour, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (2) One (1) sour water treatment system, identified as unit 1B, with a nominal capacity of 110 gallons of processed water per minute, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (3) One (1) tank venting system, identified as unit 1C, with a nominal capacity of 20,000 pounds per hour from process tank vents, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (4) One (1) tail gas incinerator, identified as unit 1, with a maximum heat input capacity of 52 million British thermal units per hour, controlling emissions from units 1A, 1B, and 1C, constructed in 1995, and exhausting to stack EP-1.
 - (5) One (1) flare, identified as unit 2, with a maximum pilot rate of 1.6 million British thermal units per hour, constructed in 1995, and exhausting to stack EP-2.
 - (6) Fugitive equipment leak emissions

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input less than six million (6,000,000) British thermal units per hour
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour
- (c) Combustion source flame safety purging on startup
- (d) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids
- (e) Heat exchanger cleaning and repair
- (f) Process vessel degassing and cleaning to prepare for internal repairs
- (g) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower
- (h) Stationary fire pumps

- (i) Filter or coalescer media changeout
- (j) Vents from ash transport systems not operated at positive pressure
- (k) A laboratory as defined in 326 IAC 2-7-1(21)(D)
- (l) Slag handling fugitive emissions
- (m) Coal transfer from Duke reclaim conveyor into Destec crusher surge hopper [326 IAC 6-4]
- (n) Coal transfer from crushed coal hopper onto rod mill feed conveyor [326 IAC 6-4]
- (o) Coal transfer from rod mill feed conveyor onto rod mill [326 IAC 6-4]
- (p) Paved roadways and unpaved parking lots without public access [326 IAC 6-4]
- (q) One (1) waste water treatment evaporator/drum dryer constructed September 30, 2001 and operating since December 17, 2001.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T167-17562-00091, is issued for a fixed term of five (5) 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 and VCAPC, 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, including any permit shield provided in 326 IAC 2-7-15, 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 2-7-7]

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

B.5 Severability [326 IAC 2-7-5(5)]

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 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ and VCAPC, within a reasonable time, any information that IDEM, OAQ and VCAPC 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and VCAPC 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 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (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 July 1 of each year to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

and

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

- (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 and VCAPC 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 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and VCAPC may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s), by job title, 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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and VCAPC upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and VCAPC. IDEM, OAQ and VCAPC 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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) 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.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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, and VCAPC 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 Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Vigo County Air Pollution Control phone: (812) 462-3433; fax: (812) 462-3447

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

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 2-7-5(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 and VCAPC may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and VCAPC 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 2-7 and any other applicable rules.
- (g) 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.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or VCAPC shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

- (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
 - (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or VCAPC has issued the modifications. [326 IAC 2-7-12(c)(7)]
 - (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or VCAPC has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T167-17562-00091 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ and VCAPC 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 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ and VCAPC 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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ and VCAPC at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ and VCAPC may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and VCAPC and shall include the information specified in 326 IAC 2-7-4. 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(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

- (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 and VCAPC 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 2-7 until IDEM, OAQ and VCAPC 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 in writing by IDEM, OAQ and VCAPC any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) 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 preconstruction approval required by 326 IAC 2-7-10.5 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:
 - Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
 - and
 - Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807
 - 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 2-7-20(b),(c), or (e). 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 and VCAPC in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
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 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) 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.21 Source Modification Requirement [326 IAC 2-7-10.5]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 and/or 326 IAC 2-3 (for sources located in NA areas).

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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, and VCAPC or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy 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 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 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ and VCAPC within 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 and VCAPC the applicable fee is due April 1 of each year.

- (b) Except as provided in 326 IAC 2-7-19(e), 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.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][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 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.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 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. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.4 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on July 13, 1994. The plan is included as Attachment A.

C.6 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC 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.
- (d) In addition to any other testing required by this permit if at any time the Permittee replaces a control device that is used to comply with an emission limitation listed in Section D, then the Permittee shall conduct a performance test no later than one hundred eighty (180) days after installation of the replacement control device in accordance with this condition.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 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.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment

and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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.
- (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 2-7-5][326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on August 26, 2003.
- (b) Upon direct notification by IDEM, OAQ and VCAPC that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [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.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (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 maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The emission statement 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 and VCAPC on or before the date it is due.

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

- (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. 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 or VCAPC makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or VCAPC within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption

of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2][326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

(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 and VCAPC on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) 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.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ and VCAPC:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

Stratospheric Ozone Protection

C.19 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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Section D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

One (1) gasification plant capable of operating on coal, petroleum coke, or a blend of coal and petroleum coke, rated at 367,000 pounds of syngas produced per hour, consisting of the following units:

- (1) One (1) acid gas removal/sulfur recovery unit, identified as unit 1A, with a nominal capacity of 40,000 pounds of acid gas per hour, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
- (2) One (1) sour water treatment system, identified as unit 1B, with a nominal capacity of 110 gallons of processed water per minute, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
- (3) One (1) tank venting system, identified as unit 1C, with a nominal capacity of 20,000 pounds per hour from process tank vents, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
- (4) One (1) tail gas incinerator, identified as unit 1, with a maximum heat input capacity of 52 million British thermal units per hour, controlling emissions from units 1A, 1B, and 1C, constructed in 1995, and exhausting to stack EP-1.

(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 2-7-5(1)]

D.1.1 Carbon Monoxide (CO)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the CO emissions from stack EP-1 shall not exceed 56 pounds of CO per hour and 221 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D.1.2 Carbon Monoxide (CO)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the CO emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator, unit 1, was determined to be: an in-line burner with a minimum operational temperature of 1400° F, operating with a minimum of 2% excess oxygen, and operating with a minimum residence time of 0.6 seconds. The stack test data shall be used to determine if these parameters ensure compliance with condition D.1.1, and can be used to adjust the required parameters.

D.1.3 Sulfuric Acid Mist (H₂SO₄)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the H₂SO₄ emissions from stack EP-1 shall not exceed 3.79 pounds of H₂SO₄ per hour and 6.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D.1.4 Sulfuric Acid Mist (H₂SO₄)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator, unit 1, was determined to be: operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 500° F, or at a temperature as determined from the most recent compliant stack test, as approved by IDEM.

D.1.5 Sulfur Dioxide (SO₂)

Pursuant to Construction Permit CP167-2609-00021, the SO₂ emissions from stack EP-1 shall not exceed 527 pounds of SO₂ per hour and 944 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D.1.6 Particulate Matter [326 IAC 6.5-1]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) from the acid gas removal/sulfur recovery unit and the tank venting system shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf) of exhaust air.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-1.1-11]

The Permittee shall perform SO₂, CO and H₂SO₄, testing utilizing Methods 4 and 6 (40 CFR 60, Appendix A) for SO₂, Method 8 (40 CFR 60, Appendix A) for H₂SO₄, and Method 10B (40 CFR 60, Appendix A) for CO or other methods as approved by the Commissioner within five (5) years of the most recent compliant stack test. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.9 Monitoring

The flow rate and temperature in the tail gas incinerator, unit 1, shall be continuously monitored. The flow rate is used to calculate the residence time. Additionally, the exit gas temperature must be monitored. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirement

(a) To document compliance with Conditions D.1.1, D.1.2, D.1.3, D.1.4, D.1.5, and D.1.8, the Permittee shall maintain records of the following:

- (1) Monthly emissions of CO and H₂SO₄, and supporting calculations, based on the following equations:

$$\text{CO Emissions (lb of CO to the Tail Gas Incinerator)} = T \times E_f$$

Where:

T = Gasification plant operating hours (On Coal/petcoke hours)
E_f = Most recent compliant CO stack test emission rate (lb/hour)

$$\text{H}_2\text{SO}_4 \text{ Emissions (lb of H}_2\text{SO}_4 \text{ to the Tail Gas Incinerator)} = T \times E_f$$

Where:

T = Gasification plant operating hours (On Coal/petcoke hours)
E_f = Most recent compliant H₂SO₄ Stack Test Emission Rate (lb/hour)

- (2) Monthly emissions of SO₂ measured by stack analyzer or based on the following equation:

$$\text{SO}_2 \text{ Emissions (lb of SO}_2 \text{ from the Tail Gas Incinerator)} = T \times E_f$$

Where:

T = Gasification plant operating hours (On Coal/petcoke hours)
E_f = Most recent compliant SO₂ Stack Test Emission Rate (lb/hour)

- (3) The flow rate and temperature of the Tail Gas Incinerator (unit 1)
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2, D.1.3, D.1.4 and D.1.5 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (5) One (1) flare, identified as unit 2, with a maximum pilot rate of 1.6 million British thermal units per hour, constructed in 1995, and exhausting to stack EP-2.

(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 2-7-5(1)]

D.2.1 Carbon Monoxide (CO)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the CO emissions from stack EP-2 shall not exceed 11,099 pounds of CO per hour and 1,401 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D.2.2 BACT: Carbon Monoxide (CO)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP 167-2609-00021, the CO emissions are subject to Best Available Control Technology (BACT). BACT for the flare, unit 2, was determined to be: a design destruction efficiency of at least 95%, monitoring the firing rate and CO emissions by measuring the flow rate and determining the gas composition for each hour of flaring by an on-line gas analyzer with a 10 to 15 minute sample turn around time.

D.2.3 BACT: Sulfuric Acid (H₂SO₄)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the flare, unit 2, was determined to be: operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 1,832° F based on the maximum firing rate and the BTU content of the syngas.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.5 CO Control

In order to comply with Conditions D.2.1 and D.2.2, the flare shall be in operation and control emissions from the gasification plant at all times when the gasification plant is in operation. For the purpose of this section, "operation of the flare" shall mean the presence of a pilot flame or equivalent. The flare shall be operated per manufacturer's specifications.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Flare Parametric Monitoring

To demonstrate compliance with Conditions D.2.2 and D.2.3:

- (a) The Permittee shall continuously monitor the presence of the flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame. For the purpose of this condition, continuous means no less than once per minute.

Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

Compliance with the above monitoring condition shall satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records of the following:
- (1) Monthly emissions of CO, and supporting calculations, determined using the following equation:
$$\text{CO Emissions (lb/hr)} = 0.01 \times (\text{Wet Mass Flow to Flare} \times \text{Wet \% CO in the Gas}) \times \frac{\text{Molecular Weight of CO}}{\text{Molecular Weight of Wet Syngas}}$$
 - (2) 12 consecutive month rolling total of CO emissions;
 - (3) A copy of the manufacturer's operation and maintenance manual that defines operating procedures that will ensure destruction efficiency;
 - (4) The design specifications for the flare, and make such records available upon request to IDEM, OAQ and the U.S. EPA.
 - (5) Monthly records of flow rate of the total primary gas flow to the flare as recorded by the primary flow meter.
- (b) To document compliance with D.2.5, the Permittee shall maintain records of the following:
- (1) Date and time when the gasification plant processes are venting to the flare and documentation that a flare pilot flame was present
- (c) To document compliance with D.2.6, the Permittee shall maintain monthly records in either electronic or hard copy to demonstrate the thermocouple or equivalent device detects the presence of a flame no less than once per minute.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (6) Fugitive equipment leak emissions

(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 2-7-5(1)]

D.3.1 BACT: Carbon Monoxide (CO)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the CO emissions are subject to Best Available Control Technology (BACT). BACT for the CO leaks from equipment was determined to be: a leak detection schedule and repair program. This would also meet the Preventive Maintenance Plan requirements under 326 IAC 2-7-5(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.2 Monitoring

- (a) The CO leak detection program shall contain, at a minimum:
- (1) Operation description
 - (2) Monitoring system description
 - (3) Number of sampling ports along with the location of each
 - (4) Data acquisition and recordkeeping description
 - (5) Alarm levels with a response plan
 - (6) Preventive Maintenance and repair plan, including inspection of each monitoring port, and
 - (7) Training plan.
- (b) The CO leak detection program submitted to, and approved by, VCAPC (Rev 0, dated April 12, 1996) shall be followed. Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.
- (c) If revisions to the leak detection program are required they shall be submitted to, and approved by, VCAPC prior to use. The Permittee may revise the leak detection program without prior approval if the revision is in response to an immediate safety concern. All revisions made under these circumstances shall be submitted to and approved by VCAPC within 30 days of revision.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

- (a) To document compliance with Condition 3.2, the Permittee shall maintain records. These records shall include a list of the monitoring sites, the date of the last inspection for each monitoring site, and the planned quarter for the next inspection at each monitoring site.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and VCAPC
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: SG Solutions, LLC
Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Part 70 Permit No.: T167-17562-00091

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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

and VCAPC

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: SG Solutions, LLC
Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Part 70 Permit No.: T167-17562-00091

This form consists of 2 pages

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- 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) 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 2-7-16.

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:

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
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: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and VCAPC**

Part 70 Quarterly Report

Source Name: SG Solutions, LLC
 Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Part 70 Permit No.: T167-17562-00091
 Facility: Tail Gas Incinerator (Unit 1)
 Parameter: Carbon Monoxide
 Limit: 56 pounds per hour, 221 tons per twelve (12) consecutive month period

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and VCAPC**

Part 70 Quarterly Report

Source Name: SG Solutions, LLC
 Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Part 70 Permit No.: T167-17562-00091
 Facility: Tail Gas Incinerator (unit 1)
 Parameter: Sulfuric Acid Mist (H₂SO₄)
 Limit: 3.79 pounds per hour, 6.8 tons per twelve (12) consecutive month period

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and VCAPC**

Part 70 Quarterly Report

Source Name: SG Solutions, LLC
Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
Part 70 Permit No.: T167-17562-00091
Facility: Tail Gas Incinerator (Unit 1)
Parameter: Sulfur Dioxide (SO₂)
Limit: 527 pounds per hour, 944 tons per twelve (12) consecutive month period

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and VCAPC**

Part 70 Quarterly Report

Source Name: SG Solutions, LLC
 Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Part 70 Permit No.: T167-17562-00091
 Facility: Flare (Unit 2)
 Parameter: Carbon Monoxide
 Limit: 11,099 pounds per hour, 1401 tons per twelve (12) consecutive month period

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 and VCAPC
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: SG Solutions, LLC
 Source Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Mailing Address: 444 West Sandford Avenue, West Terre Haute, Indiana 47885
 Part 70 Permit No.: T167-17562-00091

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
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:	
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: _____

Attach a signed certification to complete this report.

ATTACHMENT A

Fugitive Dust Control Plan Approved July 13, 1994

SG Solutions, LLC
444 West Sandford Ave.
West Terre Haute, Indiana 47885

The following control plan, when implemented, is designed to reduce uncontrolled fugitive dust generated from paved roadways and areas, unpaved roadways and areas, coal crushing operations, enclosed operations and slag handling in order to eliminate fugitive dust from crossing the property boundary.

The plan shall be implemented on a year-round basis until such time as another plan is approved or ordered by the Indiana Department of Environmental Management (IDEM).

The Fugitive Dust Control Plan consists of the following:

- (a) Pave/chip & seal plant roads;
- (b) Pave process areas of gasification plant;
- (c) Stone parking, laydown areas, air separation plant;
- (d) Seed greenbelt areas;
- (e) Slag is removed wet;
- (f) Coal slurried before/during crushing;
- (g) Process equipment enclosed; and
- (h) Water service roads.

Indiana Department of Environmental Management
Office of Air Quality
And Vigo County Air Pollution Control

Addendum to the Technical Support Document (ATSD) for a
Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	SG Solutions, LLC
Source Location:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
County:	Vigo
SIC Code:	2869
Operation Permit No.:	T167-17562-00091
Permit Reviewer:	Anne-Marie C. Hart

On September 18, 2008, the Office of Air Quality (OAQ) had a notice published in the Tribune Star, Terre Haute, Indiana, stating that SG Solutions, LLC had applied for a Part 70 Operating Permit Renewal (T167-17562-00091) to continue operating their gasification plant capable of operating on coal, petroleum coke, or a blend of coal and petroleum coke. The notice also stated that the OAQ proposed to issue a Part 70 Operating Permit renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On October 17, 2008, Jarrod Klaas from Wabash Valley Power Association submitted comments to IDEM, OAQ on the draft Part 70 Operating Permit renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Section A.1 and Technical Support Document. The source status is listed as a major source under Section 112 of the Clean Air Act. We do not agree with this determination and believe that the facility is a minor source for HAPs. The HAP emissions from the SG Solutions facility and the Wabash River Combined Cycle (WRCC) plant would need to be combined in order to make the determination; however, the HAP emissions from both sources would still not meet the thresholds for a major source of HAPs. We believe that the assumption that the source is a major HAPs source is a carryover from the time when the WRCC Plant, SG Solutions and the Duke Energy Wabash River Generating Station were considered one source. IDEM has made the determination that Duke Energy's generating station is a completely separate entity and the HAP emissions from that source would be completely separate from HAPs generated by the other two plants. The potential HAP emissions from the SG Solutions facility are approximately 3.69 tons per year, as shown on the original Title V permit application. The four units currently located at the Wabash River Combined Cycle Plant, including the combustion turbine, two boilers, and the fuel preheater, all use natural gas and the potential HAP emissions from these units, combined

with the HAP emissions from SG Solutions, are less than the 10/25 tons per year thresholds for single/combined HAPs.

Response to Comment 1:

HAP emissions are lower for gas turbines than for other combustion sources due to the high combustion temperatures. There is no Hexane emission factor for gas fired combustion turbines in AP-42. Therefore, IDEM has determined that, Wabash River Combined Cycle Plant is a minor source of HAPs. SG Solutions, LLC is also a minor source of HAPs. Condition A.1 of the permit has been revised as follows:

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary gasification plant.

Source Address:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
Mailing Address:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
General Source Phone Number:	(812) 535-6074
SIC Code:	2869
County Location:	Vigo
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Major Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

Comment 2:

Section A.2 and Technical Support Document (TSD), Source Definition. This section provides the rationale for the determination that Wabash Valley Combined Cycle Plant and SG Solutions, LLC are considered one source. Paragraph (2) of this section discusses the SIC code for Wabash River Generating Station and Wabash Valley Combined Cycle Plant. We request that the reference to Wabash River Generating Station be removed from this permit. The SIC code for Wabash River Generating Station is irrelevant to this discussion and therefore, for clarity, we request that it be deleted.

Response to Comment 2:

IDEM agrees with the recommended changes. The permit has been revised as follows:

* * *

- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other;

~~Wabash River Generating Station and Wabash Valley Combined Cycle Plant have the same~~ **operates under the** two-digit SIC code, 49, for Electric, Gas and Sanitary Services. SG Solutions, LLC operates under the SIC code of 2869. However, the gasification plant sends 100% of its total output to the combined cycle plant. Pursuant to 326 IAC 2-7-1(22), the gasification plant meets the criteria of a support facility to the combined cycle plant.

* * *

Comment 3:

Condition B.11(h), Emergency Provisions. Paragraph (h) requires that the quarterly deviation and monitoring report include a listing of all emergencies. As we read this provision, we would also be required to report all emergencies even those that may have lasted less than an hour. We believe that this requirement is excessive and contrary to the intent of the emergency provisions which limited reporting to the agency to occurrences lasting more than one hour. We are also unaware of any specific requirement under 326 IAC 2-7 requiring that all emergencies be reported as part of the quarterly deviation and monitoring report. Therefore, we request that the language in item (h) be revised as follows to be consistent with other permits recently issued by IDEM:

The Permittee shall include all emergencies **lasting one (1) hour or more** in the Quarterly Deviation and Compliance Monitoring Report **unless the emergency report made pursuant to Condition B.11(b)(5) included a certification by the responsible official.**

Response to Comment 3:

The company is required to report all deviations under 326 IAC 2-7-5(3)(C)(ii) including those deviations that are attributable to emergencies. The notice and submittal of an emergency report under 326 IAC 2-7-16 satisfies the deviation report in 326 IAC 2-7-5(3)(C)(ii) for each emergency reported. Sources are only required to notify IDEM if the emergency last more than one (1), but there is nothing in 326 IAC 2-7-5(3)(C)(ii) that lets a source out of reporting emergencies on the deviation report that have not previously reported as an emergency (e.g. emergencies lasting less than one (1) hour).

No changes were made to the permit as a result of this comment.

Comment 4:

Condition C.7, Performance Testing. We request that the following paragraph be added to this section of the permit so that permit modifications would not be required in the event a control device is replaced.

- (d) In addition to any other testing required by this permit if at any time the Permittee replaces a control device that is used to comply with an emission limitation listed in Section D, then the Permittee shall conduct a performance test no later than one hundred eighty (180) days after installation of the replacement control device in accordance with this condition.

Response to Comment 4:

IDEM agrees with the recommended changes. The permit has been changed as follows:

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue

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

and

Vigo County Air Pollution Control
103 South Third Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC 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.
- (d) **In addition to any other testing required by this permit if at any time the Permittee replaces a control device that is used to comply with an emission limitation listed in Section D, then the Permittee shall conduct a performance test no later than one hundred eighty (180) days after installation of the replacement control device in accordance with this condition.**

Comment 5:

Condition D.1.4, Sulfuric Acid Mist. For clarification, and to be more consistent with language found in other permits issued by IDEM, we request that this condition be changed as follows:

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator, unit 1, was determined to be: operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 500° F, **or at a temperature as determined from the most recent compliant stack test, as approved by IDEM.** ~~The stack test data shall be used to determine if these parameters ensure compliance with condition D.1.3, and can be used to adjust the required parameters.~~

Response to Comment 5:

IDEM agrees with the recommended changes. The permit has been revised as follows:

D.1.4 Sulfuric Acid Mist (H₂SO₄)

Pursuant to 326 IAC 2-2-3(a)(3) and Construction Permit CP167-2609-00021, the H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator, unit 1, was determined to be: operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 500° F, **or at a temperature as determined from the most recent compliant stack test, as approved by IDEM.** ~~The stack test data shall be used to determine if these parameters ensure compliance with condition D.1.3, and can be used to adjust the required parameters.~~

Comment 6:

TSD, Page 3 of 12. The section identified as "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit" includes the following statement:

"The source also consists of the following insignificant activity that was constructed and/or is operating without a permit: One (1) waste water treatment evaporator/drum dryer constructed September 30, 2001 and operating since December 17, 2001."

We request that the unit be removed from this section since as an insignificant activity, the source was not required to obtain approval prior to construction or operation. The unit has been included in the list of insignificant activities found in Section A.4 of the permit and should not be called out separately in this section.

Response to Comment 6:

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD. There were no changes made to the permit as a result of this comment.

IDEM Contact

- (a) Questions regarding this proposed Part 70 Operating Permit renewal can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Indiana Department of Environmental Management
Office of Air Quality
And
Vigo County Air Pollution Control**

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	SG Solutions, LLC
Source Location:	444 West Sandford Avenue, West Terre Haute, Indiana 47885
County:	Vigo
SIC Code:	2869
Permit Renewal No.:	T167-17562-00091
Permit Reviewer:	Anne-Marie C. Hart

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from SG Solutions, LLC relating to the operation of a gasification plant capable of operating on coal, petroleum coke, or a blend of coal and petroleum coke.

History

On February 19, 2003, SG Solutions, LLC submitted applications to the OAQ requesting to renew its operating permit. SG Solutions, LLC was issued a Part 70 Operating Permit (T167-7353-00091) on December 31, 1998.

Source Definition

In 2004, IDEM issued a Title V Operating Permit 167-7176-00021 for the Wabash River Generating Station. The permit stated that the permitted source consisted of the generating station (source ID 167-00021), the combined cycle plant (source ID 167-00147) and the syngas plant (source ID 167-00091). Duke Energy sold the combined cycle plant to Wabash Valley Power Association on January 1, 2008. IDEM, OAQ has examined whether these three plants should still be considered one "major source" as defined at 326 IAC 2-7-1(22). In order for these plants to be considered one major source, they must meet all three of the following criteria:

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

Duke Energy owns the Wabash River Generating Station. Wabash Valley Power Association owns the Wabash River Combined Cycle Plant and the syngas plant is owned by SG Solutions, LLC. Duke Energy does not have any ownership interest in the combined cycle plant or the syngas plant, but Wabash Valley Power Association has an ownership interest in SG Solutions, LLC. Therefore, there is no common ownership between Duke Energy's Wabash River Generating Station and the other two plants. However, there is common ownership between the combined cycle plant and the syngas plant.

Next IDEM examined the issue of common control to determine if Duke Energy's Wabash River Generating Station is under common control with either of the other two plants. Wabash River Power Association has entered into an agreement with Duke Energy to operate the combined cycle plant.

Under the agreement, Duke Energy employees do all of the operation and maintenance activities at the combined cycle plant but Duke Energy does not undertake any repairs or shutdown any of the electrical generating equipment without prior approval from Wabash Valley Power Association. SG Solutions operates the syngas plant and sends 100% of the syngas it produces to the combined cycle plant and has no interaction with Duke Energy's Wabash River Generating Station.

Pursuant to IDEM's Nonrule Policy Document (NPD), Air-005-NPD, the relationship between sources that are not commonly owned may be under common control. The NPD sets out two tests. The first test looks at whether one source is an auxiliary activity which directly serves the purpose of a second source, where the second source has a major role in the day-to-day operation of the auxiliary source. The second test looks at whether one source would continue to operate if the other source were to shut down.

In regards to IDEM's Air-005-NPD, the syngas plant directly serves the purpose of the combined cycle plant since it sends all of its syngas to the combined cycle plant. Also, the combined cycle plant and the syngas plant are under common control.

Duke Energy's Wabash River Generating Station does not receive any output from either the combined cycle plant or the syngas plant. Therefore, no common control exists under the first test. If Duke Energy were to shut down its generating station and no longer wish to continue operating the combined cycle plant, Wabash Valley Power Association could contract with another operator or operate the plant directly. Therefore no common control exists under the second test.

U.S. EPA Region 5 set out a test for determining common control in its July 15, 1997 letter to Robert Hodanbosi of the Ohio EPA. The letter stated:

The U.S. EPA has been guided by the definition of control used by the Securities and Exchange Commission (SEC). For SEC purposes, control means, "[T]he possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through the ownership of shares, contract, or otherwise." See 17 CFR 210.1-02(g) (1996). If two sources are under different ownership, but one company has some decision-making ability in the second facility through a contractual agreement or voting interest, the sources can be considered under common control. (Hodanbosi letter, page one)

Duke Energy does not direct the management and policies of the Wabash River Combined Cycle Plant. While Duke Energy operates and maintains the combined cycle plant, it does not decide when to make repairs or when electrical generating equipment should be shut down. Wabash Valley Power Association makes the decisions concerning the combined cycle plant. Therefore, there is no common control of Duke Energy's Wabash River Generating Station and the Wabash River Combined Cycle Plant.

Wabash River Generating Station and Wabash River Combined Cycle Plant have the same two-digit SIC code, 49, for Electric, Gas and Sanitary Services. SG Solutions, LLC operates under the SIC code of 2869. However, the syngas plant sends 100% of its total output to the combined cycle plant. Pursuant to 326 IAC 2-7-1(22), the gasification plant meets the criteria of a support facility to the combined cycle plant.

The three plants are located on contiguous properties. IDEM, OAQ finds that Duke Energy's Wabash River Generating Plant is no longer part of the same major source as the combined cycle plant and the syngas plant. IDEM, OAQ further finds that the Wabash River Combined Cycle Plant and the SG Solutions LLC syngas plant are part of the same major source.

Separate Part 70 Operating Permits will be issued to Wabash Valley Combined Cycle Plant (Plant ID 167-00147) and SG Solutions, LLC (Plant ID 167-00091) solely for administrative purposes.

Permitted Emission Units and Pollution Control Equipment

SG Solutions, LLC (Plant ID 167-00091) consists of the following permitted emission units and pollution control equipment:

- (a) One (1) gasification plant capable of operating on coal, petroleum coke, or a blend of coal and petroleum coke, rated at 367,000 pounds of syngas produced per hour, consisting of gasification, high and low temperature heat recovery, sour waste treatment, oxygen unit and a flare.
 - (1) One (1) acid gas removal/sulfur recovery unit, identified as unit 1A, with a nominal capacity of 40,000 pounds of acid gas per hour, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (2) One (1) sour water treatment system, identified as unit 1B, with a nominal capacity of 110 gallons of processed water per minute, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (3) One (1) tank venting system, identified as unit 1C, with a nominal capacity of 20,000 pounds per hour from process tank vents, using incineration as control, constructed in 1995, and exhausting to stack EP-1.
 - (4) One (1) tail gas incinerator, identified as unit 1, with a maximum heat input capacity of 52 million British thermal units per hour, controlling emissions from units 1A, 1B, and 1C, constructed in 1995, and exhausting to stack EP-1.
 - (5) One (1) flare, identified as unit 2, with a maximum pilot rate of 1.6 million British thermal units per hour, constructed in 1995, and exhausting to stack EP-2.
 - (6) Fugitive equipment leak emissions

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source also consists of the following insignificant activity that was constructed and/or is operating without a permit:

- (a) One (1) waste water treatment evaporator/drum dryer constructed September 30, 2001 and operating since December 17, 2001.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input less than six million (6,000,000) British thermal units per hour
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour
- (c) Combustion source flame safety purging on startup
- (d) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids

- (e) Heat exchanger cleaning and repair
- (f) Process vessel degassing and cleaning to prepare for internal repairs
- (g) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower
- (h) Stationary fire pumps
- (i) Filter or coalescer media changeout
- (j) Vents from ash transport systems not operated at positive pressure
- (k) A laboratory as defined in 326 IAC 2-7-1(21)(D)
- (l) Slag handling fugitive emissions
- (m) Coal transfer from Duke reclaim conveyor into Destec crusher surge hopper [326 IAC 6-4]
- (n) Coal transfer from crushed coal hopper onto rod mill feed conveyor [326 IAC 6-4]
- (o) Coal transfer from rod mill feed conveyor onto rod mill [326 IAC 6-4]
- (p) Paved roadways and unpaved parking lots without public access [326 IAC 6-4]

Existing Approvals

Since the issuance of the Part 70 Operating Permit (T167-7353-00091) on December 31, 1998, SG Solutions, LLC has constructed or has been operating under the following approvals as well:

- (a) First Administrative Amendment No. 167-11851-00091 issued on March 1, 2000;
- (b) Second Administrative Amendment No. 167-12145-00091 issued on August 31, 2000;
- (c) First Reopening No. 167-13520-00091 issued on March 6, 2002; and
- (d) Third Administrative Amendment No. 167-20863-00091 issued on March 28, 2005.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

- (a) H₂SO₄ BACT Condition

The H₂SO₄ BACT Condition in CP 167-2609-00021 (issued on May 27, 1993) has been modified to incorporate newer permitting language and the age of the tail gas incinerator. Condition D.1.4 of the permit has been modified to allow for a temperature determination based on the most recent compliant stack test, as approved by IDEM.

- (b) Section D.1 Record Keeping Requirements

The Record Keeping Requirements outlined in Condition D.1.9 of OP T167-7353-00091 (issued on December 31, 1998) has been modified to include the type of records required from the source. Condition D.1.10 of this renewal (T167-17562-00091) reflects this modification.

(c) Section D.2 Compliance Determination Requirements

Condition D.2.5 (CO Control) has been added to Title V T167-17562-00091 to ensure the flare is operational and controlling CO emissions.

(d) Section D.2 Record Keeping Requirements

Condition D.2.6 of OP T137-7353-00091 has been modified to include the type of records required from the source. Condition D.2.7 of this Title V renewal (T137-17562-00091) reflects this modification.

Enforcement Issue

There are no enforcement actions pending.

County Attainment Status

The source is located in Vigo County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective February 6, 2006, for the Terre Haute area, including Vigo County, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

- (a) Vigo County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) Vigo County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements

for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard.
- (e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

The Permittee has agreed that it is major for Part 70 Permits 326 IAC 2-7, Prevention of Significant Deterioration (PSD) 326 IAC 2-2, Emission Offset 326 IAC 2-3 for NO_x, and Hazardous Air Pollutants 326 IAC 20. No calculations of unrestricted Potential to Emit have been done for any of the criteria pollutants and hazardous air pollutants (HAPs).

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, SO₂, VOC, CO and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Emission Calculations

SG Solutions, LLC (Plant ID 167-00091) is a combined source with Wabash River Combined Cycle Plant (Plant ID 167-00147). Title V applicability is determined based on the potential to emit greater than one hundred (100) tons per year of any criteria pollutant. Wabash River Combined Cycle Plant is a Title V source, therefore calculations are not necessary to determine the potential to emit from SG Solutions, LLC.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	Potential to Emit After Issuance (tons/year)							
	PM	PM10	PM2.5	SO ₂	VOC	CO	NO _x	Sulfuric Acid Mist
SG Solutions, LLC (Plant ID 167-00091)	<100	>100	>100	>100	<100	>100	>100	<10
Wabash River Combined Cycle Plant (Plant ID 167-00147)*	<100	>100	>100	>100	<100	>100	>100	<10
Total	<100	>100	>100	>100	<100	>100	>100	<10
Major Source Threshold	100	100	100	100	100	100	100	10

* For details, refer to Part 70 Permit No. T167-26486-00147 for Wabash River Combined Cycle Plant

- (a) This existing stationary source is major for PSD because the emissions of at least one criteria pollutant are greater than two hundred fifty (>250) tons per year, and it is one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

The following federal rules are applicable to SG Solutions (Plant ID 137-00091). (See Part 70 Permit No. T167-26486-00147 for federal rule applicability for Wabash River Combined Cycle Plant):

- (a) The tail gas incinerator and the flare at this source are subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring (CAM). In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant:
 - 1) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant,
 - 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and
 - 3) the unit has the potential to emit, of the applicable regulated air pollutant, equal or greater than 100 percent of the amount required for a source to be classified as a major source.

The tail gas incinerator and flare have the potential to emit greater than 100 tons of carbon monoxide (CO) before controls, and use a control device to comply with an emission limitation for that specific pollutant, pursuant to CP 167-2609-00021. The rule requires the Permittee to use continuous compliance monitoring to satisfy the CAM requirements and

Contemporaneous							
Increases	0	0	0	0	0	0	0
Decreases	126	126	5713	5	94	1370	64
Net Change	-25	-42	-3213	20	1953	-268	90
PSD/EO Significant Level	25	15	40	40	100	40	7
Significant	No	No	No	No	Yes	No	Yes

Pursuant to CP 167-2609-00021 (issued May 27, 1993), and carried through to this Part 70 Permit renewal, the following requirements must be met:

Tail Gas Incinerator (unit 1) - Emission Limitations

- (a) CO emissions shall not exceed 56 pounds of CO per hour
- (b) H₂SO₄ emissions shall not exceed 3.79 pounds of H₂SO₄ per hour
- (c) SO₂ emissions shall not exceed 527 pounds of SO₂ per hour

Tail Gas Incinerator (unit 1) - Best Available Control Technology (BACT) determinations:

- (a) CO emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator (unit 1) was determined to be: an in-line burner with a minimum operational temperature of 1400° F, operating with a minimum of 2% excess oxygen, and operating with a minimum residence time of 0.6 seconds or a parameter determination based on the most recent stack test data
- (b) H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the tail gas incinerator (unit 1) was determined to be: Operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 500° F or a temperature determination based on the most recent stack test data

Flare (unit 2) - Emission Limitations

- (a) CO emissions shall not exceed 11,099 pounds of CO per hour

Flare (unit 2) - Best Available Control Technology (BACT) determinations

- (a) CO emissions are subject to Best Available Control Technology (BACT). BACT for the flare (unit 2) was determined to be: a design destruction efficiency of at least 95%, monitoring the firing rate and CO emissions by measuring the flow rate and determining the gas composition for each hour of flaring by an on-line gas chromatograph with a 10 to 15 minute sample turn around time
- (b) H₂SO₄ emissions are subject to Best Available Control Technology (BACT). BACT for the flare (unit 2) was determined to be: operation well above the dew point for H₂SO₄, which includes operating at a minimum exhaust gas temperature of 1832° F based on the maximum firing rate and the BTU content of the syngas

Fugitive equipment leaks - Best Available Control Technology (BACT) determinations

CO emissions are subject to Best Available Control Technology (BACT). BACT for the CO leaks from equipment was determined to be: a leak detection schedule and repair program. This would also meet the requirements under 326 IAC 2-7-5(13).

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

The source submitted an Emergency Reduction Plan (ERP) on August 26, 2003. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-3 (Emission Offset)

The source is one of the 28 listed source categories and has a potential to emit NO_x greater than 100 tons per year. Therefore, it is considered a major source and subject to 326 IAC 2-3 (Emission Offset).

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

This source is a major source for HAPs. However, all equipment was constructed and permitted prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2009. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 4-2 (Incinerators)

Pursuant to 326 IAC 1-2-34, an incinerator is "An engineered apparatus that burns waste substances with controls on combustion factors, including, but not limited to, temperature, retention time, and air." Pursuant to 326 IAC 1-2-29, a flare is "an elevated combustion device that burns waste gases." Because the tail gas incinerator does burn waste gases rather than solid materials, for the purposes of 326 IAC, the unit meets the definition of a flare, and is therefore not subject to the requirements of 326 IAC 4-2.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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 subject to the requirements of 326 IAC 6-5, because the paved and unpaved roads, coal handling equipment, and slag handling have potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan, submitted on July 13, 1994, which is included as Attachment A to the permit.

State Rule Applicability – Individual Facilities

326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County)

The particulate from the acid gas removal/sulfur recovery unit and the tank venting system shall be limited by the following in accordance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes):

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Uncontrolled particulate emission rate for the acid gas removal/sulfur recovery unit is 30.51 pounds per hour.

Uncontrolled particulate emission rate for the tank venting system is 19.20 pounds per hour.

However, this source is located in Vigo County and is not specifically listed in 326 IAC 6.5-9. The potential to emit PM of this source is greater than 100 tons per year. Therefore, this source is subject to the requirements of 326 IAC 6.5-1-2.

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) from the acid gas removal/sulfur recovery unit and the tank venting system shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf) of exhaust air.

This limit is more stringent than the limit established in 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

The tail gas incinerator shall be in operation at all times the acid gas removal/sulfur recovery unit and tank venting system are in operation in order to comply with this limit.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 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 2-7-5. 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.

The compliance monitoring requirements applicable to this source are as follows:

1. The tail gas incinerator (unit 1) has applicable compliance monitoring conditions as specified below:

- (a) The flow rate and temperature in the tail gas incinerator, unit 1, shall be continuously monitored. The flow rate is used to calculate the residence time. Additionally, the exit gas temperature must be monitored. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
2. The flare (unit 2) has applicable compliance monitoring conditions as specified below:
- (a) The Permittee shall continuously monitor the presence of the flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame. For the purpose of this condition, continuous means no less than once per minute.
 - (b) Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 February 19, 2003.

Conclusion

The operation of this gasification plant shall be subject to the conditions of the attached Part 70 Operating Permit T137-17562-00091.