

# **PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Holy Cross Services Corporation  
St. Mary's Convent, Lourdes Hall  
Notre Dame, Indiana 46556-5014**

(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.

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 and 326 IAC 2-1-3.2 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.: T141-7404-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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)]

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The Permittee operates stationary boilers and other support facilities for the educational services operations, located at St. Mary's University.

Responsible Official: Robert Seggerman  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana, 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana, 46556-5014  
SIC Code: 8221  
County Location: St. Joseph  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

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

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

- (1) One (1) natural gas fired boiler, identified as Boiler # 1, with a maximum capacity of sixty-three (63) MMBtu/hr, exhausting to stack S-B-1.
- (2) Two (2) coal fired boilers, identified as Boiler # 2 and Boiler # 3, each with a maximum capacity of sixty-three (63) MMBtu/hr and a multiclone dust collector, exhausting to stacks S-B-2 and S-B-3, respectively.

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

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

- (1) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (2) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day.

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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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 Permit No Defense [326 IAC 2-1-10] [IC 13]**

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

### **B.2 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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-7-5(2)]**

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-7-7(a)]**

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

### **B.5 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.6 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.7 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.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]**

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) 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.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 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. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

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

B.12 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]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, 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;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 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, except as provided in 326 IAC 2-7-16.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, 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 Management, Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, 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, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

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

**B.14 Permit Shield [326 IAC 2-7-15]**

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

- (c) 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, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, 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.
- (d) 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.
- (e) 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.
- (f) 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).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

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Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

**B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 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]~~

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- (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 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)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, 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, OAM, 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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, 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).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAM, upon receiving a timely and complete 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.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

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, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

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

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) 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.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]**

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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) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

**B.22 Operational Flexibility [326 IAC 2-7-20]**

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- (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 approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) 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 by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in 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, OAM, 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.23 Construction Permit Requirement [326 IAC 2]**

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Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

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Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

#### C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

#### C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6)-minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1)-minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

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

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.8 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.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) **Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

### C.10 Performance Testing [326 IAC 3-6]

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

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

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

### C.11 Compliance Schedule [326 IAC 2-7-6(3)]

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The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

### C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

**C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.14 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, 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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

### C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

#### **C.23 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

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

## SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] One (1) natural gas fired boiler, identified as # 1, rated at sixty-three (63) MMBtu/hr, exhausting to stack S-B-1.

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

#### D.1.1 Particulate Limitations: St. Joseph County [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County), particulate matter (PM) emissions from the sixty-three (63) million BTU/hour natural gas fired boiler shall be limited to 0.010 pound per million BTU heat input, not to exceed 1.40 tons PM per year.

### Compliance Determination Requirements

#### D.1.2 Compliance Schedule [326 IAC 6-1-18] [326 IAC 2-7-4(C)(10)(B)]

Pursuant to 326 IAC 2-7-4(C)(10)(B):

- (a) The Permittee shall use only natural gas as fuel for boiler # 1.
- (b) Upon promulgation of a revised PM limit for the natural gas fired boiler, the Permittee shall comply with such requirements. The revised PM limit shall replace the PM limit specified in Condition D.1.1.
- (c) If necessary to determine compliance with the revised PM limit for the natural gas fired boiler, the Permittee will perform PM testing within 6 months of the effective date of the rule. Compliance with the limits shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

There are no applicable compliance monitoring requirements for this facility.

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

There are no applicable record keeping conditions for this facility.

#### D.1.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the Natural Gas Fired Boiler Form located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.2 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Two (2) coal fired boilers, identified as # 2 and # 3, each rated at sixty-three (63) MMBtu per hour, each with a multiclone dust collector, exhausting to stack S-B-2 and stack S-B-3, respectively.

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

#### D.2.1 Particulate Limitations: St. Joseph County [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County), particulate matter (PM) emissions from each of the sixty-three (63) million BTU/hour boilers shall be limited to 0.110 pound per million BTU heat input, not to exceed 12.90 tons PM per year per boiler.

#### D.2.2 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

That pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide (SO<sub>2</sub>) emissions from each sixty-three (63) million BTU/hour coal fired boiler shall be limited to 6.0 pounds per million BTU heat input.

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

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

### Compliance Determination Requirements

#### D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall conduct testing of Boilers # 2 and # 3 for PM in accordance with 326 IAC 3-6, and for SO<sub>2</sub> utilizing Method 6 for SO<sub>2</sub>, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.2.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed six (6.0) pounds per MMBtu. Compliance shall be determined utilizing one of the following options:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
  - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
    - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
    - (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
    - (C) Minimum sample size shall be five hundred (500) grams;

- (D) Samples shall be composited and analyzed at the end of each calendar month;
- (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
  - (2) Sample and analyze the coal pursuant to 326 IAC 3-7-2(a);
  - (3) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or
- (b) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)]
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) 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.2.6 Visible Emissions Notations**

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- (a) Daily visible emission notations of the Boiler # 2 and Boiler # 3 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

##### **D.2.7 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.2.1 and D.2.2, 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 PM and SO<sub>2</sub> emission limits established in D.2.1 and D.2.2.
  - (1) Calendar dates covered in the compliance determination period;

- (2) Actual coal usage since last compliance determination period;
  - (3) Particulate matter emission rates;
  - (4) Sulfur content and heat content;
  - (5) Sulfur dioxide emission rates.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain records of daily visible emission notations of the boiler stack exhaust.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Holy Cross Services Corporation  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Part 70 Permit No.: T141-7404-00009

**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:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Holy Cross Services Corporation  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Part 70 Permit No.: T141-7404-00009

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2
<b>9</b> 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<b>9</b> 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

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

**Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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 MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Holy Cross Services Corporation  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Part 70 Permit No.: T141-7404-00009

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Boiler Affected

Alternate Fuel

Days burning alternate fuel  
From                      To


*(can omit boiler affected if only one gas boiler at this plant)*

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

### Part 70 Quarterly Report: PM

Source Name: Holy Cross Services Corporation  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Part 70 Permit No.: T141-7404-00009  
Facility: Boilers # 2 and # 3  
Parameter: PM  
Limit: 12.9 tons per year, per boiler

YEAR: \_\_\_\_\_

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

- 9 No deviation occurred in this quarter.
- 9 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 MANAGEMENT COMPLIANCE DATA SECTION

### Part 70 Quarterly Report: SO<sub>2</sub>

Source Name: Holy Cross Services Corporation  
Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
Part 70 Permit No.: T141-7404-00009  
Facility: Boilers # 2 and # 3  
Parameter: SO<sub>2</sub>  
Limit: 6.0 pounds per million BTU heat input.

YEAR: \_\_\_\_\_

Month	Sulfur Content (%) of coal, as analyzed	Heating Value (MMBtu/lb) of coal, as analyzed	lbs SO <sub>2</sub> per MMBtu heat input
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 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 MANAGEMENT  
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
 QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Holy Cross Services Corporation  
 Source Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
 Mailing Address: St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
 Part 70 Permit No.: T141-7404-00009

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

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

### Source Background and Description

**Source Name:** Holy Cross Services Corporation  
**Source Location:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014  
**County:** St. Joseph  
**SIC Code:** 8221  
**Operation Permit No.:** T141-7404-00009  
**Permit Reviewer:** Vickie Cordell

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Holy Cross Shared Services relating to the operation of a university. On January 22, 1997, the OAM was notified that the name of the Permittee has been changed to Holy Cross Services Corporation.

### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) natural gas fired boiler, identified as Boiler # 1, with a maximum capacity of 30 MMBtu/hr, exhausting to stack S-B-1.
- (2) Two (2) coal fired boilers, identified as Boiler # 2 and Boiler # 3, each with a maximum capacity of 60 MMBtu/hr and a multiclone dust collector, exhausting to stacks S-B-2 and S-B-3, respectively.

**Note:** Boiler # 1 was previously permitted with fuel oil as an alternate fuel; however, the use of fuel oil has been discontinued. The fuel oil storage tank is being removed as part of the source's compliance with underground storage tank regulations so there is no possibility of future use.

The stated boiler capacities were derived from the steam generating capacities provided to OAM in 1994. The boiler operations manuals were reported to list capacities of 50,000 pounds of steam per hour for the coal fired boilers, and 25,000 pounds of steam per hour for the natural gas fired boiler. A study performed by the OAM Compliance branch determined that, on average, the heat input capacity for boilers in million Btu per hour (MMBtu/hr) is 1.2 times the steam generating capacity in pounds of steam per hour.

### Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

There are no unpermitted facilities operating at this source during this review process.

### New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

## Insignificant Activities

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

- (1) Space heaters, process heaters, or boilers using the following fuels:
  - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
  - (B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (2) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (3) Combustion source flame safety purging on startup.
- (4) 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.
- (5) The following VOC and HAP storage containers:

Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (6) Cleaners and solvents characterized as follows:

Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (8) Closed loop heating and cooling systems.
- (9) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (10) Noncontact cooling tower systems with the following:

Forced and induced draft cooling tower system not regulated under a NESHAP.
- (11) Paved and unpaved roads and parking lots with public access.
- (12) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
- (13) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

- (14) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (15) On-site fire and emergency response training approved by the department.
- (16) Emergency generators as follows:
  - (A) Diesel generators not exceeding 1600 horsepower.
  - (B) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- (17) Other emergency equipment as follows:

Stationary fire pumps.
- (18) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only. Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day. NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day.

Storage and handling of coal.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

S 1 1, S 1 2, and S 1 3, issued on December 3, 1994 by the St. Joseph County Health Department, Air Pollution Control Division.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

S 1 1 boiler description; boiler # 1 is no longer permitted for any fuel other than natural gas.

### **Enforcement Issue**

There are no enforcement actions pending. A Compliance Schedule has been included in Section D.1 for the PM limit for the natural gas combustion in Boiler # 1.

### **Recommendation**

The staff recommends to the Commissioner that the Part 70 permit 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 administratively complete Part 70 permit application for the purposes of this review was received on December 9, 1996. Additional information was received on July 30 and August 4, 1998.

A notice of completeness letter was mailed to the source on January 17, 1997.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix pages 1 through 4.)

## Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 100, less than 250
SO <sub>2</sub>	greater than 250
VOC	less than 100
CO	greater than 100, less than 250
NO <sub>x</sub>	greater than 100, less than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM-10, SO<sub>2</sub>, CO, and NO<sub>x</sub> are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

## Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	7.6
PM-10	2.5
SO <sub>2</sub>	292.1
VOC	0.2
CO	16.7
NO <sub>x</sub>	22.7

## Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/facility	Limited Potential to Emit (tons/year)					
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Boiler 1: natural gas	1.8	1.8	0.1	0.4	4.6	18.4
Boiler 2: coal	12.9	60.5	1148.9	0.7	60.5	75.6
Boiler 3: coal	12.9	53.8	1021.3	0.6	53.8	57.2
<b>Total Emissions</b>	<b>27.6</b>	<b>116.1</b>	<b>2170.3</b>	<b>1.7</b>	<b>118.9</b>	<b>151.2</b>

**Note:** The PM for Boiler 1 is the potential PM. This is greater than the PM allowable pursuant to 326 IAC 6-1-18. A compliance schedule has been included in this permit based on promulgation of a revised limit.

**County Attainment Status**

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph county has been designated as attainment or unclassifiable for ozone.

**Federal Rule Applicability**

- (a) The boilers are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)), because each of the boilers was constructed in 1964 and has not been modified.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, applicable to this source.

**State Rule Applicability - Entire Source**

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in St. Joseph county and has the potential to emit more than ten (10) tons per year of NO<sub>x</sub>. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

### 326 IAC 5-1-2 (Visible Emissions Limitations)

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

- (a) Visible emissions shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

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

The source is located in the listed portion of St. Joseph county, however, this rule does not apply because the fugitive emissions from the source, including the coal storage pile, are less than 25 tons per year.

#### 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County)

Pursuant to 326 IAC 6-1-18 (Non-Attainment Area Particulate Limitations: St. Joseph County), the particulate matter (PM) emissions from Boiler # 1 are limited to 0.010 pound per million BTU heat input, not to exceed 1.40 tons PM per year.

The Permittee will be considered in compliance with this limit, provided that:

- (a) The boiler shall use natural gas only as fuel,
- (b) Upon promulgation of a revised PM limit for the natural gas fired boiler, the Permittee shall comply with such requirements. The revised PM shall replace the PM limit specified in Condition D.1.1.
- (c) If necessary to determine compliance with the revised PM limit for the natural gas fired boiler, the Permittee will perform PM testing within 6 months of the effective date of the rule. Compliance with the limits shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Pursuant to 326 IAC 6-1-18 (Non-Attainment Area Particulate Limitations: St. Joseph County), the particulate matter (PM) emissions from Boiler # 2 and Boiler # 3 are limited to 12.90 tons per year per boiler and 0.110 pounds/MMBTU heat input per boiler.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

That pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide (SO<sub>2</sub>) emissions from each 60 million BTU/hour coal fired boiler shall be limited to 6.0 pounds per million BTU heat input.

### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also 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:

The coal fired boilers, # 2 and # 3, have an applicable compliance monitoring condition as specified below:

- (a) Daily visible emission notations of the Boiler # 2 and Boiler # 3 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the multiclone dust collectors for the coal fired boilers must operate properly to ensure compliance with 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County) and 326 IAC 2-7 (Part 70).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

### **Conclusion**

The operation of this university shall be subject to the conditions of the attached proposed **Part 70 Permit No. T141-7404-00009**.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Name: **Holy Cross Services Corporation**  
 Source Location: **St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana 46556-5014**  
 County: **St. Joseph**  
 SIC Code: **8221**  
 Operation Permit No.: **T141-7404-00009**  
 Permit Reviewer: **Vickie Cordell**

On October 14, 1998, the Office of Air Management (OAM) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that Holy Cross Services Corporation had applied for a Part 70 Operating Permit to operate support facilities for educational services operations. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 10, 1998, a comment was received by telephone from Holy Cross Services Corporation as follows:

**Comment:**

Could the quarterly reporting requirement be dropped for Boiler # 1? It only natural gas now.

**Response:**

When burning natural gas only, submission of the Natural Gas Fired Boiler Certification or its equivalent is required to show compliance with Condition D.1.1. Additional compliance monitoring, such as visible emissions notations, would be necessary if other fuel was fired or if certification was not provided quarterly that only natural gas was combusted. Since Boiler # 1 is only capable of burning natural gas, the number of days reported burning alternate fuel should always be zero (0).

The PM and SO<sub>2</sub> quarterly report forms are only required for the coal fired Boilers # 2 and # 3. Condition D.1.4 has been corrected to clarify that the quarterly report forms for PM and SO<sub>2</sub> are not applicable to the natural gas fired Boiler # 1.

**D.1.4 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the Natural Gas Fired Boiler Form located at the end of this permit, ~~or their~~ **the** equivalent, within thirty (30) days after the end of the quarter being reported.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. The stated capacity of each of the boilers has been changed to 63 MMBtu/hour, as shown in 326 IAC 6-1-18. To change these stated capacities the source must request a rule revision.

In general, the OAM believes that the average coal fired boiler is approximately 80% efficient; that is, 80% of the heat energy input to the boiler is actually used to produce steam. Steam generating capacities for the three boilers were provided to OAM in 1994. A capacity of 50,000 pounds of steam per hour was reported for each of the coal fired boilers. That level of steam production would be expected to require roughly 62.5 MMBtu/hr of heat input, close to the 63 MMBtu/hr stated in 326 IAC 6-1-18.

A steam generating capacity of 25,000 pounds of steam per hour was reported for the natural gas fired boiler. It is recognized that a natural gas fired boiler is usually more efficient than a coal fired boiler of the same size. The stated level of steam production would typically require heat input significantly less than 63 MMBtu/hr. However, the boiler capacity stated in the rule must be used for permitting.

Conditions A.2, D.1.1, D.2.1, D.2.2, and the facility descriptions at the beginning of Sections D.1 and D.2 have been amended as follows:

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:

- (1) One (1) natural gas fired boiler, identified as Boiler # 1, with a maximum capacity of ~~30~~ **sixty-three (63)** MMBtu/hr, exhausting to stack S-B-1.
- (2) Two (2) coal fired boilers, identified as Boiler # 2 and Boiler # 3, each with a maximum capacity of ~~60~~ **sixty-three (63)** MMBtu/hr and a multiclone dust collector, exhausting to stacks S-B-2 and S-B-3, respectively.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] One (1) natural gas fired boiler, identified as # 1, rated at ~~thirty (30)~~ **sixty-three (63)** MMBtu/hr, exhausting to stack S-B-1.

D.1.1 Particulate Limitations: St. Joseph County [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County), particulate matter (PM) emissions from the ~~thirty (30)~~ **sixty-three (63)** million BTU/hour natural gas fired boiler shall be limited to 0.010 pound per million BTU heat input, not to exceed 1.40 tons PM per year.

**SECTION D.2 FACILITY CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] Two (2) coal fired boilers, identified as # 2 and # 3, each rated at ~~sixty (60)~~ **sixty-three (63)** MMBtu per hour, each with a multiclone dust collector, exhausting to stack S-B-2 and stack S-B-3, respectively.

D.2.1 Particulate Limitations: St. Joseph County [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Particulate Limitations: St. Joseph County), particulate matter (PM) emissions from each of the ~~sixty (60)~~ **sixty-three (63)** million BTU/hour boilers shall be limited to 0.110 pound per million BTU heat input, not to exceed 12.90 tons PM per year per boiler.

D.2.2 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

That pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide (SO<sub>2</sub>) emissions from each ~~60~~ **sixty-three (63)** million BTU/hour coal fired boiler shall be limited to 6.0 pounds per million BTU heat input.

2. Condition B.27 (Credible Evidence) has been deleted. The IDEM now believes that this condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.27 Credible Evidence [326 IAC 2-7-5(3)] [62 Federal Register 8313] [326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

3. Condition C.3 (Opacity) has been modified for consistency with the November 1, 1998 update to 326 IAC 5. The condition is now as follows:

~~C.3 Opacity [326 IAC 5-1]~~

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

- (a) ~~Visible emissions Opacity~~ shall not exceed an average of thirty percent (30%) ~~opacity in twenty four (24) consecutive readings,~~ **in any one (1) six (6)-minute averaging period** as determined in 326 IAC 5-1-4.
- (b) ~~Visible emissions Opacity~~ shall not exceed sixty percent (60%) ~~opacity~~ 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 non-overlapping integrated averages for a continuous opacity monitor**) in a six (6) hour period.
4. Condition D.1.2 (Compliance Schedule), subpart (b), has been corrected as follows:

~~D.1.2 Compliance Schedule [326 IAC 6-1-18]~~

~~The Permittee will be considered in compliance with Condition D.1.1, provided that:~~

- (a) The boiler shall use natural gas only as fuel,
- (b) Upon promulgation of a revised PM limit for the natural gas fired boiler, the Permittee shall comply with such requirements. The revised PM **limit** shall replace the PM limit specified in Condition D.1.1.
- (c) If necessary to determine compliance with the revised PM limit for the natural gas fired boiler, the Permittee will perform PM testing within 6 months of the effective date of the rule. Compliance with the limits shall be determined by a performance test conducted in accordance with Section C - Performance Testing.
5. The rule cite for Condition D.2.5 (Sulfur Dioxide Emissions and Sulfur Content) has been corrected as follows:

~~D.2.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]~~

6. The boiler spreadsheets for the Technical Support Document (TSD) have been amended with the revised heat input capacities, corrected VOC emission factor for the coal fired boilers, and updated emission factors for the natural gas boiler. The amended calculations have been added to this TSD Addendum as Appendix A, pages 1, 2, and 3. To reflect the change in potential emissions, the Limited Potential to Emit table from the TSD has been changed as follows:

**Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/facility	Limited Potential to Emit (tons/year)					
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Boiler 1: natural gas	<del>4.8</del> 2.1	<del>4.8</del> 2.1	<del>0.4</del> 0.2	<del>0.4</del> 1.5	<del>4.6</del> 23.2	<del>48.4</del> 27.6
Boiler 2: coal	12.9	60.5	1148.9	<del>0.7</del> 0.5	60.5	75.6
Boiler 3: coal	12.9	53.8	1021.3	<del>0.6</del> 0.4	53.8	57.2
Total Emissions	<del>27.6</del> 27.9	<del>416.4</del> 116.4	<del>2170.3</del> 2170.4	<del>4.7</del> 2.4	<del>418.9</del> 137.5	<del>451.2</del> 160.4

**Note:** The PM for Boiler 1 is the potential PM. This is greater than the tons per year PM allowable pursuant to 326 IAC 6-1-18. A compliance schedule has been included in this permit based on promulgation of a revised limit.

No change will be made to the TSD. The OAM prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

On December 28, 1998, and January 29, 1999, EPA commented on Condition D.1.2 (Compliance Schedule) in another Title V permit. EPA feels that it is inappropriate to state that the Permittee will be considered in compliance while the source is still violating the particulate limit in the rule. Because the condition in the Holy Cross permit was essentially the same as the condition that EPA found objectionable, the following changes have been made to this condition:

D.1.2 Compliance Schedule [326 IAC 6-1-18][326 IAC 2-7-4(C)(10)(B)]

~~The Permittee will be considered in compliance with Condition D.1.1, provided that~~  
**Pursuant to 326 IAC 2-7-4(C)(10)(B):**

- (a) The ~~Permittee boiler~~ shall use **only** natural gas ~~only~~ as fuel **for boiler # 1**,
- (b) Upon promulgation of a revised PM limit for the natural gas fired boiler, the Permittee shall comply with such requirements. The revised PM limit shall replace the PM limit specified in Condition D.1.1.
- (c) If necessary to determine compliance with the revised PM limit for the natural gas fired boiler, the Permittee will perform PM testing within 6 months of the effective date of the rule. Compliance with the limits shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 10 < MM BTU/HR <100  
 Small Industrial Boiler**

**Company Name:** Holy Cross Services Corporation  
**Address City IN Zip:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** October 5, 1998

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

30.0

262.8

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	14.0	14.0	0.6	140.0	2.8	35.0
Potential Emission in pounds/hr	0.420	0.420	0.018	4.200	0.084	1.050
Potential Emission in tons/yr	1.84	1.84	0.08	18.40	0.37	4.60
Potential Emission in pounds/MMBTU	0.014					

**Methodology**

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 140, Low NOx Burner = 81, Flue gas recirculation = 30

Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, updated 10/96.

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

Emissions (lb/MMBtu) = 1 MMBtu x 1 MMCF/1,000 MMBtu x Emission Factor (lb/MMCF)

**Appendix A: Emissions Calculations**  
**Coal combustion: Chain grate stokers**  
**Boiler # 2**

**Company Name:** Holy Cross Services Corporation  
**City, Indiana:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** October 5, 1998

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel
60	12,559	20,925	S = 3.0 %

Emission Factor in lb/ton	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	16.0	6.00	114.0 (38S)	7.5	0.07	6.00
Potential Emission in tons/yr	167.4	62.8	1192.7	78.5	0.7	62.8
With control 92.00% efficiency	13.4					
With control, as limited for PM compliance*	<b>12.9</b>	60.5	1148.9	75.6	0.7	60.5
Potential Emission in lbs/MMBtu	0.637		<b>4.539</b>			
With control 92.00% efficiency	<b>0.051</b>					

Methodology

\*PM is limited by 326 IAC 6-1-18 limits for this facility.

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

Emission Factors from AP-42, Chapter 1.1

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

Emissions (lbs/MMBtu) = 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

**Appendix A: Emissions Calculations**  
**Coal combustion: Chain grate stokers**  
**Boiler # 3**

**Company Name:** Holy Cross Services Corporation  
**City, Indiana:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** October 5, 1998

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel
60	12,559	20,925	S = 3.0 %

Emission Factor in lb/ton	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	16.0	6.00	114.0 (38S)	7.5	0.07	6.00
Potential Emission in tons/yr	167.4	62.8	1192.7	78.5	0.7	62.8
With control 91.00% efficiency	15.1					
With control, as limited for PM compliance*	<b>12.9</b>	53.8	1021.3	67.2	0.6	53.8
Potential Emission in lbs/MMBtu	0.637		<b>4.539</b>			
With control 91.00% efficiency	<b>0.057</b>					

Methodology

\*PM is limited by 326 IAC 6-1-18 limits for this facility.

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

Emission Factors from AP-42, Chapter 1.1

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

Emissions (lbs/MMBtu) = 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

## Appendix A: Emission Calculations

Company Name: Holy Cross Services Corporation  
 Address City IN Zip: Saint Mary's Convent, Lourdes Hall, Notre Dame, 46556-5014  
 Permit No./Plt ID: T141-7404-00009  
 Reviewer: Vickie Cordell  
 Date: August 4, 1998

## COAL PILE: POTENTIAL PARTICULATE MATTER EMISSIONS

\* \* emissions before controls \* \*

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$$

$$= 1.16 \text{ lb/acre/day}$$

$$\text{where } s = 1 \text{ \% silt}$$

$$p = 125 \text{ days of rain greater than or equal to 0.01 inches}$$

$$f = 15 \text{ \% of wind greater than or equal to 12 mph}$$

$$E_p (\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

$$= \mathbf{0.054} \text{ tons/yr}$$

$$\text{where } sc = 7,000 \text{ tons storage capacity}$$

\*\* emissions after controls \*\*

$$\text{Storage} \quad 0.054 \text{ tons/yr} \times 50\% \text{ emitted after controls} = \mathbf{0.027} \text{ tons/yr}$$

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
.3 < MM BTU/HR <100**

**Small Industrial Boiler**

**Company Name:** Holy Cross Services Corporation  
**Address City IN Zip:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** November 20, 1998

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

63.0

551.9

Pollutant

Emission Factor in lb/MMCF	PM	PM10	SO2	NOx	VOC	CO
	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in pounds/hr	0.479	0.479	0.038	6.300	0.347	5.292
Potential Emission in tons/yr	<b>2.10</b>	2.10	0.17	27.59	1.52	23.18
Potential Emission in pounds/MMBTU	<b>0.008</b>					

**Methodology**

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 and 1.4-2, updated 3/98.

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

Emissions (lb/MMBTU) = 1 MMBtu x 1 MMCF/1,000 MMBtu x Emission Factor (lb/MMCF)

**Appendix A: Emissions Calculations**  
**Coal combustion: Chain grate stokers**  
**Boiler # 2**

**Company Name:** Holy Cross Services Corporation  
**City, Indiana:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** November 30, 1998

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel
63	12,559	21,971	S = 3.0 %

Emission Factor in lb/ton	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	16.0	6.00	114.0 (38S)	7.5	0.05	6.00
Potential Emission in tons/yr	175.8	65.9	1252.4	82.4	0.5	65.9
With control 92.00% efficiency	14.1					
With control, as limited for PM compliance*	<b>12.9</b>	60.5	1148.9	75.6	0.5	60.5
Potential Emission in lbs/MMBtu	0.637		<b>4.539</b>			
With control 92.00% efficiency	<b>0.051</b>					

Methodology

\*PM is limited by 326 IAC 6-1-18 limits for this facility.

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

Emission Factors from AP-42, Chapter 1.1, updated 9/98; except VOC from FIRE Version 5.0, August 1995.

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

Emissions (lbs/MMBtu) = 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

**Appendix A: Emissions Calculations**  
**Coal combustion: Chain grate stokers**  
**Boiler # 3**

**Company Name:** Holy Cross Services Corporation  
**City, Indiana:** St. Mary's Convent, Lourdes Hall, Notre Dame, Indiana  
**Permit No./Plt ID:** T141-7404-00009  
**Reviewer:** Vickie Cordell  
**Date:** November 30, 1998

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel
63	12,559	21,971	S = 3.0 %

Emission Factor in lb/ton	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	16.0	6.00	114.0 (38S)	7.5	0.05	6.00
Potential Emission in tons/yr	175.8	65.9	1252.4	82.4	0.5	65.9
With control 91.00% efficiency	15.8					
With control, as limited for PM compliance*	<b>12.9</b>	53.8	1021.3	67.2	0.4	53.8
Potential Emission in lbs/MMBtu	0.637		<b>4.539</b>			
With control 91.00% efficiency	<b>0.057</b>					

Methodology

\*PM is limited by 326 IAC 6-1-18 limits for this facility.

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

Emission Factors from AP-42, Chapter 1.1, updated 9/98; except VOC from FIRE Version 5.0, August 1995.

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

Emissions (lbs/MMBtu) = 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)