



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, 2009

RE: Thermafiber, Inc. / 169-27436-00009

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) 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.

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Kale Sparling
Thermafiber, Inc.
3711 Mill Street
Wabash, Indiana 46992

July 22, 2009

Re: 169-27436-00009
First Significant Permit Modification to:
Part 70 Permit (1st Renewal) No.: T169-21103-00009

Dear Kale Sparling:

Thermafiber, Inc. was issued Part 70 operating permit T169-21103-00009 on December 17, 2007 for a stationary mineral wool manufacturing source. An application to modify the source was received on January 29, 2009. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification consists of the addition of two (2) thermal oxidizers to existing cupolas identified as Cupola #2 and Cupola #4, for the purpose of heat recovery and reduction in fuel usage.

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 Madhurima Moulik, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or call at (800) 451-6027, and ask for Madhurima Moulik or extension (3-0868), or dial (317) 233-0868.

Sincerely,

Chrystal Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments:

Permit
Technical Support Document

MDM

cc: File - Wabash County
Wabash County Health Department
Air Compliance Section Inspector – Ryan Hillman
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Thermafiber, Inc. Wabash Plant
3711 Mill Street,
Wabash, Indiana 46992**

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and 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 condition B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| | |
|--|--|
| Operation Permit No.: T169-21103-00009 | |
| Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality | Issuance Date: December 17, 2007 Expiration Date: December 17, 2012 |

Administrative Amendment No. 169-26743-00009, issued on August 6, 2008

| | |
|--|--|
| First Significant Permit Modification No. 169-27436-00009 | |
| Issued by:  Chrystal Wagner, Section Chief Permits Branch Office of Air Quality | Issuance Date: July 22, 2009 Expiration Date: December 17, 2012 |

TABLE OF CONTENTS

A. SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B. GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)]
[IC 13-15-3-6(a)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
- B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12(b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]
- B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS

- Emission Limitations and Standards [326 IAC 2-7-5(1)]
- C.1 Particulate Emission Limitations For Processes with Process Weight Rates
Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Stack Height [326 IAC 1-7]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]
C.8 Performance Testing [326 IAC 3-6]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]
C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
[326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.17 Emission Statement [326 IAC 2-7-5(3)(c)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

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

D.1. EMISSIONS UNIT OPERATION CONDITIONS----Cupola #2 and #4, Blowchamber #4 and #2, Curing oven #2, #2 line trimming/sizing section and #2 line cooling section

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]
D.1.2 PSD Minor Limitations [326 IAC 2-2]
D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.1.4 SO₂ emissions Determinations [326 IAC 2-2]
D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
D.1.6 Caustic Injection System Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.1.7 Particulate Matter (PM)
D.1.8 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]
D.1.9 Visible Emissions Notations
D.1.10 Parametric Monitoring
D.1.11 Broken or Failed Detection
D.1.12 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.13 Record Keeping Requirement
D.1.14 Reporting Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS----- Fiber bond cutting operation EU-P30

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

D.2.1 PSD Minor Limits [326 IAC 2-2]

D.2.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

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

Compliance Determination Requirements

D.2.4 Particulate Matter

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

D.2.5 Visible Emissions Notations

D.2.6 Parametric Monitoring

D.2.7 Broken or Failed Bag Detection

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

D.2.8 Record Keeping Requirement

D.3. EMISSIONS UNIT OPERATION CONDITIONS-----Boiler #1 and Boiler #2

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

D.3.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]

D.3.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

D.3.3 General Provision Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

D.3.4 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units [326 IAC 12-1][40 CFR 60, Subpart Dc]

D.4. EMISSIONS UNIT OPERATION CONDITIONS----- Insignificant Activities

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

D.4.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

D.4.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

E.1. EMISSIONS UNIT OPERATION CONDITIONS-----Cupola #2, Cupola #4 and Curing Oven #2

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

E.1.1 General Provisions relating to NESHAP Subpart DDD (National Emission Standard for Hazardous Air Pollutants for Mineral Wool Production) [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

E.1.2 NESHAP Subpart DDD Requirements [40 CFR 63, Subpart DDD]

Certification

Emergency Occurrence Report

Semi-Annual Natural Gas Fired Boiler Certification

Part 70 Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary Mineral Wool Manufacturing Source.

| | |
|------------------------------|--|
| Source Address: | 3711 Mill Street, Wabash, Indiana 46992 |
| Mailing Address: | 3711 Mill Street, Wabash, IN 46992 |
| General Source Phone Number: | 260-563-2111 |
| SIC Code: | 3296 |
| County Location: | Wabash |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories |

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

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

- (a) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO₂ emissions, and a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.
- (c) One (1) blowchamber #4, identified as EU-P6, constructed in 1955, equipped with a dry media filter, exhausting through Stack S4, constructed in 1992, with a maximum capacity of 8.0 tons of fiberized minerals and 0.1 tons of dedusting annealing oil per hour.
- (d) One (1) natural gas-fired curing oven #2, identified as EU-P7, with a maximum capacity of 5.7 million British thermal units per hour, exhausting through Stack S5, constructed in 1955 and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour and emissions controlled by regenerative thermal oxidizer, (RTO) constructed in 2002.
- (e) One (1) blowchamber #2, identified as EU-P8, equipped a dry media filter, exhausting through Stack S6, constructed in 1955, replaced in 1978 and refurbished in 1999, with a maximum capacity of 7.0 tons of fiberized minerals and 1.4 tons of binder and water per hour.

- (f) One (1) #2 line trimming/sizing section, identified as EU-P9, equipped with a baghouse, identified as CE7, exhausting through Stack S7 or inside the building, constructed in 1955, replaced in 1978, and reconditioned in 2003, with a maximum capacity of 7.0 tons of fiberized minerals per hour.
- (g) One (1) #2 line cooling section, identified as EU-P10, exhausting through Stack S8, constructed in 1955, and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour.
- (h) One (1) natural gas-fired #1 boiler, identified as EU-P11, with a maximum capacity 12.5 million British thermal units per hour, exhausting through Stack S9, constructed in January 31, 1990.
- (i) One (1) fiber bond cutting operation identified as emission unit EU-P30, with a maximum capacity of 1600 linear feet of board per hour and 10.4 tons of fiber board per hour, originally constructed in 2002 and approved to be modified in 2007, with two (2) cutting stations controlled by a fabric filter baghouse, identified as DC-30, exhausting either externally through stack S-23 or inside the building.

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

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

- (1) (One (1) natural gas-fired boiler, identified as boiler #2, with a maximum at 4.5 million British thermal units per hour, exhausting through Stack 10, constructed in 1977 [326 IAC 6-2-3];
- (2) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2]; and
- (3) Conveyors as follows: covered conveyors for coke conveying of maximum capacity 80 tons of coke per day [326 IAC 6-3-2].

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T169-21103-00009, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

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

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

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

and

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ 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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

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

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T169-21103-00009 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

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

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

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

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

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

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of

326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

C.11 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.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;

- (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
- (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6][326 IAC 2-2]

- (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) If there is a "project" (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;

- (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and 326 IAC 2-3-1(mm)(2)(A)(3); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

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) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO₂ emissions, and a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.
- (c) One (1) blowchamber #4, identified as EU-P6, constructed in 1955, equipped with a dry media filter, exhausting through Stack S4, constructed in 1992, with a maximum capacity of 8.0 tons of fiberized minerals and 0.1 tons of dedusting annealing oil per hour;
- (d) One (1) natural gas-fired curing oven #2, identified as EU-P7, with a maximum capacity of 5.7 million British thermal units per hour, exhausting through Stack S5, constructed in 1955 and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour and emissions controlled by regenerative thermal oxidizer, (RTO), constructed in 2002.
- (e) One (1) blowchamber #2, identified as EU-P8, equipped a dry media filter, exhausting through Stack S6, constructed in 1955, replaced in 1978 and refurbished in 1999, with a maximum capacity of 7.0 tons of fiberized minerals and 1.4 tons of binder and water per hour;
- (f) One (1) #2 line trimming/sizing section, identified as EU-P9, equipped with a baghouse, identified as CE7, exhausting through Stack S7 or inside the building, constructed in 1955, replaced in 1978, and reconditioned in 2003, with a maximum capacity of 7.0 tons of fiberized minerals per hour; and
- (g) One (1) #2 line cooling section, identified as EU-P10, exhausting through Stack S8, constructed in 1955, and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour.

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

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

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate matter emissions from the two (2) blowchambers, identified as EU-P6 and EU-P8, line trimmings/sizing section, identified as EU-P9 and #2 Line cooling section, identified as EU-P10, shall not exceed the emission limit shown in the table below:

| Operation | Process weight (tons/hr) | Allowable Limits (lbs/hr) |
|---------------------------------------|--------------------------|---------------------------|
| Blowchamber #4 EU-P6 | 8.1 | 16.7 |
| Blowchamber #2 EU-P8 | 8.4 | 17.1 |
| Line trimming/sizing section #2 EU-P9 | 7.0 | 15.1 |
| #2 Line cooling section EU-P10 | 7.0 | 15.1 |

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

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

Where:

P = process weight in tons/hr; and
E = rate of emission in pounds per hour.

D.1.2 PSD Minor Limitations [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

The production in tons and the SO₂ emission rates at Cupola #2 and Cupola #4 shall be limited such that the total SO₂ emissions from Cupola #2 and Cupola #4 and the thermal oxidizers EU-P2A and EU-P4A shall be less than 620 tons per twelve (12) consecutive month period, with compliance determined at the end of each month in accordance with Condition D.1.4.

Compliance with this limit shall ensure that the increase in SO₂ emissions from the modification of Cupola #2 and Cupola #4 involving the addition of the thermal oxidizers EU-P2A and EU-P4A is limited to less than 40 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-2 not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.4 SO₂ emissions Determinations [326 IAC 2-2]

Compliance with Condition D.1.2 shall be determined as follows:

- (a) SO₂ emissions from EU-P2A and EU-P4A shall be calculated using the following equation:

$$E = [(EF_{2U} \times P_{2U}) + (EF_{4U} \times P_{4U}) + (EF_{4C} \times P_{4C})] \times 1/2000 \quad \text{Eq. 1}$$

Where:

E = emissions in tons per month
EF = SO₂ emission factor in lb/ton [2U = uncontrolled Cupola 2/EU-P2A, 4U = uncontrolled Cupola 4/EU-P4A, 4C = controlled (scrubber) Cupola 4/EU-P4A]
P = monthly cupola production in tons

- (b) Until stack test results become available, compliance shall be determined by using the following emission factors in Equation 1: $EF_{2U} = 16.43$ lb/ton; $EF_{4U} = 15.86$ lb/ton, $EF_{4C} = 4.76$ lb/ton. After results from the stack tests become available, compliance shall be determined by using the emission factors determined in the latest stack test.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.2, the following shall apply:

- (a) Within sixty (60) days after achieving maximum capacity but no later than one hundred eighty (180) days after initial startup of EU-P2A and EU-P4B, the Permittee shall conduct performance tests on EU-P2A (uncontrolled only) and EU-P4A (controlled and uncontrolled) to verify the emission factors for SO₂ emissions, utilizing methods as approved by the Commissioner.
- (b) These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.
- (c) Testing shall be conducted in accordance with Section C – Performance Testing.

D.1.6 Caustic Injection System Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Except as provided by statute, rule, or this permit, the caustic injection system shall be operated as needed to maintain compliance with all SO₂ emission limits.

D.1.7 Particulate Matter (PM)

- (a) In order to comply with Condition D.1.1, the baghouses for particulate control shall be in operation at all times when the #2 line trimming/size section 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.

D.1.8 Particulate Matter (PM)

- (a) In order to comply with Condition D.1.1, the media dry filters for particulate control shall be in operation at all times when the two (2) blowchambers, identified as EU-P6 and EU-P8 are in operation.
- (b) In the event that filter failure is observed in a multi-compartment media dry filter, 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.9 Visible Emissions Notations

- (a) Visible emission notations of the two (2) blowerchambers, identified as EU-P6 and EU-P8, line trimmings/sizing section, identified as EU-P9 and #2 line cooling section, identified as EU-P10 stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) 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.

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.1.10 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the #2 line trimming/sizing section, at least once per day when the #2 line trimming/sizing section is in operation when exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse are outside the normal range of 1.2 and 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 and 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 and Exceedances shall be considered deviation from the permit.
- (b) The Permittee shall record the caustic injection rate used in conjunction with the Cupola #4, at least once per day when the Cupola #4 is in operation when exhausting to the atmosphere. When for any one reading, the injection rate is below the normal range of 200-600 pounds of dry sorbent per hour or as established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances. An injection rate 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 and Exceedances shall be considered deviation from the permit.

The instruments used for determining the pressure and caustic injection rate 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.1.11 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.
- (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 emissions unit.

Bag failure can be indicated by 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, or dust traces.

D.1.12 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry media filters. To monitor the performance of the dry media filters, weekly observations shall be made of the particulate matter from the blowchamber stacks S4 and S6 while one or more of the blowchambers are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C-Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the blowchamber emissions from the stacks and the particulate matter on the rooftops and the nearby ground. when there is a noticeable change in particulate matter emissions, or when evidence of particulate matter emission is 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 2-7-5(3)] [326 IAC 2-7-19]

D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.9, the Permittee shall maintain daily records of the visible emission notations of the two (2) blowchambers, identified as EU-P6 and EU-P8, line trimmings/sizing section, identified as EU-P9 and #2 line cooling section, identified as EU-P10 stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.1.10 the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the #2 line trimming/sizing section. 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) To document compliance with Condition D.1.12, the Permittee shall maintain a log of weekly particulate observations, and daily and monthly inspection of the filters.
- (d) To document compliance with Condition D.1.12, the Permittee shall maintain daily records of the caustic injection rate controlling Cupola #4. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading, (e.g. the process did not operate that day).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

D.1.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30)

days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (i) One (1) fiber bond cutting operation identified as emission unit EU-P30, with a maximum capacity of 1600 linear feet of board per hour and 10.4 tons of fiber board per hour, originally constructed in 2002 and approved to be modified in 2007, with two (2) cutting stations controlled by a fabric filter baghouse, identified as DC-30, exhausting either externally through stack S-23 or inside the building.

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

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

D.2.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to SSM 169-24879-00009, issued on September 18, 2007:

- (a) The PM emissions from the fiber bond cutting, identified as unit EU-P30 shall be less than 5.7 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2002 modification.
- (b) The PM₁₀ emissions from the fiber bond cutting, identified as unit EU-P30 shall be less than 3.42 pounds per hour. Compliance with this limit will limit the PM₁₀ emissions to less than fifteen (15) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2002 modification.

D.2.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the fiber bond cutting operation, identified as EU-P30 shall not exceed 19.7 pounds per hour when operating at a process weight rate of 10.4 tons per hour. The pound per hour limitation was calculated with the following equation:

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:

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

Where:

E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

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

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the fiber bond cutting operation (EU-P30) and its control device.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

- (a) In order to comply with Conditions D.2.1 and D.2.2, the baghouses for PM control shall be in operation at all times when the fiber bond cutting operation (EU-P30) is 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of the fiber bond cutting operation stack exhaust (stack S23) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) 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

The Permittee shall record the pressure drop across the baghouse used in conjunction with the fiber bond cutting (EU-P30) operations, at least once per day when the fiber bond cutting (EU-P30) operation is in operation when exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse are outside the normal range of 1.0 and 7.0 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 and 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 and Exceedances shall be considered deviation from the permit.

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.
- (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 emissions unit.

Bag failure can be indicated by 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, or dust traces.

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

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain daily records of the visible emission notations of the fiber bond cutting (EU-P30) operations stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.2.6 the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the fiber bond cutting (EU-P30) operations. 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.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Boilers

- (h) One (1) natural gas-fired #1 boiler, identified as EU-P11, with a maximum capacity 12.5 million British thermal units per hour, exhausting through Stack S9, constructed in January 31, 1990; and
- (i) (One (1) natural gas-fired boiler, identified as boiler #2, with a maximum at 4.5 million British thermal units per hour, exhausting through Stack 10, constructed in 1977 [326 IAC 6-2]. This boiler is an Insignificant activity.

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

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

D.3.1 Particulate Matter (Particulate Emission Limitations for Sources of Indirect Heating) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(e), particulate matter (PM) emissions from Boiler #2 shall not exceed 0.6 pounds of PM per million British thermal units.

D.3.2 Particulate Matter (Particulate Emission Limitations for Sources of Indirect Heating) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, particulate matter (PM) emissions from the #1 Boiler, identified as EU-P11 shall not exceed 0.522 pounds of PM per million British thermal units.

The limits were calculated using the equation below:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and

Q = Total source maximum operating capacity (MMBtu/hr) = 17 MMBtu/hr for #1 Boiler, identified as EU-P11.

D.3.3 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 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 #1 Boiler, identified as EU-P11 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 46204-2251

D.3.4 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units
[326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60 Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units for the #1 Boiler, identified as EU-P11 as specified as follows:

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

Facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

[55 FR 37683, Sept. 12, 1990, as amended at 61 FR 20736, May 8, 1996; 71 FR 9884, Feb. 27, 2006]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR—see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835–86, 87, 91, or 97, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference—see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference—see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[55 FR 37683, Sept. 12, 1990, as amended at 61 FR 20736, May 8, 1996; 65 FR 61752, Oct. 17, 2000; 71 FR 9884, Feb. 27, 2006]

§ 60.48c Reporting and recordkeeping requirements.

(a) The Permittee 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.

(g) The permittee of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The Permittee 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.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[55 FR 37683, Sept. 12, 1990, as amended at 64 FR 7465, Feb. 12, 1999; 65 FR 61753, Oct. 17, 2000; 71 FR 9886, Feb. 27, 2006]

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Specifically Regulated Insignificant Activities

- (1) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2]; and
- (2) Conveyors as follows: covered conveyors for coke conveying of maximum capacity 80 tons of coke per day [326 IAC 6-3-2].

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

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

D.4.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the particulate matter (PM) emissions from the insignificant activities, brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed the pounds per hour emission rate established by the equation:

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:

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

Where:

P = process weight in tons/hr and
E = rate of emission in pounds per hour.

D.4.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the particulate matter (PM) emissions from the conveyors for coke shall not exceed the pounds per hour emission rate established by the equation:

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:

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

Where:

P = process weight in tons/hr and
E = rate of emission in pounds per hour.

SECTION E EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart DDD

- (a) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, and modified in 2009, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO₂ emissions, and a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.
- (c) One (1) natural gas-fired curing oven #2, identified as EU-P7, with a maximum capacity of 5.7 million British thermal units per hour, exhausting through Stack S5, constructed in 1955 and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour and emissions controlled by regenerative thermal oxidizer, (RTO), constructed in 2002.

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

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

E.1.1 General Provisions Relating to NESHAP Subpart DDD (National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production) [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1194, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A-General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as apply to the two (2) cupolas, identified as EU-P2, EU-P4 and the curing oven, identified as EU-P7 described in this section except when otherwise specified in 40 CFR 63, Subpart DDD.

E.1.2 NESHAP Subpart DDD Requirements [40 CFR 63, Subpart DDD]

Pursuant to 40 CFR, Subpart DDD, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart DDD, for existing mineral wool cupolas, identified as EU-P2, EU-P4 and curing oven, identified as EU-P7, beginning June 2, 2002.

§ 63.1175 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants emitted from existing, new, and reconstructed cupolas and curing ovens at facilities that produce mineral wool.

§ 63.1176 Where can I find definitions of key words used in this subpart?

The definitions of key words used in this subpart are in the Clean Air Act (Act), in §63.2 of the general provisions in subpart A of this part, and in §63.1196 of this subpart.

§ 63.1177 Am I subject to this subpart?

You are subject to this subpart if you own or operate an existing, new, or reconstructed mineral wool production facility that is located at a plant site that is a major source of hazardous air pollutant (HAP) emissions, meaning the

plant emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAPs at a rate of 22.68 megagrams (25 tons) or more per year.

§ 63.1178 For cupolas, what standards must I meet?

(a) You must control emissions from each cupola as follows:

(1) Limit emissions of particulate matter (PM) from each existing, new, or reconstructed cupola to 0.05 kilograms (kg) of PM per megagram (MG) (0.10 pound [lb] of PM per ton) of melt or less.

(2) Limit emissions of carbon monoxide (CO) from each new or reconstructed cupola to either of the following:

(i) 0.05 kg of CO per MG (0.10 lb of CO per ton) of melt or less.

(ii) A reduction of uncontrolled CO emissions by at least 99 percent.

(b) You must meet the following operating limits for each cupola:

(1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.

(2) When the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period, develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of §64.8(b)–(d) of 40 CFR part 64.

(3) Additionally, for each new or reconstructed cupola, maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1179 For curing ovens, what standards must I meet?

(a) You must control emissions from each existing, new, or reconstructed curing oven by limiting emissions of formaldehyde to either of the following:

(1) 0.03 kg of formaldehyde per MG (0.06 lb of formaldehyde per ton) of melt or less.

(2) A reduction of uncontrolled formaldehyde emissions by at least 80 percent.

(b) You must meet the following operating limits for each curing oven:

(1) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.

(2) Maintain the operating temperature of each incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1180 When must I meet these standards?

(a) *Existing cupolas and curing ovens.* You must install any control devices and monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart no later than the following:

(1) June 2, 2002; or

(2) June 3, 2003 if you apply for and receive a one-year extension under section 112(i)(3)(B) of the Act.

(b) *New and reconstructed cupolas and curing ovens.* You must install any control devices or monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart by the dates in §63.7 of the general provisions in subpart A of this part.

(c) You must comply with the standards in §§63.1178 and 63.1179 of this subpart on and after the dates in paragraphs (a) and (b) of this section.

(d) You must comply with these standards at all times except during periods of startup, shutdown, or malfunction.

§ 63.1181 How do I comply with the particulate matter standards for existing, new, and reconstructed cupolas?

To comply with the PM standards, you must meet all of the following:

(a) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter.

(b) Do a performance test as specified in §63.1188 of this subpart and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.

(c) Begin corrective actions specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart within one hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.

(d) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period.

§ 63.1183 How do I comply with the formaldehyde standards for existing, new, and reconstructed curing ovens?

To comply with the formaldehyde standards, you must meet all of the following:

(a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.

(b) Do a performance test as specified in §63.1188 of this subpart while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in §63.1185(a) of this subpart.

(c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.

(d) Following the performance test, monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.

(e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

(f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in §63.1185(b) of this subpart.

(g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

(h) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.

(i) With prior approval from the Administrator, you may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:

(1) The purpose of the experimental run.

(2) The affected production process.

(3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.

(4) The duration of the experimental run.

(5) The date and time of the experimental run.

(6) A description of any emissions testing to be done during the experimental run.

§ 63.1184 What do I need to know about the design specifications, installation, and operation of a bag leak detection system?

A bag leak detection system must meet the following requirements:

(a) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(b) The sensor on the bag leak detection system must provide output of relative PM emissions.

(c) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(d) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(e) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(f) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations.

(g) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:

(1) Adjust the range and the averaging period of the device.

(2) Establish the alarm set points and the alarm delay time.

(h) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by §63.1187 of this subpart. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless a responsible official as defined in §63.2 of the general provisions in subpart A of this part certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

§ 63.1185 How do I establish the average operating temperature of an incinerator?

(a) During the performance test, you must establish the average operating temperature of an incinerator as follows:

(1) Continuously measure the operating temperature of the incinerator.

(2) Determine and record the average temperatures in consecutive 15-minute blocks.

(3) Determine and record the arithmetic average of the recorded average temperatures measured in consecutive 15-minute blocks for each of the one-hour performance test runs.

(4) Determine and record the arithmetic average of the three one-hour average temperatures during the performance test runs. The average of the three one-hour performance test runs establishes the temperature level to use to monitor compliance.

(b) To comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, you must measure and record the average operating temperature of the incinerator as required by §§63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of this section.

§ 63.1188 What performance test requirements must I meet?

You must meet the following performance test requirements:

(a) All monitoring systems and equipment must be installed, operational, and properly calibrated before the performance tests.

(b) Do a performance test, consisting of three test runs, for each cupola and curing oven subject to this subpart at the maximum production rate to demonstrate compliance with each of the applicable emission limits in §§63.1178 and 63.1179 of this subpart.

(c) Measure emissions of PM from each existing cupola.

(d) Measure emissions of PM and CO from each new or reconstructed cupola.

(e) Measure emissions of formaldehyde from each existing, new or reconstructed curing oven.

(f) Measure emissions at the outlet of the control device if complying with a numerical emission limit for PM, CO, or formaldehyde, or at the inlet and outlet of the control device if complying with a percent reduction emission limit for CO or formaldehyde.

(g) To determine the average melt rate, measure and record the amount of raw materials, excluding coke, charged into and melted in each cupola during each performance test run. Determine and record the average hourly melt rate for each performance test run. Determine and record the arithmetic average of the average hourly melt rates associated with the three performance test runs. The average hourly melt rate of the three performance test runs is used to determine compliance with the applicable emission limits.

(h) Compute and record the average emissions of the three performance test runs and use the equations in §63.1190 of this subpart to determine compliance with the applicable emission limits.

(i) Comply with control device and process operating parameter monitoring requirements for performance testing as specified in this subpart.

§ 63.1190 How do I determine compliance?

(a) Using the results of the performance tests, you must use the following equation to determine compliance with the PM emission limit:

$$E = \frac{C \times Q \times K_1}{P}$$

where:

E = Emission rate of PM, kg/Mg (lb/ton) of melt.

C = Concentration of PM, g/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).

P = Average melt rate, Mg/hr (ton/hr).

(b) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde numerical emission limits:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{K_3 \times P \times 10^6}$$

where:

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.

C = Measured volume fraction of pollutant, ppm.

MW = Molecular weight of measured pollutant, g/g-mole:

CO = 28.01, Formaldehyde = 30.03.

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).

K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).

K₃ = Conversion factor, 24.45 L/g-mole.

P = Average melt rate, Mg/hr (ton/hr).

(c) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde percent reduction performance standards:

$$\%R = \frac{L_i - L_o}{L_i} \times 100$$

where:

%R = Percent reduction, or collection efficiency of the control device.

L_i = Inlet loading of pollutant, kg/Mg (lb/ton).

L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

§ 63.1191 What notifications must I submit?

You must submit written notifications to the Administrator as required by §63.9(b)–(h) of the general provisions in subpart A of this part. These notifications include, but are not limited to, the following:

(a) Notification that the following types of sources are subject to the standard:

(1) An area source that increases its emissions so that it becomes a major source.

(2) A source that has an initial startup before the effective date of the standard.

(3) A new or reconstructed source that has an initial startup after the effective date of the standard and doesn't require an application for approval of construction or reconstruction under §63.5(d) of the general provisions in subpart A of this part.

(b) Notification of intention to construct a new major source or reconstruct a major source where the initial startup of the new or reconstructed source occurs after the effective date of the standard and an application for approval of construction or reconstruction under §63.5(d) of the general provisions in subpart A of this part is required.

(c) Notification of special compliance obligations for a new source that is subject to special compliance requirements in §63.6(b)(3) and (4) of the general provisions in subpart A of this part.

(d) Notification of a performance test at least 60 calendar days before the performance test is scheduled to begin.

(e) Notification of compliance status.

§ 63.1192 What recordkeeping requirements must I meet?

You must meet the following recordkeeping requirements:

(a) Maintain files of all information required by §63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.

(b) Maintain records of the following information also:

(1) Cupola production (melt) rate (Mg/hr (tons/hr) of melt).

(2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

(3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.

(4) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.

(c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.

(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.

(e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.

§ 63.1193 *What reports must I submit?*

You must prepare and submit reports to the Administrator as required by this subpart and §63.10 of the general provisions in subpart A of this part. These reports include, but are not limited to, the following:

(a) A performance test report, as required by §63.10(d)(2) of the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.

(b) A startup, shutdown, and malfunction plan, as described in §63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by §63.6(e)(3), your plan must include the following:

(1) Procedures to determine and record what caused the malfunction and when it began and ended.

(2) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(c) A report of each event as required by §63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in §63.6(e)(3) of the general provisions in subpart A of this part.

(d) An operations, maintenance, and monitoring plan as specified in §63.1187 of this subpart.

(e) A semiannual report as required by §63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in §63.10(c) of the general provisions, as well as the relevant records required by §63.1192(b) of this subpart.

(f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by §63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.

§ 63.1194 Which general provisions apply?

The general provisions in subpart A of this part define requirements applicable to all owners and operators affected by NESHAP in part 63. See Table 1 of this subpart for general provisions that apply (or don't apply) to you as an owner or operator subject to the requirements of this subpart.

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Thermafiber, Inc Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Mailing Address: 3711 Mill Street, Wabash, IN 46992
Part 70 Permit No.: T169-21103-00009

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Thermafiber, Inc Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Mailing Address: 3711 Mill Street, Wabash, IN 46992
Part 70 Permit No.: T169-21103-00009

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Thermafiber, Inc Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Mailing Address: 3711 Mill Street, Wabash, IN 46992
Part 70 Permit No.: T169-21103-00009

Natural Gas Only
 Alternate Fuel burned
From: _____ To: _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

PART 70 OPERATING PERMIT QUARTERLY REPORT

Source Name: Thermafiber, Inc Wabash Plant
 Source Address: 3711 Mill Street, Wabash, Indiana 46992
 Mailing Address: 3711 Mill Street, Wabash, IN 46992
 Part 70 Permit No.: T169-21103-00009
 Facility: Cupola #2 and #4
 Parameter: SO2 emissions
 Limit: 620 tons per 12 consecutive month period

| Cupola #4 | | | |
|-----------|------------|--------------------|---------------------|
| YEAR: | | QUARTER: | |
| Month | Column 1 | Column 2 | Column 1 + Column 2 |
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on:

| |
|-----------------|
| Submitted by: |
| Title/Position: |
| Signature: |
| Date: |
| Telephone: |

Attach a signed certification to complete this report.

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

Source Name: Thermafiber, Inc Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Mailing Address: 3711 Mill Street, Wabash, IN 46992
Part 70 Permit No.: T169-21103-00009

Months: _____ to _____ Year: _____

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70
Significant Source Modification and Significant Permit Modification**

Source Description and Location

| | |
|--------------------------------------|---|
| Source Name: | Thermafiber, Inc. |
| Source Location: | 3711 Mill Street, Wabash, Indiana 46992 |
| County: | Wabash |
| SIC Code: | 3296 |
| Operation Permit No.: | T 169-21103-00009 |
| Operation Permit Issuance Date: | December 17, 2007 |
| Significant Source Modification No.: | 169-27407-00009 |
| Significant Permit Modification No.: | 169-27436-00009 |
| Permit Reviewer: | Madhurima D. Moulik |

Existing Approvals

The source was issued Part 70 Operating Permit No. T 169-21103-00009 on December 17, 2007. The source has since received the following approvals:

- (a) Administrative Amendment No. 169-26743-00009, issued on August 6, 2008.

County Attainment Status

The source is located in Wabash County.

| Pollutant | Designation |
|--|---|
| SO ₂ | Better than national standards. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| O ₃ | Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹ |
| PM ₁₀ | Unclassifiable effective November 15, 1990. |
| NO ₂ | Cannot be classified or better than national standards. |
| Pb | Not designated. |
| ¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5. | |

- (a) Ozone Standards

- (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, and St. Joseph counties 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, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby counties as attainment for the 8-

hour ozone standard.

- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Wabash County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Wabash County has been classified as attainment for PM2.5. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and these rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.
- (c) Other Criteria Pollutants
Wabash County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

| |
|----------------------|
| Source Status |
|----------------------|

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

| Pollutant | tons/year |
|------------------|--------------|
| PM | >100 |
| PM ₁₀ | >100 |
| SO ₂ | >100 |
| VOC | <100 |
| CO | >100 |
| NO _x | >100 |
| Pb | less than 10 |

- (a) This existing stationary source is major for PSD because the emissions of at least one criteria pollutant are greater than one hundred (>100) tons per year, and it is one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.
- (c) These emissions are based on the Technical Support Document for Part 70 Permit No. T169-21103-00009.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

| HAPs | tons/year |
|--------------------|-----------------|
| Chromium | less than 10 |
| Manganese | less than 10 |
| Nickel | less than 10 |
| Arsenic | less than 10 |
| cadmium | less than 10 |
| Selenium | less than 10 |
| Carbonyl Sulfide | greater than 10 |
| Barium | less than 10 |
| Beryllium | less than 10 |
| Antimony | less than 10 |
| Lead | less than 10 |
| Fine Mineral Fiber | less than 10 |
| Benzene | less than 10 |
| Dichlorobenzene | less than 10 |
| Formaldehyde | less than 10 |
| Hexane | less than 10 |
| Toluene | less than 10 |
| Total | greater than 25 |

This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

| Pollutant | Actual Emissions (tons/year) |
|------------------|------------------------------|
| PM | 0 |
| PM ₁₀ | 121 |
| SO ₂ | 411 |
| VOC | 151 |
| CO | 10,848 |
| NO _x | 74 |
| Pb | 0.00 |

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a source modification application, submitted by Thermafiber, Inc. on January 23, 2009, relating to the installation of two thermal oxidizers in order to recover heat from two existing cupolas. The thermal oxidizers will be installed between the existing cupolas and the existing baghouses. The thermal oxidizers will reduce the cupola emissions of CO, VOC, and carbonyl sulfide through thermal destruction. However, the thermal oxidation of carbonyl sulfide and other reduced sulfur compounds emitted from the cupola will result in increased SO₂ emissions.

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

- (a) Two (2) natural gas fired thermal oxidizers, identified as EU-P2A and EU-P4A, permitted in 2009, with rated capacities of 10.0 mmBTU/hr each, exhausting through Stacks S-1 and S-3.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Stack Summary

| Stack ID | Operation | Height (ft) | Diameter (ft) | Flow Rate (acfm) | Temperature (°F) |
|----------|---------------------------------|-------------|---------------|------------------|------------------|
| S-1 | Cupola #2 with thermal oxidizer | 57 | 3 | 13,000 | 200 |
| S-3 | Cupola #4 with thermal oxidizer | 57 | 3 | 12,000 | 200 |

Emission Calculations

The Permittee has submitted emissions calculations for the proposed project. IDEM has reviewed this information and has determined the emissions calculations to be accurate. See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| PTE Before Controls of the Modification | |
|--|-----------------------------------|
| Pollutant | Potential To Emit (ton/yr) |
| PM | 0.6 |
| PM ₁₀ | 0.6 |
| PM _{2.5} | 0.6 |
| SO ₂ | 132.7 |
| VOC | 0.48 |
| CO | 7.4 |
| NO _x | 8.8 |

| HAP PTE Before Controls of the Modification | |
|--|-----------------------------------|
| HAPs | Potential To Emit (ton/yr) |
| Single HAP | Negligible |
| TOTAL | Negligible |

This source modification is subject to the Significant Source Modification requirements under 326 IAC 2-7-10.5(f)(4) because the potential to emit sulfur dioxide is greater than twenty-five (25) tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification requires significant changes in the existing monitoring Part 70 permit terms and conditions.

Permit Level Determination – PSD Actual to Projected Actual Test

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual test (ATPA) in 326 IAC 2-2-2(d)(3), this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8. See Appendix A of this Technical Support Document for detailed emission calculations.

As shown in the following table, the operation of the two (2) cupolas equipped with the two (2) natural gas fired thermal oxidizers will result in an overall reduction of criteria pollutants.

| Process / Emission Unit | Projected Increase in Actual Emissions (ton/yr) | | | | | |
|--|--|-----------|------------------------|-----------------------|-----------------------------------|-------------|
| | CO* | PM | PM₁₀ | NO_x | SO₂[#] | VOC* |
| Baseline Actual Emissions (Nov 2006 to Nov 2008) - Cupola #2 and Cupola #4 | 11412.3 | 0.38 | 0.38 | 73.0 | 580.3 | 136.9 |
| Emissions that could have been accommodated - Cupola #2 and Cupola #4 | 3587.8 | 0.1 | 0.1 | 23.0 | 0 | 43.1 |
| Projected Actual Emissions - Cupola #2 and Cupola #4 | 150.0 | 0.5 | 0.5 | 96.0 | 479.7 | 1.8 |
| Thermal Oxidizers | 7.4 | 0.6 | 0.6 | 8.8 | 132.7 | 0.48 |
| Emissions Increase | --- | 0.7 | 0.7 | 8.8 | 32.1 | --- |
| PSD Significant Level | 100 | 25 | 15 | 40 | 40 | 40 |

--- ATPA calculations show an emissions decrease

* RTO destruction efficiency for CO and VOC were assumed to be 99%. However, even at an assumed 0% destruction efficiency, the emissions increase from this modification are less than PSD significant levels for both CO and VOC. Therefore, compliance monitoring requirements are not necessary for the two (2) proposed thermal oxidizers to ensure that this modification is minor under 326 IAC 2-2.

The SO₂ emission factors (uncontrolled for Cupola #2 and both controlled (through use of a caustic injection system) and uncontrolled for Cupola #4) used in the ATPA calculations have been included as limitations in the permit, and testing requirements have been included to verify these emission factors.

Federal Rule Applicability Determination

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved, for SO₂:

| CAM Applicability Analysis | | | | | | | |
|-----------------------------------|----------------------------|----------------------------------|----------------------------------|--------------------------------|--|-----------------------------|-------------------------|
| Emission Unit | Control Device Used | Emission Limitation (Y/N) | Uncontrolled PTE (ton/yr) | Controlled PTE (ton/yr) | Part 70 Major Source Threshold (ton/yr) | CAM Applicable (Y/N) | Large Unit (Y/N) |
| RTO #2 | Y | Y | <100 | <100 | 100 | N | N |
| RTO #4 | Y | Y | <100 | <100 | 100 | N | N |

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

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

The operation of the thermal oxidizers will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

The remaining state rule applicabilities remain unchanged as a result of this modification.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance

Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

- (a) Within sixty (60) days after achieving maximum capacity but no later than one hundred eighty (180) days after initial startup of EU-P2A and EU-P4A, the Permittee shall conduct performance tests on EU-P2A and EU-P4A to verify the emission factors for SO₂ emissions.

These compliance requirements are necessary in order to ensure that the proposed source modification is minor under PSD rules (326 IAC 2-2).

| |
|-------------------------|
| Proposed Changes |
|-------------------------|

The changes listed below have been made to Part 70 Operating Permit No. T169-21103-00009. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

1. The equipment descriptions in Sections A, D, and E of the permit have been modified to include the changes involved in the proposed modification.
2. Condition D.1.2 - Carbon Monoxide (CO), Sulfur Dioxide (SO₂) and Volatile Organic Compounds (VOC) PSD Minor Limitation, has been added to include the PSD minor limitations that are applicable, in order to ensure that the proposed modification is minor under 326 IAC 2-2.
3. Condition D.1.5 - Testing Requirements, has been added to verify the SO₂ emission factors used in the actual-to-projected-actual calculations submitted by the Permittee.
4. Part 70 Quarterly Reports have been added to ensure compliance with the SO₂ emissions limitation on Cupola #2 and Cupola #4.
5. Several of IDEM's branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

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

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

- (a) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a **10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A** and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a **10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO₂ emissions, and** a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.

Emissions Unit Description:

- (a) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a **10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A** and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with a **10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO2 emissions, and** a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.

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

D.1.2 PSD Minor Limitations [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

The production in tons and the SO2 emission rates at Cupola #2 and Cupola #4 shall be limited such that the total SO2 emissions from Cupola #2 and Cupola #4 and the thermal oxidizers EU-P2A and EU-P4A shall be less than 620 tons per twelve (12) consecutive month period, with compliance determined at the end of each month in accordance with Condition D.1.4.

Compliance with this limit shall ensure that the increase in SO2 emissions from the modification of Cupola #2 and Cupola #4 involving the addition of the thermal oxidizers EU-P2A and EU-P4A is limited to less than 40 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-2 not applicable.

D.1.4 SO2 emissions Determinations [326 IAC 2-2]

Compliance with Condition D.1.2 shall be determined as follows:

- (a) SO2 emissions from EU-P2A and EU-P4A shall be calculated using the following equation:

$$E = [(EF_{2U} \times P_{2U}) + (EF_{4U} \times P_{4U}) + (EF_{4C} \times P_{4C})] \times 1/2000 \quad \text{Eq. 1}$$

Where:

E = emissions in tons per month
EF = SO2 emission factor in lb/ton [2U = uncontrolled Cupola 2/EU-P2A, 4U = uncontrolled Cupola 4/EU-P4A, 4C = controlled (scrubber) Cupola 4/EU-P4A]
P = monthly cupola production in tons

- (b) Until stack test results become available, compliance shall be determined by using the following emission factors in Equation 1: EF_{2U} = 16.43 lb/ton; EF_{4U} = 15.86 lb/ton, EF_{4C} = 4.76 lb/ton. After results from the stack tests become available, compliance shall be determined by using the emission factors determined in the latest stack test.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.2, the following shall apply:

- (a) Within sixty (60) days after achieving maximum capacity but no later than one hundred eighty (180) days after initial startup of EU-P2A and EU-P4A, the Permittee shall conduct performance tests on EU-P2A (uncontrolled only) and EU-P4A (controlled and uncontrolled) to verify the emission factors for SO₂ emissions, utilizing methods as approved by the Commissioner.**
- (b) These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.**
- (c) Testing shall be conducted in accordance with Section C – Performance Testing.**

D.1.6 Caustic Injection System Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Except as provided by statute, rule, or this permit, the caustic injection system shall be operated as needed to maintain compliance with all SO₂ emission limits.

D.1.810 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the #2 line trimming/sizing section, at least once per day when the #2 line trimming/sizing section is in operation when exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse are outside the normal range of 1.2 and 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 and 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 and Exceedances shall be considered deviation from the permit.**
- (b) The Permittee shall record the caustic injection rate used in conjunction with the Cupola #4, at least once per day when the Cupola #4 is in operation when exhausting to the atmosphere. When for any one reading, the injection rate is outside the normal range of 200-600 pounds of dry sorbent per hour or as established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances. An injection rate 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 and Exceedances shall be considered deviation from the permit.**

The instruments used for determining the pressure **and caustic injection rate** 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.1.4413 Record Keeping Requirements

- (a) To document compliance with Condition D.1.9, the Permittee shall maintain daily records of the visible emission notations of the two (2) blowchambers, identified as EU-P6 and EU-P8, line trimmings/sizing section, identified as EU-P9 and #2 line cooling section, identified as EU-P10 stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).**
- (b) To document compliance with Condition D.1.10 the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the #2 line**

trimming/sizing section. 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) To document compliance with Condition D.1.12, the Permittee shall maintain a log of weekly particulate observations, and daily and monthly inspection of the filters.
- (d) **To document compliance with Condition D.1.12, the Permittee shall maintain daily records of the caustic injection rate controlling Cupola #4. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading, (e.g. the process did not operate that day).**
- (d e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

D.1.14 Reporting Requirements

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

SECTION E EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart DDD

- (a) One (1) coke-fueled cupola #2, identified as EU-P2, constructed in 1955, refurbished in 1995, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with **a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P2A** and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour.
- (b) One coke-fueled cupola #4, identified as EU-P4, constructed in 1955, and refurbished in 1994, **and modified in 2009**, natural gas supplemented, with a maximum capacity of 10.47 MMBtu/hr, equipped with **a 10.0 mmBTU/hr natural gas fired thermal oxidizer EU-P4A, a caustic injection system for control of SO2 emissions, and a** baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour.
- (c) One (1) natural gas-fired curing oven #2, identified as EU-P7, with a maximum capacity of 5.7 million British thermal units per hour, exhausting through Stack S5, constructed in 1955 and replaced in 1978, with a maximum capacity of 7.0 tons of fiberized minerals per hour and emissions controlled by regenerative thermal oxidizer, (RTO), constructed in 2002.

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

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

PART 70 OPERATING PERMIT QUARTERLY REPORT

Source Name: Thermafiber, Inc Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Mailing Address: 3711 Mill Street, Wabash, IN 46992
Part 70 Permit No.: T169-21103-00009
Facility: Cupola #2 and #4
Parameter: SO2 emissions
Limit: 620 tons per 12 consecutive month period

| Cupola #4 | | | |
|-----------|------------|--------------------|---------------------|
| YEAR: | | QUARTER: | |
| Month | Column 1 | Column 2 | Column 1 + Column 2 |
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

- No deviation occurred in this quarter.
 Deviation/s occurred in this quarter.

Deviation has been reported on:

| |
|------------------------|
| Submitted by: |
| Title/Position: |
| Signature: |
| Date: |
| Telephone: |

Attach a signed certification to complete this report.

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 169-27407-00009 Significant Permit Modification No. 169-27436-00009. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

**Thermafiber
Wabash Indiana
Annual Cupola Emissions and
Impact of Installation of a Thermal Oxidizer**

Date: April 23, 2009
Permit No. 169-27436-00009

Page 1 of 2

Table 1 - Unit Capacities, Production Levels and Emission Factors used in ATPA Assessment

| | Rated capacity, tons/hr | Annual Throughput Potential, tons/year | Actual Throughput Baseline, tons/year | Future Projected Actual Throughput, tons/year | Throughput that could have been accomodated, tons/year | Thermal Oxidizer Rated Capacity, MMBtu/hr | %S input Reduction | VOC and CO destruction Efficiency | %SO2 Control |
|-----------|-------------------------|--|---------------------------------------|---|--|---|--------------------|-----------------------------------|--------------|
| Cupola #2 | 8.5 | 74,460 | 42,589 | 56,000 | 13,412 | 10.0 | 2% | 99% | 0% |
| Cupola #4 | 9.5 | 83,220 | 48,710 | 64,000 | 15,291 | 10.0 | 2% | 99% | 70% |

Cupola Emission Factors, pounds/ton

| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
|-----------------------|-------|-----|------|------|-----|---------|
| Cupola #2 before Mod. | 13.3 | 250 | 3 | 3 | 1.6 | 0.00901 |
| Cupola #4 before Mod. | 12.2 | | | | | 0.00788 |
| Cupola #2 after mod. | 13.03 | 2.5 | 0.03 | 0.03 | 1.6 | 0.00901 |
| Cupola #4 after Mod. | 3.59 | | | | | 0.00788 |

Thermal Oxidizer Emission Factors,

| | | | | | | | |
|-----------------------|------|----|-----|----|-----|-----|----------|
| RTO #2, NG Combustion | 0.6 | 84 | 5.5 | NA | 100 | 7.6 | lbs/MMCF |
| RTO #4, NG Combustion | | | | | | | |
| RTO #2 TRS Conversion | 3.40 | | | | | | lbs/ton |
| RTO #4 TRS Conversion | 1.17 | | | | | | |

Table 2: Actual to Projected Actual for Existing Cupola

| Baseline Emissions, tons/year | | | | | | |
|---|---------------|-----------------|---------------|---------------|-------------|-------------|
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| Cupola #2 | 283.2 | 5323.6 | 63.9 | 63.9 | 34.1 | 0.19 |
| Cupola #4 | 297.1 | 6088.7 | 73.1 | 73.1 | 39.0 | 0.19 |
| Total | 580.3 | 11412.3 | 136.9 | 136.9 | 73.0 | 0.38 |
| Future Projected Actual Emissions From the Cupola, tons/year | | | | | | |
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| Cupola #2 | 364.952 | 70 | 0.84 | 0.84 | 44.8 | 0.25 |
| Cupola #4 | 114.7776 | 80 | 0.96 | 0.96 | 51.2 | 0.25 |
| Total | 479.7 | 150.0 | 1.8 | 1.8 | 96.0 | 0.5 |
| Cupola Emissions that Could have Been Accomodated, tons/year | | | | | | |
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| Cupola #2 | | 1676.4 | 20.1 | 20.1 | 10.7 | 0.06 |
| Cupola #4 | | 1911.3 | 22.9 | 22.9 | 12.2 | 0.06 |
| Total | 0.0 | 3587.8 | 43.1 | 43.1 | 23.0 | 0.1 |
| Actual to Projected Actual Emissions for the Cupolas | | | | | | |
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| Cupolas #2 & #4 | -100.6 | -14850.0 | -178.2 | -178.2 | 0.0 | 0.0 |

**Thermafiber
Wabash Indiana
Annual Cupola Emissions and
Impact of Installation of a Thermal Oxidizer**

| Table 3 - Actual to Projected Actual for the RTO Units (Baseline Assumed to be = zero; Projected Actual = Potential) | | | | | | |
|---|--------------|------------|-------------|----------|------------|------------|
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| RTO #2, NG Combustion | 0.026 | 3.7 | 0.24 | | 4.4 | 0.3 |
| RTO #4, NG Combustion | 0.026 | 3.7 | 0.24 | | 4.4 | 0.3 |
| RTO #2 TRS Conversion | 95.2 | | | | | |
| RTO #4 TRS Conversion | 37.4 | | | | | |
| Total | 132.7 | 7.4 | 0.48 | 0 | 8.8 | 0.7 |

| Table 4: Actual to Projected Actual for the Cupola and RTO units | | | | | | |
|---|-------------|-----------------|---------------|---------------|------------|--------------|
| | SO2 | CO | VOCs | COS | NOx | PM/PM10 |
| Cupolas #2 and #4 | -100.6 | -14850.0 | -178.2 | -178.2 | 0.0 | 0.0 |
| Thermal Oxidizers | 132.7 | 7.4 | 0.5 | 0.0 | 8.8 | 0.7 |
| Cupolas and Thermal Oxidizers | 32.1 | -14842.6 | -177.7 | -178.2 | 8.8 | 0.7 |
| PSD Major Modification Thresholds | 40 | 100 | 40 | NA | 40 | 25/15 |

| | Nov 23, 2006 to Nov 22, 2007 | Nov 23, 2007 to Nov 22, 2008 | 2 year average, tons |
|----------------------------------|------------------------------------|------------------------------------|-------------------------|
| Production on #2 Bonded Line | | | |
| Shift 1 | 14597 | 14737 | |
| Shift 2 | 12330 | 13021 | |
| Shift 3 | 15054 | 15438 | |
| | 41981 | 43196 | 42588.5 |
| Production on #4 Granulated Line | | | |
| Shift 1 | 16588 | 16542 | |
| Shift 2 | 14787 | 14908 | |
| Shift 3 | 17160 | 17434 | |
| | 48535 | 48884 | 48709.5 |



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Kale Sparling
Thermfiber, Inc.
3711 Mill Stret
Wabash, Indiana 46992

DATE: July 22, 2009

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

SUBJECT: Final Decision
Part 70 SPM
169-27436-00009

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Eric Ryder (Thermfiber, Inc.)
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

July 22, 2009

TO: Wabash Carnegie Public Library

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

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

Applicant Name: Thermfiber, Inc.
Permit Number: 169-27436-00009

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

| | | | | |
|----------------------------|---|---|---|--|
| IDEM Staff | DPABST 7/22/2009 Thermafiber Incorporated 169-27436-00009 (final) | | Type of Mail: CERTIFICATE OF MAILING ONLY | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender |  | Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204 | | |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee | Remarks |
|------|----------------|---|---------|-----------------|----------------------------|---------------|-----------------|----------|----------|----------|----------------|---------|
| 1 | | Kale Sparling Thermafiber Incorporated 3711 Mill St Wabash IN 46992 (Source CAATS) via confirmed delivery | | | | | | | | | | |
| 2 | | Eric Ryder Dir - Mfg Thermafiber Incorporated 3711 Mill St Wabash IN 46992 (RO CAATS) | | | | | | | | | | |
| 3 | | Wabash County Commissioners 1 West Hill Street Wabash IN 46992 (Local Official) | | | | | | | | | | |
| 4 | | Wabash City Council and Mayors Office 202 South Wabash Street Wabash IN 46992 (Local Official) | | | | | | | | | | |
| 5 | | Wabash County Health Department 89 W. Hill, Memorial Hall Wabash IN 46992-3184 (Health Department) | | | | | | | | | | |
| 6 | | Ted Little Wabash County Council 1076 West 900 North North Manchester IN 46962 (Affected Party) | | | | | | | | | | |
| 7 | | Wabash Carnegie Public Library 188 W Hill St Wabash IN 46992-3048 (Library) | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |

| | | | |
|---|--|--|--|
| Total number of pieces Listed by Sender | Total number of Pieces Received at Post Office | Postmaster, Per (Name of Receiving employee) | The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels. |
| 6 | | | |