



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 22, 2008

RE: Westville Correctional Facility / 091-26451-00004

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07



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July 22, 2008

Mark McDaniel
Westville Correctional Facility
State Road 2 and 1100 West
Westville, IN 46391

Re: 091-26451-00004
First Significant Revision to
F091-24264-00004

Dear Mark McDaniel:

Westville Correctional Facility was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F091-24264-00004 on May 30, 2007 for a stationary correctional facility located at State Road 2 and 1100 West, Westville, Indiana 46391. On April 15, 2008, the Office of Air Quality (OAQ) received an application from the source requesting to modify an existing corn-fired boiler to also burn biomass, including untreated corn, wood (including bark), wood pellets, switchgrass, and clean, untreated construction wood. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Anne-Marie C. Hart, of my staff, at 317-234-5401 or 1-800-451-6027, and ask for extension 4-5401.

Sincerely,

Original document signed by

Alfred C. Dumauval, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

ACD/ACH

cc: File - LaPorte County
LaPorte County Health Department
U.S. EPA, Region V
Air Compliance Section
IDEM Northwest Regional Office
Compliance Data Section
Technical Support and Modeling
Permits Administrative and Development
Billing, Licensing and Training Section



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NEW SOURCE REVIEW AND FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Westville Correctional Facility
State Road 2 and 1100 West
Westville, Indiana 46391**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F091-24264-00004	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: May 30, 2007 Expiration Date: May 30, 2017

First Administrative Amendment No.: 091-25993-00004, issued February 29, 2008

First Significant Permit Revision No.: 091-26451-00004	
Issued by: <i>Original document signed by</i> Alfred C. Dumauval, Ph.D, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 22, 2008 Expiration Date: May 30, 2017

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary correctional facility.

Source Address:	State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address:	State Road 2 and 1100 West, Westville, Indiana 46391
General Source Phone Number:	(219) 785-2511
SIC Code:	9223
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

The Westville Correctional Facility (Source ID: 091-00004) and Pen Products (091-00109) are located in one complex of buildings. IDEM, OAQ examined whether these two plants should be considered one "major source" as defined at 326 IAC 2-7-1(22). IDEM, OAQ finds that the Westville Correctional Facility and PEN Products do not meet the criteria of 326 IAC 2-7-1 (22). They are not one source and will be permitted as separate sources.

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

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

- (a) Three (3) natural gas-fired boilers, using No. 2 fuel oil as backup, referred to as Boiler #1, Boiler #2, and Boiler #3, each constructed in 1949 as coal-fired boilers and each converted to natural gas-fired boilers in 1997, each with a maximum heat input capacity of 50 million Btu per hour, and exhausting to one stack designated as stack #1.
- (b) One (1) biomass-fired boiler system including one (1) boiler identified as Boiler #4, with a maximum heat input capacity of 27.5 MMBtu/hr, capable of combusting untreated corn, wood (including bark), wood pellets, switchgrass, and clean, untreated construction debris, and one (1) natural-gas ignition burner with a maximum heat input capacity of 1.075 MMBtu/hr for cold boiler starts with emissions controlled by a cyclone, and exhausting to a stack. This facility was permitted for construction in 2007 and modified in 2008.
- (c) One (1) biomass handling and storage operation, consisting of the following:
 - (1) One (1) truck unloading operation with a maximum throughput of 224,000 lbs of biomass per hour. This facility was permitted for construction in 2007 and modified in 2008.
 - (2) One (1) biomass storage silo, with a maximum storage capacity of 762,552 lbs of corn (volumetric capacity 15,987 cubic feet), with emissions controlled by a

baghouse. This facility was permitted for construction in 2007 and modified in 2008.

- (3) One (1) biomass handling system with a maximum throughput of 252,000 lbs per hour, with emissions controlled by a baghouse including: five (5) augers, one (1) conveyor, one (1) bucket elevator, one (1) pneumatic fuel transfer system, and one (1) metering bin. These facilities were permitted for construction in 2007 and modified in 2008.

- (d) One (1) ash disposal system, with a maximum throughput of 500 lbs of ash per hour, with emissions controlled by a cyclone including: three (3) augers. This facility is permitted to be constructed in 2007.

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

A.5 FESOP Applicability [326 IAC 2-8-2]

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

SECTION B GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke the approval to construct if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

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

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

- (a) This permit, F091-24264-00004, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

B.6 Enforceability [326 IAC 2-8-6]

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

B.7 Severability [326 IAC 2-8-4(4)]

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

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

B.11 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the

shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

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

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

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

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

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

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267.

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
 - (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.
- Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F091-24264-00004 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or

(3) deleted.

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

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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

B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.19 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.20 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

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

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.21 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

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

and

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

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

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

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

- (b) **Emission Trades [326 IAC 2-8-15(c)]**
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

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

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.26 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.27 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2] [326 IAC 2-3]

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator 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).

C.7 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.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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.

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

C.9 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.17 Emission Statement [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit an emission statement by July 1 following a calendar year when the source emits oxides of nitrogen or volatile organic compounds into the ambient air equal to or greater than twenty-five (25) tons. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

The statement must be submitted to:

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

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years. Unless otherwise specified in this permit, for the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Three (3) natural gas-fired boilers, using No. 2 fuel oil as backup, referred to as Boiler #1, Boiler #2, and Boiler #3, each constructed in 1949 as coal-fired boilers and each converted to natural gas-fired boilers in 1997, each with a maximum heat input capacity of 50 million Btu per hour, and exhausting to one stack designated as stack #1
- (b) One (1) biomass-fired boiler system including one (1) boiler identified as Boiler #4, with a maximum heat input capacity of 27.5 MMBtu/hr, capable of combusting untreated corn, wood (including bark), wood pellets, switchgrass, and clean, untreated construction debris, and one (1) natural-gas ignition burner with a maximum heat input capacity of 1.075 MMBtu/hr for cold boiler starts with emissions controlled by a cyclone, and exhausting to a stack. This facility was permitted for construction in 2007 and modified in 2008.

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

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

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), particulate emissions from the Boilers #1, 2, and 3 shall in no case exceed 0.30 pounds of particulate matter per million British thermal units heat input. This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

- (b) Pursuant to 326 IAC 6-2-4 particulate emissions from the biomass-fired boiler (Boiler #4) shall in no case exceed 0.28 lb/MMBtu. This limitation is based on the equation above.

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the Boilers #1, 2, and 3 shall not exceed five tenths (0.5) pounds per MMBtu heat input. In order to comply with this limit, the sulfur content of the No. 2 fuel oil shall not exceed 0.5 weight percent.

D.1.3 FESOP [326 IAC 2-8][326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the input of fuel oil to Boilers #1, 2, and 3, shall be limited to 500 kgallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) The total amount of biomass and natural gas burned by Boilers #1, 2, 3, and 4 shall be limited such that NOx emissions shall not exceed 91.0 tons per twelve (12) consecutive month period.
- (c) The total amount of biomass and natural gas fuel burned by Boilers #1, 2, 3 and 4 shall be limited such that CO emissions shall not exceed 90.0 tons per twelve (12) consecutive month period, and
- (d) The total No. 2 distillate fuel oil input to Boilers #1, 2, and 3 shall be limited to less than 500,000 U.S. gallons per year. This fuel usage limit will limit the NOx emissions to less than 5.0 tons per, the CO emissions to 1.25 tons per year and the SO₂ emissions to 17.80 tons per year.

Compliance with the above limit, combined with the potential to emit NOx and CO from other emission units at the source, shall limit the NOx and CO from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-7 and 326 IAC 2-2 not applicable.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the cyclone controlling emissions from Boiler #4.

Compliance Determination Requirements

D.1.5 Particulate Control

In order to comply with Condition D.1.1, the cyclone for particulate control shall be in operation and control emissions from the biomass-fired boiler (Boiler #4) at all times that the biomass-fired boiler is in operation.

D.1.6 Nitrogen Oxides Emissions

Compliance with the NOx emissions limit in Condition D.1.3(b) shall be demonstrated by the summation of twelve (12) consecutive monthly emission rates calculated by the following equation:

$$E_{NOx} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (2.9 * Q_{Bark}) + (7.92 * Q_{Wood}) + (100 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where:

- E_{NOx} = Emissions of NOx in tons per month
- CE_{Corn} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{Corn} = Corn consumption in tons per month
- CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{SG} = Switchgrass consumption in tons per month
- Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
- Q_{Wood} = Wood pellets consumption in tons per month
- Q_{NG} = Natural Gas consumption in MMCF per month

D.1.7 Carbon Monoxide Emissions

Compliance with the CO emissions limit in Condition D.1.3(c) shall be demonstrated by the summation of twelve (12) consecutive monthly emission rates calculated by the following equation:

$$E_{CO} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (7.74 * Q_{Bark}) + (9.48 * Q_{Wood}) + (84 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where

- E_{CO} = Emissions of CO in tons per month
 CE_{Corn} = Compliance Emission Factor for CO shall be 8.16 pounds CO per ton Corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
 Q_{Corn} = Corn consumption in tons per month.
 CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
 Q_{SG} = Switchgrass consumption in tons per month
 Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
 Q_{Wood} = Wood pellets consumption in tons per month
 Q_{NG} = Natural Gas consumption in MMCF per month

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) Unless the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is representative of emissions from Boiler #4, within one hundred and eighty (180) days after initial usage of untreated corn as a fuel in of Boiler #4, the Permittee shall perform PM, PM10, SO₂, NOx, CO, VOC, and HCl testing for Boiler #4 when burning untreated corn utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10. If the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is not representative of emissions from Boiler #4, stack tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Unless the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is representative of emissions from Boiler #4, within one hundred and eighty (180) days after initial usage of switchgrass as a fuel in Boiler #4, the Permittee shall perform PM, PM10, SO₂, NOx, CO, VOC and HCl testing for Boiler #4 when burning switchgrass utilizing methods as approved by the Commissioner. PM10 includes filterable and condensable PM10. If the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is not representative of emissions from Boiler #4, stack tests shall be repeated at least once every five (5) years form the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.1.2 and D.1.3 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

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

D.1.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.1.11 Visible Emissions Notations

- (a) When combusting fuel oil, daily visible emission notations of the Boilers #1, 2, and 3 stack exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) When combusting biomass, daily visible emission notations of the Boiler #4 stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.8, the Permittee shall maintain records in accordance with (1) through (6) below.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.11, the Permittee shall maintain a daily record of visible emission notations for each of the Boilers #1, 2, 3, and 4 stack exhausts. The Permittee shall include in each daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (c) To document compliance with Condition D.1.3, the Permittee shall maintain records of the No. 2 fuel oil or equivalent fuel usage and the weight percent sulfur content of the fuel oil.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.3 in any compliance period when No. 2 fuel oil was combusted, and the natural gas fired boiler certification, 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. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

D.1.14 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the biomass-fired boiler (Boiler #4) except as otherwise specified in 40 CFR Part 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.1.15 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which are incorporated by reference as 326 IAC 12 for the biomass-fired boiler (Boiler #4) as specified as follows.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on allfuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

D.1.16 One Time Deadlines Relating to Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc]

The Permittee shall comply with the following requirements by the dates listed below:

- (a) Pursuant to 40 CFR 60.7(a)(1), submit notification of the date of construction of biomass-fired boiler (Boiler #4), no later than 30 days after commencement of construction.

- (b) Pursuant to 40 CFR 60.7(a)(3), submit notification of the date of initial startup of biomass-fired boiler (Boiler #4), within 15 days of startup. This notification shall include the design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility, if applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c, and the annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

D.1.17 State Only Emissions Standards of Performance for Small Industrial–Commercial–Institutional Steam Generating Units Requirements [326 IAC 12]

Pursuant to 326 IAC 12 and until 326 IAC 1-1-3 is revised to include the most recent version of 40 CFR 60, Subpart Dc, the Permittee shall comply with the previous version of 40 CFR 60, Subpart Dc, published in 65 FR 61752, Oct. 17, 2000.

40 CFR 60, Subpart Dc has been most recently amended on February 27, 2006. Therefore, the February 27, 2006 amendments to the federal rule are not approved into the 326 IAC, and the biomass-fired boiler (Boiler #4) at this source is subject to both versions of the rule. All of the requirements of the 326 IAC 12 rule that are applicable to this source are the same as the requirements listed under the Federal Rule Applicability Determination section except for the following:

- (1) 40 CFR 60.45c(a)
- (2) 40 CFR 60.48c(g)

The new version of 40 CFR 60.45c(a) allows for units that burn only oil containing no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 0.54 lb/MMBtu or less, to be exempt from conducting emissions monitoring if fuel supplier certifications of the sulfur content are maintained. Additionally, pursuant to the 326 IAC version of 40 CFR 60.48c(g), the Permittee must keep daily records of the fuel burned in the boilers. The new version of 40 CFR 60.48c(g) allows for the Permittee to keep monthly records of the fuel burned in the boilers. Both versions will be included in the permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) One (1) biomass handling and storage operation, consisting of the following:
- (1) One (1) truck unloading operation with a maximum throughput of 224,000 lbs of biomass per hour. This facility was permitted for construction in 2007 and modified in 2008.
 - (2) One (1) biomass storage silo, with a maximum storage capacity of 762,552 lbs of corn (volumetric capacity 15,987 cubic feet), with emissions controlled by a baghouse. This facility was permitted for construction in 2007 and modified in 2008.
 - (3) One (1) biomass handling system with a maximum throughput of 252,000 lbs per hour, with emissions controlled by a baghouse including: five (5) augers, one (1) conveyor, one (1) bucket elevator, one (1) pneumatic fuel transfer system, and one (1) metering bin. These facilities were permitted for construction in 2007 and modified in 2008.
- (d) One (1) ash disposal system, with a maximum throughput of 500 lbs of ash per hour, with emissions controlled by a cyclone including: three (3) augers. This facility is permitted to be constructed in 2007.

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

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

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacture Processes), the allowable particulate emission rate from each process shall be limited by the following:

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

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

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The following table shows the maximum process weight rate and allowable particulate emission rate for each emission unit:

Emission Unit	Process Weight Throughput (tons/hr)	Particulate Emission Limit (lbs/hr)
Truck Unloading Operation	112	52.4
Biomass Handling System	126	53.6
Ash Handling System	0.25	1.62

D.2.2 PM₁₀ Limitations [326 IAC 2-8-4]

The PM₁₀ emissions from the baghouse controlling the emissions from biomass silo and handling system shall not exceed 6.25 pounds per hour. Compliance with this limit, combined with the PM₁₀ emissions from the other emission units at this source shall limit the source-wide potential to emit PM₁₀ to less than 100 tons per twelve (12) consecutive month period, and render 326 IAC 2-7 (Part 70 Program) not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.4 Particulate Control

- (a) In order to comply with Condition D.2.2, the biomass silo and handling system shall be controlled by a baghouse when these units are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eight percent (80%) of the time the process is in operation, not counting startup or shutdown time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps

in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.6 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the biomass silo and handling system at least once per day when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.2.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

- (a) To document compliance with D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with D.2.6, the Permittee shall maintain daily records of pressure drop for baghouses during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Westville Correctional Facility
Source Address: State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address: State Road 2 and 1100 West, Westville, IN 46391
FESOP Permit No.: F091-24264-00004

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)_____
- Report (specify)_____
- Notification (specify)_____
- Affidavit (specify)_____
- Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Westville Correctional Facility
Source Address: State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address: State Road 2 and 1100 West, Westville, IN 46391
FESOP Permit No.: F091-24264-00004

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|--|

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

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 FESOP Quarterly Report**

Source Name: Westville Correctional Facility
 Source Address: State Road 2 and 1100 West
 Mailing Address: State Road 2 and 1100 West
 FESOP Permit No.: F091-26264
 Facility: Boilers #1, #2, #3, and #4
 Parameter: Biomass or equivalent fuel usage
 Limit:

- (a) The total amount of fuel (untreated corn, wood (including bark), wood pellets, switchgrass, clean and untreated construction debris and natural gas) burned by Boiler #1, Boiler # 2, Boiler # 3, Boiler # 4 shall be limited such that NOx emissions shall not exceed 91.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month based on the following equation.
- (b) The total amount of fuel (untreated corn, wood (including bark), wood pellets, switchgrass, clean, untreated construction debris and natural gas) burned by Boiler #1, Boiler # 2, Boiler # 3, Boiler # 4 shall be limited such that CO emissions shall not exceed 90.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month based on the following equation.

$$E_{NOx} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (2.9 * Q_{Bark}) + (7.92 * Q_{Wood}) + (100 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where:

- E_{NOx} = Emissions of NOx in tons per month
- CE_{Corn} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{Corn} = Corn consumption in tons per month
- CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{SG} = Switchgrass consumption in tons per month
- Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
- Q_{Wood} = Wood pellets consumption in tons per month
- Q_{NG} = Natural Gas consumption in MMCF per month

$$E_{CO} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (7.74 * Q_{Bark}) + (9.48 * Q_{Wood}) + (84 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where

- E_{CO} = Emissions of CO in tons per month
- CE_{Corn} = Compliance Emission Factor for CO shall be 8.16 pounds CO per ton Corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{Corn} = Corn consumption in tons per month.
- CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{SG} = Switchgrass consumption in tons per month
- Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
- Q_{Wood} = Wood pellets consumption in tons per month
- Q_{NG} = Natural Gas consumption in MMCF per month

This FESOP Quarterly Report consists of 2 pages.

YEAR: _____

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

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

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

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

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Westville Correctional Facility
Source Address: State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address: State Road 2 and 1100 West, Westville, IN 46391
FESOP Permit No.: F091-24264-00004
Facility: Boilers #1, 2, and 3
Parameter: No. 2 fuel oil or equivalent fuel usage
Limit: 500,000 of No. 2 fuel oil or equivalent fuel per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

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

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

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

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Westville Correctional Facility
Source Address: State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address: State Road 2 and 1100 West, Westville, IN 46391
FESOP Permit No.: F091-24264-00004
Facility: Boilers #1, 2, and 3
Parameter: No. 2 fuel oil or equivalent fuel usage, sulfur content and heat content of fuel oil, and SO₂ emissions
Limit: 0.5 weight percent sulfur content, and SO₂ emissions of 0.5 lb/MMBtu

YEAR: _____

Month	Sulfur Content (%)	Heat Content	Fuel usage (gal/month)	SO ₂ Emissions (lb/MMBTU)

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Westville Correctional Facility
Source Address: State Road 2 and 1100 West, Westville, Indiana 46391
Mailing Address: State Road 2 and 1100 West, Westville, IN 46391
FESOP Permit No.: F091-24264-00004

Months: _____ to _____ Year: _____

Page 1 of 2

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

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Westville Correctional Facility
State Road 2 and 1100 West,
Westville, IN 46391

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Westville Correctional Facility State Road 2 and 1100 West, Westville, IN 46391 completed construction of the biomass-fired boiler and the associate biomass and ash handling operations on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality as permitted pursuant to New Source Review and Renewal of a FESOP Permit No. 091-24264-00004 Plant ID No. 091-00004 issued on _____.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature _____

Date _____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 20 _____.

My Commission expires: _____.

Signature _____

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	Westville Correctional Facility
Source Location:	State Road 2 and 1100 West, Westville, Indiana 46391
County:	LaPorte
SIC Code:	9223
Operation Permit No.:	F 091-24264-00004
Operation Permit Issuance Date:	May 30, 2007
Significant Permit Revision No.:	091-26451-00004
Permit Reviewer:	Anne-Marie C. Hart

On April 15, 2008, the Office of Air Quality (OAQ) has received an application from Westville Correctional Facility related to a modification to an existing corn-fired boiler.

Existing Approvals

The source was issued FESOP Renewal No. 091-24264-00004 on May 30, 2007. The source has since received Administrative Amendment No. 091-25993-00004, issued on February 29, 2008.

County Attainment Status

The source is located in LaPorte County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective November 15, 1990, for the 1-hour standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock,

Process/Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)							
	PM	PM10	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Total PTE of Entire Source	200.31	<100	<100	<100	<100	<100	4.23	2.29 (Hydrogen Chloride)
Title V Major Source Thresholds	NA	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	NA	NA
Emission Offset Major Source Thresholds	100	100	100	100	100	100	NA	NA
negl. = negligible These emissions are based upon FESOP 091-24264-00004 issued May 30, 2007. * Worst-case fuel is No. 2 fuel oil Fugitive emissions are not counted toward Title V, PSD and Emission Offset applicability.								

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the unlimited potential to emit HAPs are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Westville Correctional Facility on April 15, 2008, relating to modification of an existing boiler, identified as Boiler #4, to burn wood (including bark), wood pellets and switchgrass and associated handling operations. The boiler and handling operations were approved for construction in 2007 (FESOP No. 091-24264-00004, issued May 30, 2007) to burn and handle untreated corn.

The following is a list of the modified emission units and pollution control devices:

- (a) One (1) biomass-fired boiler system including one (1) boiler, identified as Boiler #4, with a maximum heat input capacity of 27.5 MMBtu/hr, capable of combusting untreated corn, wood (including bark), wood pellets, switchgrass, and clean, untreated construction debris, and one (1) natural-gas ignition burner with a maximum heat input capacity of 1.075 MMBtu/hr for cold boiler starts with emissions controlled by a cyclone, and exhausting to a stack. This facility was permitted for construction in 2007 and modified in 2008.
- (b) One (1) biomass handling and storage operation, consisting of the following:
 - (1) One (1) truck unloading operation with a maximum throughput of 224,000 pounds of biomass per hour. This facility was permitted for construction in 2007 and modified in 2008.
 - (2) One (1) biomass storage silo, with a maximum storage capacity of 726,552 pounds of biomass (volumetric capacity 15,987 cubic feet), with emissions controlled by a baghouse. This facility was permitted for construction in 2007 and modified in 2008.

- (3) One (1) biomass handling system with a maximum throughput of 252,000 pounds per hour, with emissions controlled by a baghouse including: five (5) augers, one (1) conveyor, one (1) bucket elevator, one (1) pneumatic fuel transfer system, and one (1) metering bin. These facilities were permitted for construction in 2007 and modified in 2008.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/Emission Unit	PTE of Proposed Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Boiler #4 (Biomass-Fired)	16.86	40.48	3.01	26.50	1.57	72.27	4.25	2.29 (Hydrogen Chloride)
Total PTE of Proposed Revision	16.86	40.48	3.01	26.50	1.57	72.27	4.25	2.29 (Hydrogen Chloride)

negl. = negligible
 * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

This FESOP is being revised through a FESOP Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(1)(E) because the revision involves the modification of one boiler, identified as Boiler #4, to run on untreated corn, wood (including bark), wood pellets or switchgrass with potential to emit (PTE) greater than 25 tons per year.

The use of switchgrass as an alternative fuel source will also include a permit condition requiring the source to perform a stack test to determine appropriate emissions factors associated with the combustion of switchgrass.

In addition, a PM₁₀ limit for biomass silo and handling system is being added to Section D.2 of the permit in order to limit the source-wide potential to emit to within FESOP levels.

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~struck through~~ values.

Process/Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Boiler #1 (Worst-Case Fuel)*	0.50	0.83	17.8	5.00	Negl.	1.25	Negl.	Negl. (Formaldehyde)
Boiler #2 (Worst-Case Fuel)*								
Boiler #3 (Worst-Case Fuel)*								
Boiler #4 (Corn Biomass-Fired)	33.70 16.86	29.50 40.48	54.20	90.30	2.05	72.30	4.23	2.29 (Hydrogen Chloride)
Truck Unloading	88.30	28.90	0.00	0.00	0.00	0.00	0.00	0.00
Corn Biomass Silo and Handling System	75.40	29.34 <27.38						
Ash Handling	2.41	2.41	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions	28.40	5.54	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	183.47	<100	<100	<100	<100	<100	4.23	2.29 (Hydrogen Chloride)
Title V Major Source Thresholds	NA	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	NA	NA
Emission Offset Major Source Thresholds	100	100	100	100	100	100	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Boiler #1 (Worst-Case Fuel)*	0.50	0.83	17.8	5.00	Negl.	1.25	Negl.	Negl. (Formaldehyde)
Boiler #2 (Worst-Case Fuel)*								
Boiler #3 (Worst-Case Fuel)*								
Boiler #4 (Biomass-Fired)	16.86	40.48	54.20	90.30	2.05	72.30	4.23	2.29 (Hydrogen Chloride)
Truck Unloading	88.30	28.90	0.00	0.00	0.00	0.00	0.00	0.00
Biomass Silo and Handling System	75.40	<27.38						
Ash Handling	2.41	2.41	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions	28.40	5.54	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	183.47	<100	<100	<100	<100	<100	4.23	2.29 (Hydrogen Chloride)
Title V Major Source Thresholds	NA	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	NA	NA
Emission Offset Major Source Thresholds	100	100	100	100	100	100	NA	NA
negl. = negligible * US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

(a) FESOP Status

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

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The Permittee shall comply with the following limits for Boilers #1, 2, 3 and 4:
 - (A) The input of fuel oil to Boilers #1, 2, and 3 shall be limited to 500 kgallons per twelve (12) consecutive month period.
 - (B) The total amount of biomass and natural gas burned by Boilers #1, 2, 3 and 4 shall be limited such that NO_x emissions shall not exceed 91.0 tons per twelve (12) consecutive month period.

- (C) The total amount of biomass and natural gas fuel burned by Boilers #1, 2, 3, and 4 shall be limited such that CO emissions shall not exceed 90.0 tons per twelve (12) consecutive month period.
- (D) The total No. 2 distillate fuel oil input to Boilers #1, 2, and 3 shall be limited to less than 500,000 U.S. gallons per year. This fuel usage limit will limit the NOx emissions to less than 5.0 tons per year, the CO emissions to 1.25 tons per year and the SO₂ emissions to 17.80 tons per year.
- (2) The cyclone, used for control on Boiler #4, shall be in operation at all times Boiler #4 is in operation in order to control the PM₁₀ emissions from Boiler #4.
- (3) The PM₁₀ emissions from the baghouse controlling the emissions from biomass silo and handling system shall not exceed 6.25 pounds per hour.

Compliance with these limits, combined with the potential to emit SO₂, NOx, PM₁₀ from all other emission units at this source, shall limit the source-wide total potential to emit of SO₂, NOx, and PM₁₀ to less than 100 tons per 12 consecutive month period, each, any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

- (b) PSD Minor Source
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Grain Elevators, 40 CFR 60, Subpart DD (326 IAC 12), are not included for this proposed revision because the source has a permanent storage capacity less than 2.5 million U.S. bushels. The maximum storage capacity of the source is 0.013 million U.S. bushels.
- (b) The biomass-fired boiler, Boiler #4, is subject to the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), because the operation commenced after June 9, 1989 and the maximum design heat input capacity is greater than ten (10) MMBtu per hour but less than one hundred (100) MMBtu/hr.

The biomass-fired boiler, Boiler #4, subject to this rule include the following:

Applicable portions of the NSPS are the following:

- (1) 40 CFR 60.48c(a)
- (2) 40 CFR 60.48c(g)

Nonapplicable portions of the NSPS will not be included in the permit.

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to Boiler #4 except as otherwise specified in 40 CFR 60, Subpart Dc.

- (c) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included for this proposed revision).

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the modified units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (d) 326 IAC 2-6 (Emission Reporting)
Since this source is located LaPorte County, and has a potential to emit NO_x greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.
- (e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a

continuous opacity monitor) in a six (6) hour period.

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

Biomass-Fired Boiler

- (g) The one (1) corn fired boiler identified as Boiler #4 (constructed after 1983), rated at 27.5 MMBtu/hr is subject to the particulate matter limitations of 326 IAC 6-2-4. Pursuant to this rule, the particulate emissions from the indirect heating facilities constructed after September 21, 1983, shall be limited by the following equation:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per mMBtu heat input
 Q = total source max. operation capacity rating (50 x 3 + 27.5 = 177.50 MMBtu/hr)

Based on the above equation, the biomass-fired boiler (Boiler #4) shall be limited to 0.28 lb/MMBtu.

The potential to emit particulate from Boiler #4, before controls, is 0.56 lb/MMBtu. However, the potential to emit particulate from Boiler #4, after controls, is 0.14 lb/MMBtu. Therefore, the source shall operate the cyclone whenever Boiler #4 is in operation in order to comply with this limit.

- (h) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
 This rule is applicable to emission units with a potential to emit twenty five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. Pursuant to 326 IAC 7-1.1 (applicability), the one (1) biomass-fired boiler (Boiler #4) is subject to the rule because the potential emissions are greater than twenty five (25) tons per year when burning biomass. However, since the biomass fired-boiler does not burn any of the fuels listed in 326 IAC 7-1.1-2, the requirements of this rule do not apply.
- (i) 326 IAC 12 (New Source Performance Standards)
 See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements
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- (a) The compliance determination and monitoring requirements applicable to this proposed revision are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Boiler #4/Cyclone	Visible Emission Notations	Once per day
Biomass Handling/Baghouse	Visible Emission Notations	Once per day
Biomass Handling/Baghouse	Pressure Drop	Once per Day

(b) The testing requirements applicable to this proposed revision are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Boiler #4 (when burning switchgrass)	Cyclone	PM PM ₁₀ NOx VOC SO ₂ CO	No later than 180 after initial usage of switchgrass as a fuel	Once every five years

Proposed Changes

(a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strike through~~ text and new language appears as **bold** text:

(1) Descriptive language in Condition A.2 (Emission Units and Pollution Control Equipment Summary), Section D.1 (Facility Description), and Section D.2 (Facility Description) is revised to reflect the modification to use biomass in Boiler #4, and the storage and handling of biomass at the source as follows:

* * *

(b) One (1) ~~corn~~ **biomass**-fired boiler system including one (1) ~~untreated corn-fired~~ boiler identified as Boiler #4, with a maximum heat input capacity of 27.5 MMBtu/hr, **capable of combusting untreated corn, wood (including bark), wood pellets, switchgrass, and clean, untreated construction debris** and one (1) natural-gas ignition burner with a maximum heat input capacity of 1.075 MMBtu/hr for cold boiler starts with emissions controlled by a cyclone, and exhausting to a stack. This facility ~~is~~ **was** permitted ~~to be constructed~~ **for construction in 2007 and modified in 2008.**

(c) One (1) ~~corn~~ **biomass** handling and storage operation, consisting of the following:

- (1) One (1) truck unloading operation with a maximum throughput of 224,000 lbs of ~~corn~~ **biomass** per hour. This facility ~~is~~ **was** permitted ~~to be constructed~~ **for construction in 2007 and modified in 2008.**
- (2) One (1) ~~corn~~ **biomass** storage silo, with a maximum storage capacity of 762,552 lbs of corn (volumetric capacity 15,987 cubic feet), with emissions controlled by a baghouse. This facility ~~is~~ **was** permitted ~~to be constructed~~ **for construction in 2007 and modified in 2008.**
- (3) One (1) ~~corn~~ **biomass** handling system with a maximum throughput of 252,000 lbs per hour, with emissions controlled by a baghouse including: five (5) augers, one (1) conveyor, one (1) bucket elevator, one (1) pneumatic fuel transfer system, and one (1) metering bin. These facilities ~~is~~ **were** permitted ~~to be constructed~~ **for construction in 2007 and modified in 2008.**

* * *

(2) Conditions D.1.1 (Particulate Matter Limitation (PM)), D.1.3 (FESOP), D.1.4 (FESOP), D.1.6 (Particulate Control), D.1.7 (Testing Requirements), D.1.10 (Visible Emissions Notations), D.1.13 (General Provisions Relating to New Source Performance Standards),

D.1.14 (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements), D.1.15 (One Time Deadlines Relating to Small Industrial-Commercial-Institutional Steam Generating Units), and D.1.16 (State Only Emissions Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements) are revised to reflect the use of biomass in Boiler #4 as follows:

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), particulate emissions from the Boilers #1, 2, and 3 shall in no case exceed 0.30 pounds of particulate matter per million British thermal units heat input. This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

- (b) Pursuant to 326 IAC 6-2-4 particulate emissions from the ~~corn~~ biomass-fired boiler (Boiler #4) shall in no case exceed 0.28 lb/MMBtu. This limitation is based on the equation above.

* * *

D.1.3 FESOP [326 IAC 2-8]~~[326 IAC 2-3]~~[326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the input of fuel oil to Boilers #1, 2, and 3, and the corn-fired boiler ignition burner shall be limited to 500 kgallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) **The total amount of biomass and natural gas burned by Boilers #1, 2, 3, and 4 shall be limited such that NOx emissions shall not exceed 91.0 tons per twelve (12) consecutive month period.**
- (c) **The total amount of biomass and natural gas fuel burned by Boilers #1, 2, 3 and 4 shall be limited such that CO emissions shall not exceed 90.0 tons per twelve (12) consecutive month period, and**
- (d) **The total No. 2 distillate fuel oil input to Boilers #1, 2, and 3 shall be limited to less than 500,000 U.S. gallons per year. This fuel usage limit will limit the NOx emissions to less than 5.0 tons per, the CO emissions to 1.25 tons per year and the SO₂ emissions to 17.80 tons per year.**

Compliance with the above limit, combined with the potential to emit NOx and CO from other emission units at the source, shall limit the NOx and CO from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-7 and 326 IAC 2-2 not applicable.

~~For the purpose of determining compliance with this limit, one kgallon of fuel oil shall be considered equal to 118 million cubic feet of natural gas equivalents, based on SO₂ emissions. This usage limit is required to limit the source-wide potential to emit of SO₂ to less than 100 tons per twelve (12) consecutive month period. Boilers #1, 2, and 3 shall not burn untreated corn.~~

~~The above mentioned fuel oil or equivalent usage limit to Boilers #1, 2, 3, and the corn fired boiler ignition burner will simultaneously limit the source-wide potential to emit of NO_x to less than 100 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-7 (Title V), 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable.~~

~~The Permittee shall comply with the following limits for Boilers #1, 2, 3, and the corn-fired boiler ignition burner:~~

- ~~(a) — When burning No. 2 fuel oil SO₂ emissions shall not exceed 71.0 pounds per kgal.~~
- ~~(b) — When burning natural gas SO₂ emissions shall not exceed 0.60 pounds per MMCF.~~
- ~~(c) — When burning No. 2 fuel oil NO_x emissions shall not exceed 20.0 pounds per kgal.~~
- ~~(d) — When burning natural gas NO_x emissions shall not exceed 100 pounds per MMCF.~~
- ~~(e) — When burning No. 2 fuel oil PM10 emissions shall not exceed 3.3 pounds per kgal.~~
- ~~(f) — When burning natural gas PM10 emissions shall not exceed 7.60 pounds per MMCF.~~

~~D.1.4 FESOP [326 IAC 2-8][326 IAC 2-3][326 IAC 2-2][326 IAC 2-4.1]~~

~~Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable, Boiler #4 shall be ignited using a natural gas burner and otherwise burn only untreated corn. The Permittee shall comply with the following for Boiler #4:~~

- ~~(a) — The SO₂ emissions shall not exceed 0.45 pounds per MMBtu (where the energy content of shelled untreated corn is 6,800 Btu/lb).~~
- ~~(b) — The NO_x emissions shall not exceed 0.75 pounds per MMBtu (where the energy content of shelled untreated corn is 6,800 Btu/lb).~~
- ~~(c) — The PM10 emissions shall not exceed 0.38 pounds per MMBtu (where the energy content of shelled untreated corn is 6,800 Btu/lb).~~
- ~~(d) — The HCl emissions shall not exceed 2.28 pounds per hour.~~

~~D.1.45 Preventive Maintenance Plan [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the cyclone controlling emissions from Boiler #4.~~

~~D.1.56 Particulate Control~~

~~In order to comply with Condition D.1.1, the cyclone for particulate control shall be in operation and control emissions from the ~~corn~~ biomass-fired boiler (Boiler #4) at all times that the ~~corn~~ biomass-fired boiler is in operation.~~

~~D.1.6 Nitrogen Oxides Emissions~~

~~Compliance with the NO_x emissions limit in Condition D.1.3(b) shall be demonstrated by~~

the summation of twelve (12) consecutive monthly emission rates calculated by the following equation:

$$E_{NOx} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (2.9 * Q_{Bark}) + (7.92 * Q_{Wood}) + (100 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where:

E_{NOx}	=	Emissions of NOx in tons per month
CE_{Corn}	=	Compliance emission factor for NOx shall be 10.2 pounds NOx per ton corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
Q_{Corn}	=	Corn consumption in tons per month
CE_{SG}	=	Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
Q_{SG}	=	Switchgrass consumption in tons per month
Q_{Bark}	=	Wood (including bark and clean, untreated construction debris) consumption in tons per month
Q_{Wood}	=	Wood pellets consumption in tons per month
Q_{NG}	=	Natural Gas consumption in MMCF per month

D.1.7 Carbon Monoxide Emissions

Compliance with the CO emissions limit in Condition D.1.3(c) shall be demonstrated by the summation of twelve (12) consecutive monthly emission rates calculated by the following equation:

$$E_{CO} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (7.74 * Q_{Bark}) + (9.48 * Q_{Wood}) + (84 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where

E_{CO}	=	Emissions of CO in tons per month
CE_{Corn}	=	Compliance Emission Factor for CO shall be 8.16 pounds CO per ton Corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
Q_{Corn}	=	Corn consumption in tons per month.
CE_{SG}	=	Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
Q_{SG}	=	Switchgrass consumption in tons per month
Q_{Bark}	=	Wood (including bark and clean, untreated construction debris) consumption in tons per month
Q_{Wood}	=	Wood pellets consumption in tons per month
Q_{NG}	=	Natural Gas consumption in MMCF per month

D.1.87 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) Unless the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is representative of emissions from Boiler #4, ~~within~~ within one hundred and eighty (180) days after initial startup usage of untreated corn as a fuel in the corn-fired boiler (Boiler #4), Boiler #4, the Permittee ~~also~~ shall perform PM, PM10, SO₂, NOx, CO, VOC, and HCl testing for the

~~corn-fired boiler~~ **Boiler #4 when burning untreated corn** utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. ~~All~~ **If the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is not representative of emissions from Boiler #4, stack** tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) **Unless the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is representative of emissions from Boiler #4, within one hundred and eighty (180) days after initial usage of switchgrass as a fuel in Boiler #4, the Permittee shall perform PM, PM10, SO₂, NO_x, CO, VOC and HCl testing for Boiler #4 when burning switchgrass utilizing methods as approved by the Commissioner. PM10 includes filterable and condensible PM10. If the Commissioner determines that valid stack test results from a similar boiler operated by the Indiana Department of Corrections is not representative of emissions from Boiler #4, stack tests shall be repeated at least once every five (5) years form the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.**

D.1.98 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.1.2 and D.1.3 shall be determined utilizing one of the following options.

* * *

D.1.109 Cyclone Failure Detection

* * *

D.1.1140 Visible Emissions Notations

- (a) When combusting fuel oil, daily visible emission notations of the Boilers #1, 2, and 3 stack exhausts shall be performed during normal daylight operations ~~when exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal.
- (b) When combusting ~~corn~~ **biomass**, daily visible emission notations of the Boiler #4 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.

* * *

D.1.1244 Record Keeping Requirements

* * *

D.1.1342 Reporting Requirements

* * *

D.1.1443 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the ~~corn~~ **biomass**-fired boiler (Boiler #4) except as otherwise specified in 40 CFR Part

60, Subpart Dc.

* * *

D.1.1544 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which are incorporated by reference as 326 IAC 12 for the ~~coal~~ **biomass**-fired boiler (Boiler #4) as specified as follows.

* * *

D.1.1645 One Time Deadlines Relating to Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc]

The Permittee shall comply with the following requirements by the dates listed below:

- (a) Pursuant to 40 CFR 60.7(a)(1), submit notification of the date of construction of ~~coal~~ **biomass**-fired boiler (Boiler #4), no later than 30 days after commencement of construction.
- (b) Pursuant to 40 CFR 60.7(a)(3), submit notification of the date of initial startup of ~~coal~~ **biomass**-fired boiler (Boiler #4), within 15 days of startup. This notification shall include the design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility, if applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c, and the annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

D.1.1746 State Only Emissions Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [326 IAC 12]

Pursuant to 326 IAC 12 and until 326 IAC 1-1-3 is revised to include the most recent version of 40 CFR 60, Subpart Dc, the Permittee shall comply with the previous version of 40 CFR 60, Subpart Dc, published in 65 FR 61752, Oct. 17, 2000.

40 CFR 60, Subpart Dc has been most recently amended on February 27, 2006. Therefore, the February 27, 2006 amendments to the federal rule are not approved into the 326 IAC, and the ~~coal~~ **biomass**-fired boiler (Boiler #4) at this source is subject to both versions of the rule. All of the requirements of the 326 IAC 12 rule that are applicable to this source are the same as the requirements listed under the Federal Rule Applicability Determination section except for the following:

- (1) 40 CFR 60.45c(a)
- (2) 40 CFR 60.48c(g)

The new version of 40 CFR 60.45c(a) allows for units that burn only oil containing no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 0.54 lb/MMBtu or less, to be exempt from conducting emissions monitoring if fuel supplier certifications of the sulfur content are maintained. Additionally, pursuant to the 326 IAC version of 40 CFR 60.48c(g), the Permittee must keep daily records of the fuel burned in the boilers. The new version of 40 CFR 60.48c(g) allows for the Permittee to keep monthly records of the fuel burned in the boilers. Both versions will be included in the permit.

(3) Condition D.2.1 (Particulate) is revised to reflect the use of biomass in Boiler #4, as follows:

D.2.1 Particulate [326 IAC 6-3-2]

* * *

The following table shows the maximum process weight rate and allowable particulate emission rate for each emission unit:

Emission Unit	Process Weight Throughput (tons/hr)	Particulate Emission Limit (lbs/hr)
Truck Unloading Operation	112	52.4
Corn Biomass Handling System	126	53.6
Ash Handling System	0.25	1.62

(4) Emission limitations, compliance determination, compliance monitoring, and record keeping requirements (Conditions D.2.2 through D.2.8) are added as follows:

D.2.2 PM₁₀ Limitations [326 IAC 2-8-4]

The PM₁₀ emissions from the baghouse controlling the emissions from biomass silo and handling system shall not exceed 6.25 pounds per hour. Compliance with this limit, combined with the PM₁₀ emissions from the other emission units at this source shall limit the source-wide potential to emit PM₁₀ to less than 100 tons per twelve (12) consecutive month period, and render 326 IAC 2-7 (Part 70 Program) not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.4 Particulate Control

- (a) In order to comply with Condition D.2.2, the biomass silo and handling system shall be controlled by a baghouse when these units are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing,

or expected to prevail, eight percent (80%) of the time the process is in operation, not counting startup or shutdown time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.6 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the biomass silo and handling system at least once per day when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.2.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.8 Record Keeping Requirements

- (a) To document compliance with D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
 - (b) To document compliance with D.2.6, the Permittee shall maintain daily records of pressure drop for baghouses during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
 - (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (4) Condition C.17 (Emission Statement) included as follows:

C.17 Emission Statement [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit an emission statement by July 1 following a calendar year when the source emits oxides of nitrogen or volatile organic compounds into the ambient air equal to or greater than twenty-five (25) tons. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

The statement must be submitted to:

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

The emission statement does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (5) Inclusion of FESOP Quarterly Report form to document compliance with NOx and CO limits as follows:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
FESOP Quarterly Report**

Source Name:	Westville Correctional Facility
Source Address:	State Road 2 and 1100 West
Mailing Address:	State Road 2 and 1100 West
FESOP Permit No.:	F091-26264
Facility:	Boilers #1, #2, #3, and #4
Parameter:	Biomass or equivalent fuel usage
Limit:	(a) The total amount of fuel (untreated corn, wood (including bark), wood pellets, switchgrass, clean and untreated construction debris and natural gas) burned by Boiler #1, Boiler # 2, Boiler # 3, Boiler # 4 shall be limited such that NOx emissions shall not exceed 91.0 tons per twelve (12) consecutive month period with compliance

determined at the end of each month based on the following equation.

- (b) The total amount of fuel (untreated corn, wood (including bark), wood pellets, switchgrass, clean, untreated construction debris and natural gas) burned by Boiler #1, Boiler # 2, Boiler # 3, Boiler # 4 shall be limited such that CO emissions shall not exceed 90.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month based on the following equation.

$$E_{NOx} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (2.9 * Q_{Bark}) + (7.92 * Q_{Wood}) + (100 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where:

- E_{NOx} = Emissions of NOx in tons per month
- CE_{Corn} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton corn until an IDEM approved stack test is conducted. After a stack test is conducted, the -emission factor shall be the lb/ton value as established by the stack test
- Q_{Corn} = Corn consumption in tons per month
- CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{SG} = Switchgrass consumption in tons per month
- Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
- Q_{Wood} = Wood pellets consumption in tons per month
- Q_{NG} = Natural Gas consumption in MMCF per month

$$E_{CO} = \frac{(CE_{Corn} * Q_{Corn}) + (CE_{SG} * Q_{SG}) + (7.74 * Q_{Bark}) + (9.48 * Q_{Wood}) + (84 * Q_{NG})}{2000 \text{ lbs/ton}}$$

Where

- E_{CO} = Emissions of CO in tons per month
- CE_{Corn} = Compliance Emission Factor for CO shall be 8.16 pounds CO per ton Corn until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{Corn} = Corn consumption in tons per month.
- CE_{SG} = Compliance emission factor for NOx shall be 10.2 pounds NOx per ton switchgrass until an IDEM approved stack test is conducted. After a stack test is conducted, the emission factor shall be the lb/ton value as established by the stack test
- Q_{SG} = Switchgrass consumption in tons per month
- Q_{Bark} = Wood (including bark and clean, untreated construction debris) consumption in tons per month
- Q_{Wood} = Wood pellets consumption in tons per month
- Q_{NG} = Natural Gas consumption in MMCF per month

This FESOP Quarterly Report consists of 2 pages.

YEAR: _____

	Column 1	Column 2	Column 1 + Column 2

Month	NOx Emissions This Month	NOx Emissions Previous 11 Months	NOx Emissions 12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

Attach a signed certification to complete this report.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 15, 2008.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 091-26451-00004. The staff recommends to the Commissioner that this FESOP Significant Permit Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.

- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emissions Calculations
External Combustion Boiler
Emissions Summary**

Company Name: Westville Correctional Facility
Address City IN Zip: State Road 2 and 1100 West, Westville, Indiana 46391
Permit Number: 091-26451-00004
Plt ID: 091-00004
Reviewer: Anne-Marie C. Hart
Date: May 19, 2008

Fuel	tons/year						
	PM	PM10	SO2	NOx	VOC	CO	HAP*
Uncontrolled							
Bark or Bark & Wet Wood	67.45	67.27	3.01	26.50	1.57	72.27	4.25
Dry Wood	48.18	45.41	3.01	59.02	1.57	72.27	4.25
Wet Wood	39.75	36.98	3.01	26.50	1.57	72.27	4.25
Controlled							
Bark or Bark & Wet Wood	16.86	40.48	3.01	26.50	1.57	72.27	4.25
Dry Wood	12.05	29.52	3.01	59.02	1.57	72.27	4.25
Wet Wood	9.94	32.16	3.01	26.50	1.57	72.27	4.25

* Combination of all HAPs

Worst-Case HAP: Hydrogen Chloride = 2.3 tons/year

Emissions associated with corn combustion are less than the Bark or Bark & Wet Wood emissions and are not considered the worst-case fuel for Boiler B-1.

No emission factors exist for the combustion of switchgrass as a fuel. A stack test will be required within 180 days of initial usage of switchgrass in Boiler B-1 in order to determine appropriate emission factors.

Clean, untreated construction debris is considered dry wood.

**Appendix A: Emissions Calculations
External Combustion Boiler
Wood Waste Combustion (uncontrolled)
Bark/Bark and Wet Wood**

**Company Name: Westville Correctional Facility
Address City IN Zip: State Road 2 and 1100 West, Westville, Indiana 46391
Permit Number: 091-26451-00004
Plt ID: 091-00004
Reviewer: Anne-Marie C. Hart
Date: May 19, 2008**

Capacity (MMBtu/hr) 27.5

Cyclone Control Efficiency	
75% PM	
35% PM10	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO**
Emission Factor in lb/MMBtu	0.56	0.517	0.025	0.22	0.013	0.6
Potential Emissions in tons/yr	67.45	62.27	3.01	26.50	1.57	72.27
Controlled Potential Emissions in tons/yr	16.86	40.48	3.01	26.50	1.57	72.27

Wet wood is considered to be greater than or equal to 20% moisture content. Dry wood is considered to be less than 20% moisture content.

*The PM10 and PM2.5 emission factors include the condensible PM emission factor of 0.017 lb/MMBtu, measured by EPA Method 202 (or equivalent) and the appropriate filterable PM emission factor, measured by EPA Method 5 (or equivalent). The PM emission factor is filterable PM measured by EPA Method 5 (or equivalent).

**The CO emission factor is for stokers and dutch ovens/fuel cells. Change the emission factor to 0.17 lb/MMBtu if the calculations are for a fluidized bed combustor.

326 IAC 6-2-4 limits the indirect heating source to 0.247 lb/mmBtu

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs}/1 \text{ ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired boilers, and 08 for dry wood-fired boilers

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760\text{hrs/yr} \times 1\text{ton}/2000\text{lbs}$$

**Appendix A: Emissions Calculations
External Combustion Boiler
Wood Waste Combustion (uncontrolled)
Dry Wood**

**Company Name: Westville Correctional Facility
Address City IN Zip: State Road 2 and 1100 West, Westville, Indiana 46391
Permit Number: 091-26451-00004
Plt ID: 091-00004
Reviewer: Anne-Marie C. Hart
Date: May 19, 2008**

Capacity (MMBtu/hr) 27.5

Cyclone Control Efficiency

75% PM 35% PM10

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO**
	0.4	0.377	0.025	0.49	0.013	0.6
Potential Emissions in tons/yr	48.18	45.41	3.01	59.02	1.57	72.27
Controlled Potential Emissions in tons/yr	12.05	29.52	3.01	59.02	1.57	72.27

Wet wood is considered to be greater than or equal to 20% moisture content. Dry wood is considered to be less than 20% moisture content.

*The PM10 and PM2.5 emission factors include the condensible PM emission factor of 0.017 lb/MMBtu, measured by EPA Method 202 (or equivalent) and the appropriate filterable PM emission factor, measured by EPA Method 5 (or equivalent). The PM emission factor is filterable PM measured by EPA Method 5 (or equivalent).

**The CO emission factor is for stokers and dutch ovens/fuel cells. Change the emission factor to 0.17 lb/MMBtu if the calculations are for a fluidized bed combustor.

326 IAC 6-2-4 limits the indirect heating source to 0.247 lb/mmBtu

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs}/1 \text{ ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired boilers, and 08 for dry wood-fired boilers

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs}$$

**Appendix A: Emissions Calculations
External Combustion Boiler
Wood Waste Combustion (uncontrolled)
Wet Wood**

**Company Name: Westville Correctional Facility
Address City IN Zip: State Road 2 and 1100 West, Westville, Indiana 46391
Permit Number: 091-26451-00004
Plt ID: 091-00004
Reviewer: Anne-Marie C. Hart
Date: May 19, 2008**

Capacity (MMBtu/hr)

27.5

Cyclone Control Efficiency

75% PM
35% PM10

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO**
0.33	0.307	0.025	0.22	0.013	0.6	
Potential Emissions in tons/yr	39.75	36.98	3.01	26.50	1.57	72.27
Controlled Potential Emissions in tons/yr	9.94	24.04	3.01	26.50	1.57	72.27

Wet wood is considered to be greater than or equal to 20% moisture content. Dry wood is considered to be less than 20% moisture content.

*The PM10 and PM2.5 emission factors include the condensible PM emission factor of 0.017 lb/MMBtu, measured by EPA Method 202 (or equivalent) and the appropriate filterable PM emission factor, measured by EPA Method 5 (or equivalent). The PM emission factor is filterable PM measured by EPA Method 5 (or equivalent).

**The CO emission factor is for stokers and dutch ovens/fuel cells. Change the emission factor to 0.17 lb/MMBtu if the calculations are for a fluidized bed combustor.

326 IAC 6-2-4 limits the indirect heating source to 0.247 lb/mmBtu

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs}/1 \text{ ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired boilers, and 08 for dry wood-fired boilers

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760\text{hrs/yr} \times 1\text{ton}/2000\text{lbs}$$

**Appendix A: HAPs Emissions Calculations
External Combustion Boiler
Wood Waste Combustion (uncontrolled)
All Wood Waste Fuel Types**

**Company Name: Westville Correctional Facility
Address City IN Zip: State Road 2 and 1100 West, Westville, Indiana 46391
Permit Number: 091-26451-00004
Plt ID: 091-00004
Reviewer: Anne-Marie C. Hart
Date: May 19, 2008**

Capacity (MMBtu/hr)

27.5

Emission Factor in lb/MMBtu	Selected Hazardous Air Pollutants						
	Acrolein	Benzene	Formaldehyde	Hydrogen Chloride	Styrene	Acetaldehyde	Toluene
	4.0E-03	4.2E-03	4.4E-03	1.9E-02	1.9E-03	8.3E-04	9.2E-04
Potential Emissions in tons/yr	4.8E-01	5.1E-01	5.3E-01	2.3E+00	2.3E-01	1.0E-01	1.1E-01
	Total HAPs				4.25E+00		

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs/1 ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired boilers, and 08 for dry wood-fired boilers

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760\text{hrs/yr} \times 1\text{ton}/2000\text{lbs}$$

These factors include the seven HAPs with the highest AP-42 emission factors.