



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 24, 2012

RE: Ball State University / 035-30479-00002

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

Notice of Decision: Approval – Effective Immediately

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Ball State University
2000 West University Avenue
Muncie, Indiana 47306**

(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.

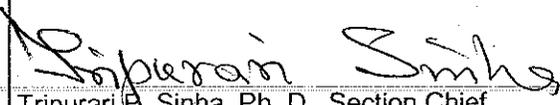
Operation Permit No.: T035-30479-00002	
Issued by:  Tripurari Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: January 24, 2012 Expiration Date: January 24, 2017

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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). 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 steam generating station.

Source Address:	2000 West University Avenue, Muncie, Indiana 47306
General Source Phone Number:	(765) 285-2830
SIC Code:	8221
County Location:	Delaware
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 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) coal-fired boiler, installed in 1941, identified as Boiler 4, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2.
- (b) One (1) coal-fired boiler, installed in 1941, identified as Boiler 5, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2.
- (c) One (1) coal-fired boiler, installed in 1955, identified as Boiler 6, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #1.
- (d) One (1) coal-fired boiler, installed in 1958, identified as Boiler 7, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #1.
- (e) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1961, identified as Boiler 8, with a maximum heat input capacity of 63 MMBtu per hour and a steam capacity of 50,000 pounds of steam per hour, and exhausting to stack #3.
- (f) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1966, identified as Boiler 9, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #3.
- (g) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1970, identified as Boiler 10, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #4.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

- (e) Degreasing operations that do not exceed 145 gallons per 12 months:
 - (2) Degreasing operation D-2, installed in 1983. [326 IAC 8-3-2]
- (i) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (j) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]
- (k) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]
- (l) Fugitive PM emissions from a coal storage pile. [326 IAC 6-4]
- (m) Ash Handling and Storage [326 IAC 6-3-2]
- (p) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

A.4 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, T035-30479-00002, 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, 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] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-7-5(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, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The

PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.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, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 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 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.

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, 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, 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, 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 T035-30479-00002 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 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 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 at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes

final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.18 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 or notice 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.19 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 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, 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.22 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.23 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 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 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.24 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 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.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at

least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.8 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.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 shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ 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]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or

- (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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]

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year 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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) 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(ll)) 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 except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:
- Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) 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:

- (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).
- (f) The report for project at an existing emissions unit shall be submitted no later than 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 (d)(1) and (2) 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 wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) coal-fired boiler, installed in 1941, identified as Boiler 4, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2;
- (b) One (1) coal-fired boiler, installed in 1941, identified as Boiler 5, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2;
- (c) One (1) coal-fired boiler, installed in 1955, identified as Boiler 6, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #1; and
- (d) One (1) coal-fired boiler, installed in 1958, identified as Boiler 7, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #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 Hazardous Air Pollutants (HAP) Minor Limit

The total amount of coal input to Boilers 4, 5, 6, and 7 shall be limited such that HCl, HF and P emissions are less than 10 tons per twelve (12) consecutive month period each, with compliance determined at the end of each month.

Compliance with this limit, in conjunction with the sum of the potential to emit of HAPs from other units will limit the source wide HAPs to less than 25 tons of total HAPs per twelve (12) consecutive month period, with compliance determined at the end of each month.

D.1.2 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from each boiler (4, 5, 6, and 7) shall be limited to 0.75 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

C = 50 u/m³

Pt = emission rate limit (lbs/MMBtu)

Q = total source heat input capacity (MMBtu/hr) =

N = number of stacks

a = plume rise factor (0.67)

h = stack height (ft)

D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from each boiler (4, 5, 6, and 7) shall not exceed six and zero-tenths (6.0) pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.4 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations):

- (a) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the forty percent (40%) opacity limitation established by 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
- (b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed forty percent (40%); however, opacity shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of forty percent (40%) shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60)-minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:

- (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or
- (2) Pursuant to 326 IAC 3-7-2(b)(2) and 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring; or
- (3) The Permittee shall meet the minimum sampling requirements specified in 326 IAC 3-7-2(b)(3), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e).

D.1.7 HAP Emissions

In order to demonstrate the compliance status with Condition D.1.1:

- (1) The HCl emissions shall be calculated according to the following equation:

$$E_{HCl} = (1.028 * C_{Cl} * Q_{Coal}) / 10^6 \dots\dots \text{Equation (1)}$$

Where

- E_{HCl} = Emissions of Hydrogen Chloride in tons per month
- 1.028 = Molecular weight ratio of Hydrogen Chloride to Chlorine
- C_{Cl} = Chlorine content in coal, dry basis (ppm)
- Q_{Coal} = Coal Consumption in tons per month

- (2) The HF emissions shall be calculated according to the following equation:

$$E_F = (1.053 * C_F * Q_{Coal})/10^6 \dots\dots \text{Equation (2)}$$

Where

- E_F = Emissions of HF in tons per month
1.053 = Molecular weight ratio of Hydrogen Fluoride to Fluorine
 C_F = Fluorine content in coal, dry basis (ppm)
 Q_{Coal} = Coal Consumption in dry tons per month

- (3) The Phosphorus emissions shall be calculated according to the following equation:

$$E_P = (C_P * Q_{Coal})/10^6 \dots\dots \text{Equation (3)}$$

Where

- E_P = Emissions of Phosphorus in tons per month
 C_P = Phosphorus content in coal, dry basis (ppm)
 Q_{Coal} = Coal Consumption in dry tons per month

D.1.8 HAP Emissions

In order to demonstrate the compliance status with Condition D.1.1, the coal consumption (Q_{Coal}) in Condition D.1.6 shall be determined each month based on the actual coal burned in the Boilers 4, 5, 6, and 7.

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

D.1.9 Visible Emissions Notations

- (a) Visible emission notations of each boiler stack (1 and 2) exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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 Requirements

- (a) To document the compliance status with Conditions D.1.1 and D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Condition D.1.1 and D.1.3.
- (1) Calendar dates covered in each month;
 - (2) Actual coal usage each month;
 - (3) Sulfur content, heat content, and ash content;
 - (4) Sulfur dioxide emission rates; and
 - (5) Vendor analysis of coal and coal supplier certification.
- (b) To document the compliance status with Condition D.1.6 and D.1.7, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be sufficient to establish a 12 consecutive month annual emissions rate and shall be complete and sufficient to demonstrate compliance with the HCl limits establish in Condition D.1.1.
- (1) Actual coal usage each month and records of fuel sampling results and all calculations per Condition D.1.6.
 - (2) Chlorine, fluoride, phosphorus, and moisture content in the coal.
- (c) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of visible emission notations of each boiler stack (1 and 2) exhaust while combusting coal. The Permittee shall include in its daily record when a visible emission reading is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (d) Section C – General Record Keeping Requirements contains the Permittee’s obligation with regard to the records required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.1, D.1.3, D.1.6, D.1.7 and D.1.8 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1 (34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (e) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1961, identified as Boiler 8, with a maximum heat input capacity of 63 MMBtu per hour and a steam capacity of 50,000 pounds of steam per hour, and exhausting to stack #3.
- (f) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1966, identified as Boiler 9, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #3.
- (g) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1970, identified as Boiler 10, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #4.

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

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

D.2.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from each boiler (8, 9, and 10) shall be limited to 0.75 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

C = 50 u/m³

Pt = emission rate limit (lbs/MMBtu)

Q = total source heat input capacity (MMBtu/hr) = 337 MMBtu/hr

N = number of stacks

a = plume rise factor (0.67)

h = stack height (ft)

D.2.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from each boiler (8, 9, and 10) shall not exceed five-tenths (0.5) pound per million Btu. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.4 Sulfur Dioxide Emissions and Sulfur Content

In order to demonstrate the compliance status with Condition D.2.2, one of the following options shall be utilized:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths pound per million Btu (0.5 lb/MMBtu) by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from each boiler (8, 9, and 10), using 40 CFR 60, Appendix A, Method 6, 6A, 6C, 8 or other methods as approved by the Commissioner, in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the boiler stacks (3 and 4) exhaust shall be performed once per day during normal daylight operations while combusting No. 2 fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limit established in Condition D.2.2.
 - (1) Actual fuel oil usage each month and equivalent sulfur dioxide emissions;

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (2) Fuel supplier certifications;
 - (3) The name of the fuel supplier; and
 - (4) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document the compliance status with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the boiler stacks (3 and 4) exhaust while combusting fuel oil. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (Insignificant Activities):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, that are not subject to 326 IAC 20-6, including degreasing operation D-2, installed in 1983. [326 IAC 8-3-2]
- (b) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6-3-2]
- (c) Coal bunker and coal scale exhausts and associated dust collector vents; [326 IAC 6-3-2] and
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the coal truck unload, bucket conveyors, weighing device, coal bunkers and exhausts, and ash handling shall not exceed 25 lb/hr. Grinding and machining operations shall not exceed shall not exceed 4 lb/hr, based on the following formula:

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Ball State University
Source Address: 2000 West University Avenue, Muncie, Indiana 47306
Part 70 Permit No.: T035-30479-00002

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Ball State University
Source Address: 2000 West University Avenue, Muncie, Indiana 47306
Part 70 Permit No.: T035-30479-00002

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) 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: _____

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

Part 70 Quarterly Report

Source Name: Ball State University
Source Address: 2000 West University Avenue, Muncie, Indiana 47306
Part 70 Permit No.: T035-30479-00002
Facility: Boilers 4, 5, 6, 7 (coal-fired)
Parameter: SO₂
Limit: 6.0 lbs/MMBtu

Month: _____ Year: _____

Month	Sulfur Content (%)	Heat Content (Btu/lb)	SO ₂ Emissions (lb/MMBTU)

No deviation occurred in this quarter.

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

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

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

Part 70 Quarterly Report

Source Name: Ball State University
Source Address: 2000 West University Avenue, Muncie, Indiana 47306
Part 70 Permit No.: T035-30479-00002
Facility: Boilers 4, 5, 6, 7
Parameter: HCl, HF and P
Limit: Each individual hazardous air pollutant and total hazardous air pollutants are limited to less than 10 and 25 tons per twelve (12) consecutive month period respectively, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 3	Column 4
	Coal Consumption (tons)	HAP Content (ppm)	Moisture Content (%)	Single and Total HAPs (tons)
Month 1				
Month 2				
Month 3				
Previous 9 Months				
12 Month Total				

- No deviation occurred in this month.
- Deviation/s occurred in this month.
Deviation has been reported on:

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

Attached a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Ball State University
Source Address: 2000 West University Avenue, Muncie, Indiana 47306
Part 70 Permit No.: T035-30479-00002

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, 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: _____

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Ball State University
Source Location:	2000 West University Avenue, Muncie, IN 47306
County:	Delaware
SIC Code:	8221
Permit Renewal No.:	T035-30479-00002
Permit Reviewer:	Heath Hartley

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Ball State University relating to the operation of a stationary steam generating station. On April 25, 2011, Ball State University submitted an application to the OAQ requesting to renew its operating permit. Ball State University was issued its first Part 70 Operating Permit Renewal (T035-16280-00002) on February 2, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) One (1) coal-fired boiler, installed in 1941, identified as Boiler 4, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2.
- (b) One (1) coal-fired boiler, installed in 1941, identified as Boiler 5, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #2.
- (c) One (1) coal-fired boiler, installed in 1955, identified as Boiler 6, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #1.
- (d) One (1) coal-fired boiler, installed in 1958, identified as Boiler 7, with a maximum heat input capacity of 31 MMBtu per hour, and exhausting to stack #1.
- (e) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1961, identified as Boiler 8, with a maximum heat input capacity of 63 MMBtu per hour and a steam capacity of 50,000 pounds of steam per hour, and exhausting to stack #3.
- (f) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1966, identified as Boiler 9, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #3.
- (g) One (1) no. 2 fuel oil/natural gas-fired boiler, installed in 1970, identified as Boiler 10, with a maximum heat input capacity of 75 MMBtu per hour and a steam capacity of 60,000 pounds of steam per hour, and exhausting to stack #4.

Insignificant Activities

The source also consists of the following insignificant activities:

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

- (a) Space heaters, using natural gas with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (b) Combustion source flame safety purging on startup.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (d) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Degreasing operations that do not exceed 145 gallons per 12 months
 - (1) Degreasing operation D-1, installed in 1978.
 - (2) Degreasing operation D-2, installed in 1983. [326 IAC 8-3-2]
- (f) Closed loop heating and cooling systems.
- (g) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
- (h) Heat exchanger cleaning and repair.
- (i) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (j) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]
- (k) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]
- (l) Fugitive PM emissions from a coal storage pile. [326 IAC 6-4]
- (m) Ash Handling and Storage [326 IAC 6-3-2]
- (n) Asbestos abatement projects.
- (o) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) Emergency generators as follows:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
- (r) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less

than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

- (s) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (t) Other activities or categories with emissions below insignificant thresholds:
 - (1) VOC emissions from furniture finishing.
 - (2) VOC emissions from underground storage tanks containing No. 2 fuel oil.

Existing Approvals

Since the issuance of the Part 70 Operating Permit (T035-16280-00002) on February 2, 2007, the source has constructed or has been operating under the following additional approvals:

- (a) Significant Permit Modification No. 035-30479-00002 issued on November 19, 2007.

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.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Delaware County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective January 3, 2006, for the Muncie area, including Delaware 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) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Delaware County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
Delaware County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ 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) **Other Criteria Pollutants**
Delaware County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO₂, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a fossil fuel fired steam electric plant of more than 250,000,000 Btu/hr heat input, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	398
*PM ₁₀	192
PM _{2.5}	192
SO ₂	2537
VOC	7
CO	221
NO _x	329
GHGs as CO ₂ e	260,773
Single HAP	28
Total HAP	32
negl. = negligible	
*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".	

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

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, PM_{2.5}, SO₂, CO, 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 and will be issued a Part 70 Operating Permit Renewal.

- (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.

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2009 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	N/A
PM ₁₀	212
SO ₂	1,464
VOC	1
CO	90
NO _x	254
Lead	0.06

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met 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 new 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 of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM ₁₀	PM _{2.5} *	SO ₂	NO _x	VOC	CO	GHGs	Worst Single HAP	Total HAPs
Boiler 4	94	41	41	516	44	0.3	35	30,541	< 10 HCl	< 12.2
Boiler 5	94	41	41	516	44	0.3	35	30,541		
Boiler 6	94	41	41	516	44	0.3	35	30,541		
Boiler 7	94	41	41	516	44	0.3	35	30,541		
Boiler 8	4	6	6	140	39	1	23	32,661	0	1.7
Boiler 9	5	8	8	167	56	2	27	52,525	0	
Boiler 10	5	8	8	167	56	2	27	52,525	0	
Grinding/Machining	4.5	4.5	4.5	0	0	0	0	0	0	0
Fugitive Emissions	2.4	2.3	2.2	0	0	0	0	0	0	0
Emergency Generators	0.3	0.2	0.2	0	9.9	0.7	2.4	899	0	0
Total PTE of Entire Source	398	192	192	2,537	339	7	221	260,773	< 10	< 25
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO ₂ e	10	25
PSD Major Source Thresholds	100	100	100	100	100	100	100	100,000 CO ₂ e	NA	NA
*PM _{2.5} listed is direct PM _{2.5} .										

- (a) This existing stationary source is major for PSD because the emissions of at least one regulated pollutant are greater than one hundred (>100) tons per year, emissions of GHGs are equal to or greater than one hundred thousand (>100,000) tons of CO₂ equivalent emissions (CO₂e) per year, and it is in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. Boilers 4, 5, 6, 7, 8, 9, and 10 each have a potential to emit PM, PM₁₀, and SO₂ greater than 100 tons per year and are subject to PM/PM₁₀ and SO₂ limitations, but do not use control devices to comply with these limits. Therefore, the requirements of 40 CFR 64 are not included in this permit.

- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

All boilers were constructed prior to the applicability date for 40 CFR 60, Subpart D, therefore this NSPS is not applicable to the units at this source.

- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is one of the listed 28 source categories, because it is a fossil fuel fired steam electric plant of more than 250,000,000 Btu/hr heat input, and the potential to emit SO₂, NO_x, CO, PM and PM₁₀ are greater than 100 tons per year. There have been no modifications to the source since 1970. Because the source was constructed prior to the applicability date of the PSD regulations, the source is considered an existing major source. Since there have been no modifications since the PSD regulations went into effect, the source has not been subject to a PSD review.

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 pursuant to 326 IAC 2-7 (Part 70). The potential to emit of SO₂ is greater than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 6-4 (Fugitive Dust Emissions)

326 IAC 6-4 applies to all sources of fugitive dust, thus this source is subject to this rule.

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

This source is not subject to the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) because the source received all necessary preconstruction approvals before December 13, 1985.

326 IAC 5-1 (Opacity Limitations)

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

State Rule Applicability – Individual Facilities

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

- (a) The operation of each facility will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

- (b) The total uncontrolled HAPs at the source are greater than 25 tons per year and the potential Hydrogen Chloride emissions are greater than 10 tons per year. However, the source has taken limits to keep the single HAP to less than 10 tons per year and total HAPs less than 25 tons per year, therefore the source is an Area Source for HAPs.

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-3(b) (Particulate Matter Limitations for Sources of Indirect Heating), particulate matter emissions from the boilers shall not exceed an amount specified by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

$$C = 50 \text{ } \Phi/\text{m}^3$$

Pt = emission rate limit (lbs/MMBtu)

Q = total source heat input capacity (337 MMBtu/hr)

N = number of stacks (4)

a = plume rise factor (0.67)

h = stack height (190.6 ft)

$$Pt = \frac{50 \times 0.67 \times 190.6}{76.5 \times 337^{0.75} \times 4^{0.25}}$$

$$Pt = 0.75 \text{ lbs/MMBtu}$$

The total source maximum operating capacity, Q, includes the four (4) 31 MMBtu/hr coal-fired boilers 4, 5, 6, and 7, the one 63 MMBtu/hr natural gas/no. 2 fuel oil-fired boiler 8, and the two (2) 75 MMBtu/hr natural gas/no. 2 fuel oil-fired boilers 9 and 10.

Therefore, the limit of 0.75 pounds per MMBtu shall be applied to each boiler, which were all constructed before June 8, 1972. Based on AP-42 emission factors, the boilers can comply with this limit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) The particulate from the coal truck unload, bucket conveyors, bunkers, weighing device, conveyors and ash handling shall each be limited by the following:

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:

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

$$E = 4.1(15)^{0.67} = 25 \text{ lb/hr}$$

- (b) The particulate from the grinding and machining operations shall be limited by the following:

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:

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

$$E = 4.1(1)^{0.67} = 4 \text{ lb/hr}$$

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

Boilers 4 - 10 are subject to 326 IAC 326 IAC 7-1.1 because its SO₂ PTE is equal to or greater than 25 tons/year or 10 pounds/hour.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The degreasing operation D-2, installed in 1983, is subject to 326 IAC 8-3-2 The cold cleaner was also constructed prior to January 1, 1990, therefore, the requirements of 326 IAC 8-3-5 are not applicable.

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. 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:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Boilers 4 - 10	Visible Emissions	Daily	Normal-Abnormal	Response Steps
Coal Handling, Transfer Points and Storage		Weekly		
Ash Handling, Transfer and Storage				

These monitoring conditions are necessary because the Boilers and coal transfer facilities must be monitored to ensure compliance with 326 IAC 2-7 (Part 70).

There are no compliance determination requirements applicable.

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 April 25, 2011.

Conclusion

The operation of this steam generating station shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T035-30479-00002.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Heath Hartley at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCM 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8217 or toll free at 1-800-451-6027 extension.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

SUMMARY

POTENTIAL TO EMIT - UNRESTRICTED

Emission Unit	Pollutant							G.H.G.	HAP	HAP's
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO ₂ e	HCI	comb.
Boiler 4	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541	28.3	30.5
Boiler 5	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 6	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 7	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 8	3.9	6.504	6.5	139.9	39.4	1.5	22.7	32,661	0	1.7
Boiler 9	4.7	7.7	7.7	166.6	56.3	1.8	27.1	52,525		
Boiler 10	4.7	7.7	7.7	166.6	56.3	1.8	27.1	52,525		
Coal/Ash Handling	2.4	2.3	2.2	0	0	0	0	0	0	0
Grinding/Machining	4.5	4.5	4.5	0	0	0	0	0	0	0
Emergency Gen	0.3	0.2	0.2	0	9.9	0.7	2.4	899	0	0.0
Totals	398	192	192	2,537	339	7	221	260,773	28	32

LIMITED POTENTIAL TO EMIT

Emission Unit	Pollutant							G.H.G.	HAP	HAP's
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO ₂ e	single	comb.
Boiler 4	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541	< 10	12.2
Boiler 5	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 6	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 7	94.5	40.9	40.9	516.0	44.3	0.3	35.4	30,541		
Boiler 8	3.9	6.5	6.5	139.9	39.4	1.5	22.7	32,661	0	1.7
Boiler 9	4.7	7.7	7.7	166.6	56.3	1.8	27.1	52,525		
Boiler 10	4.7	7.7	7.7	166.6	56.3	1.8	27.1	52,525		
Coal/Ash Handling	2.4	2.3	2.2	0	0	0	0	0	0	0
Grinding/Machining	4.5	4.5	4.5	0	0	0	0	0	0	0
Emergency Gen	0.3	0.2	0.2	0	9.9	0.7	2.4	899.4	0	0
Totals	398	192	192	2,537	339	7	221	260,773	< 10	< 25

Heat Input Capacity MMBtu/hr	Boiler	Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel	Weight % Ash in Fuel
31	Boiler 4	11,500	11,807	2.300	
31	Boiler 5	11,500	11,807		
31	Boiler 6	11,500	11,807		
31	Boiler 7	11,500	11,807		

Emission Factor in lb/ton	Pollutant							
	PM*	PM10*	PM2.5	SO2 (38S)	NOx	VOC	CO	
	16	6.92	6.92	87.4	7.5	0.05	6	
Potential Emission in tons/yr	Boiler 4	94.5	40.9	40.9	516.0	44.3	0.3	35.4
	Boiler 5	94.5	40.9	40.9	516.0	44.3	0.3	35.4
	Boiler 6	94.5	40.9	40.9	516.0	44.3	0.3	35.4
	Boiler 7	94.5	40.9	40.9	516.0	44.3	0.3	35.4
Potential Emission in lbs/MMBtu		0.696			3.8	-	-	-

Emission Factors are from AP-42, Chapter 1.1 for industrial overfeed stoker SCC 1-02-002-05/25 (Supplement E, 9/98)

VOC emission factor is from Table 1.1-19 (Total non-methane organic carbon).

HAPs emission factors are available in AP-42, Chapter 1.1.

Additional emission factors for commercial/institutional and electric generation boilers are available in AP-42, Chapter 1.1.

Methodology

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10⁶ Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

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

Emissions (lbs/MMBtu) = 10⁶ Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

		Greenhouse Gases		
		CO ₂	CH ₄	N ₂ O
Emission Factor, lb/ton		5133	1	0
Potential Emission, ton/yr		30,305	4	1
Summed Potential Emissions, tons/yr		30,309		
Global Warming Potential (100 Year)		1	21	310
CO ₂ e Total in tons/yr		30,541		

Per each boiler 4-7

Methodology

Pursuant to Table C-1 of 40 CFR Part 98 Subpart C, Bituminous coal has a default high heat value of 24.93 MMBtu/ton. Emission Factors from Tables C-1 and 2 of 40 CFR Part 98 Subpart C and have been converted from kg/MMBtu to lb/ton.

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

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

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

HAPS

Boilers: 4, 5, 6 & 7

Potential Throughput - Boilers #4, 5, 6, and 7

47,228

(tons/yr)

HAP (metals)	Emission Factor (lb/ton coal)	Emissions (tons/yr)
Antimony	1.8E-05	4.3E-04
Arsenic	4.1E-04	9.7E-03
Beryllium	2.1E-05	5.0E-04
Cadmium	5.1E-05	1.2E-03
Chromium	2.6E-04	6.1E-03
Cobalt	1.0E-04	2.4E-03
Lead	4.2E-04	9.9E-03
Magnesium	1.1E-02	2.6E-01
Manganese	4.9E-04	1.2E-02
Mercury	8.3E-05	2.0E-03
Nickel	2.8E-04	6.6E-03
Selenium	1.30E-03	3.1E-02
		0.34

HAP (compounds)	Emission Factor (lbs/ton coal)	Emissions (tons/yr)
Benzene	1.3E-03	0.03
Cyanide	2.5E-03	0.06
Hydrogen chloride	1.2	28.3
Hydrogen fluoride	0.015	0.4
Phosphorus	2.56E-03	1.4
		30.2

Combined HAP's Total **30.5**

Methodology:

Potential Throughput = (4 boilers) X (31 MMBtu/hr) X (1/11,500)(lb/Btu) X (1/2000)(ton/lb) X (8,760)(hr/yr)

HAPs emission factors are from AP-42, Chapter 1.1-14, 15 & 18

Emissions (tons/yr) = Potential Throughput for 4 boilers (tons/yr) X E.F. (lb/ton) X (ton/ 2000 lb)

BOILER #8

A. Fuel Oil Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
63.0	3942	0.5

Emission Factor, lb/kgal	Pollutant						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
	2.0	3.3	3.3	71 (142.0 S)	20.0	0.34	5.0
Potential Emissions, ton/yr	3.9	6.5	6.5	139.9	39.4	0.7	9.9

Methodology

No. 2 fuel oil heating value: 140,000 Btu/gal
 Potential Throughput (kgal/yr) = (Input)(MMBtu/hr) X (8,760)(hr/yr) X (1/1,000)(kgal/gal) X (1/140,000)(gal/Btu)
 Emission Factors are from AP-42 Tables: 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-12. (5/2010)
 PM = filterable only. PM₁₀ = filterable + condensable
 Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

B. Natural Gas Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput MMscf/yr
63.0	541.1

Emission Factor in lb/MMCF	Pollutant						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in ton/yr	0.5	2.1	2.1	0.2	27.1	1.5	22.7

Methodology:

Natural gas heating value: 1,020 Btu/ft³
 Potential throughput (MMCF) = (Input)(MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu.
 Emission Factors are from AP 42 Tables 1.4-1, 1.4-2. (7/1998)
 PM = filterable only. PM₁₀ = filterable + condensable
 Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) x 1ton/2000 lbs.

Emission Factor, lb/kgal	Greenhouse Gases		
	CO ₂	CH ₄	N ₂ O
	22,300	0.216	0.26
Potential Emission, ton/yr	43,953	0.4	0.5
Summed Potential Emissions, ton/yr	43,954		
Global Warming Potential (100 Year)	1	21	310
CO ₂ e Total, ton/yr	44,121		

Emission Factor, lb/MMscf	Greenhouse Gases		
	CO ₂	CH ₄	N ₂ O
	120,000	2.3	2.2
Potential Emission, ton/yr	32,464	1	1
Summed Potential Emissions, tons/yr	32,465		
Global Warming Potential (100 Year)	1	21	310
CO ₂ e Total in tons/yr	32,661		

A. Fuel Oil Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year							S = Weight % Sulfur
75.0	4693							0.5
	Pollutant							
Emission Factor, lb/kgal	PM 2.0	PM ₁₀ 3.3	PM _{2.5} 3.3	SO ₂ 71 (142.0 S)	NO _x 24.0	VOC 0.34	CO 5.0	
Potential Emissions, ton/yr	4.7	7.7	7.7	166.6	56.3	0.8	11.7	

Methodology

No. 2 fuel oil heating value: 140,000 Btu/gal
 Potential Throughput (kgal/yr) = (Input)(MMBtu/hr) X (8,760)(hr/yr) X (1/1,000)(kgal/gal) X (1/140,000)(gal/Btu)
 Emission Factors are from AP-42 Tables: 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-12. (5/2010)
 PM = filterable only. PM₁₀ = filterable + condensable
 Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

B. Natural Gas Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput MMscf/yr						
75.0	644.1						
	Pollutant						
Emission Factor in lb/MMCF	PM 1.9	PM ₁₀ 7.6	PM _{2.5} 7.6	SO ₂ 0.6	NO _x 100.0	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.6	2.4	2.4	0.2	32.2	1.8	27.1

Methodology:

Natural gas heating value: 1,020 Btu/ft³
 Potential throughput (MMCF) = (Input)(MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu.
 Emission Factors are from AP 42 Tables 1.4-1, 1.4-2. (7/1998)
 PM = filterable only. PM₁₀ = filterable + condensable
 Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) x 1 ton/2000 lbs.

BOILER #9 & #10

Greenhouse Gases			
Emission Factor, lb/kgal	CO ₂ 22,300	CH ₄ 0.216	N ₂ O 0.26
Potential Emission, ton/yr	52,325	0.5	0.6
Summed Potential Emissions, ton/yr	52,326		
Global Warming Potential (100 Year)	1	21	310
CO ₂ e Total, ton/yr	52,525		

Greenhouse Gases			
Emission Factor, lb/MMscf	CO ₂ 120,000	CH ₄ 2.3	N ₂ O 2.2
Potential Emission, ton/yr	38,647	1	1
Summed Potential Emissions, tons/yr	38,649		
Global Warming Potential (100 Year)	1	21	310
CO ₂ e Total in tons/yr	38,882		

**HAPs
 Boilers 8, 9 & 10**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
213	1829

No. 2 Fuel Oil Combustion Only

HAPs - Metals

Emission Factor in lb/MMBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	3.2E-02	2.4E-02	2.4E-02	2.4E-02	7.2E-02

HAPs - Metals (continued)

Emission Factor in lb/MMBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	
Potential Emission in tons/yr	2.4E-02	4.8E-02	2.4E-02	1.2E-01	
Combined HAP's					3.9E-01

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

Emission Factors are from AP-42, Tables 1.3-10 (SCC 1-03-005-01/02/03) Supplement E 9/98

Potential Emissions (tons/year) = Heat Input Capacity (MMBtu/hr)*Emission Factor (lb/MMBtu)*8,760hrs/yr / 2,000lb/ton

Natural Gas Combustion Only

HAPs - Organics

Emission Factor in lb/MMCF	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.9E-03	1.1E-03	6.9E-02	1.6E+00	3.1E-03

HAPs - Metals

Emission Factor in lb/MMCF	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.6E-04	1.0E-03	1.3E-03	3.5E-04	1.9E-03
Combined HAP's					1.7E+00

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

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-2, 1.4-3, and 1.4-4, SCC #1-02-006-02, 1-01-006-02,

1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

INSIGNIFICANT ACTIVITIES

Emission Units	Pollutants (ton/yr)						
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO
COAL							
Regular Truck Unload	0.04	0.02	0.00	0	0	0	0
Bucket Conveyor	0.04	0.02	0.00	0	0	0	0
Bunkers	0.04	0.02	0.00	0	0	0	0
Weighing Device	0.04	0.02	0.00	0	0	0	0
Conveyor	0.04	0.02	0.00	0	0	0	0
Store Pile: Load/Unload	0.00	0.00	0.00	0	0	0	0
Store Pile: Wind Erosion	2.13	2.13	2.13	0	0	0	0
Ash							
Handling	0.10	0.05	0.01	0	0	0	0
Store Pile: Load/Unload	0.00	0.00	0.00	0	0	0	0
Store Pile: Wind Erosion	2.13	2.13	2.13	0	0	0	0
Grinding/Machining							
Grinding/Machining	4.51	4.5	4.5	0	0	0	0
Totals	9.1	8.9	8.8	0	0	0	0

Methodology

COAL

AP-42; 13.2.4-3, Drop Operation (11/2006)

$$E = k(0.0032) \times \frac{(U/5)^{1.3}}{(M/2)^{1.4}} = \begin{array}{|c|c|c|} \hline \text{PM} & \text{PM}_{10} & \text{PM}_{2.5} \\ \hline 0.0006 & 0.0003 & 0.0000 \\ \hline 0.0016 & 0.0008 & 0.0001 \\ \hline \end{array} \begin{array}{l} \text{coal} \\ \text{fly ash} \end{array}$$

where:

- E = emission factor (lb/ton)
- k = particle size multiplier (dimensionless)
 = 0.74 (< 30 mm) 0.35 (< 10 mm) 0.053 (<2.5 μm)
- U = mean wind speed = 9.9 mph
- M = material moisture content (%) = 10 (coal), 5 (ash)

Regular Truck Unload & Coal Conveyor: Maximum coal unload rate = ton/day
 PM/PM10/PM2.5 = (360)(ton/day) X (365 day/yr) X (E) X (ton/2000lb)

Store Pile Load/Unload: Annual total = (360)(ton/day) X (24)(day/yr) = ton/yr
 PM/PM10/PM2.5 = (8640)(ton/yr) X (E) X (ton/2000lb)

Store Pile Wind Erosion: PM/PM₁₀/PM_{2.5} = (1/4)(acre) X (17060)(lb/acre-yr)
 SCC 30501043

Grinding / machining: PM/PM₁₀ =

(0.03)(gr/dscf) X (lb/7000 gr) X (4,000 dscf/min) X (60 min/hr) X 8760 hr/yr X (ton/2000 lb)

	Diesel	Gasoline
Output Horsepower Rating (hp)	1600	110
Maximum Hours Operated per Year	500	500
Potential Throughput (hp-hr/yr)	800,000	55,000
Sulfur Content (S) of Fuel (% by weight)	0.000	0.000

	Pollutant							
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	
Emission Factor lb/hp-hr	7.00E-04	4.01E-04	4.01E-04	0.00E+00 (.00809S)	2.40E-02 **see below	7.05E-04	5.50E-03	diesel
	7.21E-04	7.21E-04	7.21E-04	0.001	0.011	0.015	6.96E-03	gasoline
Potential Emission in tons/yr	0.28	0.16	0.16	0.00	9.60	0.28	2.20	diesel
	0.02	0.02	0.02	0.02	0.30	0.41	0.19	gasoline

*PM10 emission factor in lb/hp-hr was calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr
 Gasoline emission factors from AP-42 Table 3.3-1.

Hazardous Air Pollutants (HAPs)

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06
Potential Emission in tons/yr	2.17E-03	7.87E-04	5.40E-04	2.21E-04	7.06E-05	2.21E-05	5.94E-04

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

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr) 4.41E-03

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06
Potential Emission in tons/yr	4.64E+02	2.54E-02	3.72E-03

	Pollutant		
	CO2	CH4	N2O
	1.08E+00	6.35E-05	9.30E-06
	4.32E+02	2.54E-02	3.72E-03

gasoline

Summed Potential Emissions in tons/yr	4.64E+02
CO2e Total in tons/yr	4.66E+02

4.32E+02
4.34E+02

Methodology

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

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

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

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

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

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

+ N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A - Calculations
 Ball State University Muncie, IN
 TVOP: T035-30479-00002
 Permit Reviewer: Heath Hartley
 8/17/11

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
10	1000	87.6

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.1	0.3	0.3	0.0	4.4	0.2	3.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 emission factor is filterable and condensable PM2.5 combined.

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

Methodology

All emission factors are based on normal firing.

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

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

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

8.266E-02

Methodology is the same as page 1.

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

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	5,256	0.1	0.1
Summed Potential Emissions in tons/yr	5,256		
CO2e Total in tons/yr	5,288		

Methodology

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: David Whitmer
Ball State University
2000 W University Ave
Muncie, IN 47306

DATE: January 24, 2012

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

SUBJECT: Final Decision
Title V - Renewal
035-30479-00002

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
James Lowe (Director – Engineering, Construction & Operations)
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
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January 24, 2012

TO: Muncie Center Township Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Ball State University
Permit Number: 035-30479-00002

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	MIDENNEY 1/24/2012 Ball State University 035-30479-00002 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		David L Whitmer Ball State University 2000 W University Ave Muncie IN 47306 (Source CAATS) via confirm delivery										
2		James W Lowe Dir - Engineering, Construction & Ops Ball State University 2000 W University Ave Muncie IN 47306 (RO CAATS)										
3		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)										
4		Muncie City Council and Mayors Office 300 N. High St Muncie IN 47305 (Local Official)										
5		Muncie Center Twp Public Library 301 E Jackson St Muncie IN 47305-1878 (Library)										
6		Delaware County Health Department 200 W Main St, County Bldg Room 207-309 Muncie IN 47305-2874 (Health Department)										
7		Delaware County Commissioners 100 West Main Street Muncie IN 47305 (Local Official)										
8		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
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