NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit for Thermafiber Inc., Wabash Plant in Wabash County

Significant Source Modification No.: 169-38543-00009
Significant Permit Modification No.: 169-38562-00009

The Indiana Department of Environmental Management (IDEM) has received an application from Thermafiber Inc., Wabash Plant, located at 3711 Mill Street, Wabash, Indiana 46992, for a significant modification of its Part 70 Operating Permit issued on May 12, 2017. If approved by IDEM’s Office of Air Quality (OAQ), this proposed modification would allow Thermafiber Inc., Wabash Plant to make certain changes at its existing source. Thermafiber Inc., Wabash Plant has applied to replacing some of the saws associated with the Line #2 trimming section, identified as EU-P9 as well as adding additional new saws and the removal of old saws from the plant.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM’s preliminary findings are available at:

Wabash Carnegie Public Library
188 West Hill Street
Wabash, IN 46992

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so...
that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM169-38543-00009 and SPM 169-38562-00009 in all correspondence.

Comments should be sent to:

Monica Dick  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for extension (317) 234-1243  
Or dial directly: (317) (317) 234-1243  
Fax: (317) 232-6749 attn: Monica Dick  
E-mail: MDick@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Monica Dick of my staff at the above address.

Josiah K. Balogun, Section Chief  
Permits Branch  
Office of Air Quality
Dear Eric Hamm:

Thermafiber Inc., Wabash Plant was issued Part 70 Operating Permit Renewal No. T169-31618-00009 on June 25, 2013 for a stationary mineral wool manufacturing source located at 3711 Mill Street, Wabash, Indiana 46992. An application to modify the source was received on May 12, 2017. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following modifications to the emission unit is approved for construction at the source:

(a) One (1) #2 line trimming/sizing section, identified as EU-P9, with a maximum capacity of 7.0 tons of fiberized minerals per hour. and consisting of the following equipment:

1. One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

2. Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

3. Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.

4. Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

5. One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

The following construction conditions are applicable to the proposed modification:

**General Construction Conditions**

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
Effective Date of the Permit

3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Commenced Construction

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(h)(2), this Significant Source Modification authorizes the construction of the new emission unit(s), when the Significant Source Modification has been issued.

Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source’s Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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 Monica Dick of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Monica Dick or extension (317) 234-1243 or dial (317) 234-1243.

Sincerely,

Josiah K. Balogun, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Wabash County
Wabash County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
Significant Source Modification
to a Part 70 Source

OFFICE OF AIR QUALITY

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: T169-38543-00009

Issued by: Josiah Balogun
Section Chief, Permits Branch
Office of Air Quality

Issuance Date:
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SECTION A  SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][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
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
Not 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(14)]

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

(a) One (1) coke-fired 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, a caustic injection system for control of SO2 emissions approved in 2012, and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(b) One (1) coke-fired 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. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(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. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected curing oven]
(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, with a maximum capacity of 7.0 tons of fiberized minerals per hour and consisting of the following equipment:

   (1) One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

   (2) Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

   (3) Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.

   (4) Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

   (5) One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(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.

Under 40 CFR 60, Subpart Dc, the #1 boiler is an affected facility.

Under 40 CFR 63, Subpart DDDDD, the #1 boiler is an affected facility.

(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.

(j) One (1) adhesive coating operation, identified as EU-P12, approved in 2010 for construction, using air-assisted airless spray application method, with a maximum capacity of 7 gallons per hour coating usage rate, using dry filters for particulate control, and exhausting to stack S-12.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source currently has the following insignificant activities, as defined in 326 IAC 2-7-1(21).

(a) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated
by one stationary source exceeds 2,000,000 British thermal units per hour.

(b) Combustion source flame safety purging on startup.

(c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons:

(1) One (1) storage tank, known as Tank 10, constructed in 1989, capacity, with a maximum capacity of 500 gallons of gasoline;

(d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month:

(1) One (1) storage tank, known as Tank 1, constructed in 1979, capacity, with a maximum capacity of 1,000 gallons of diesel fuel;

(e) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.

(f) Machining where an aqueous cutting coolant continuously floods the machining interface.

(g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;

(h) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38°C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(i) 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].

(j) Closed loop heating and cooling systems.

(k) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

(l) Noncontact cooling tower systems with either of the following: forced and induced draft cooling tower system not regulated under a NESHAP.

(m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(n) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(o) Conveyors as follows: conveyors for coke conveying of maximum capacity 80 tons of coke
(p) Asbestos abatement projects regulated by 326 IAC 14-10.

(q) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(r) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(s) On-site fire and emergency response training approved by the department.

(t) Other emergency equipment as follows: stationary fire pumps.

(1) one (1) diesel engine, with a maximum capacity of 0.153 MMBtu/hr, driving a fire protection water pump.

Under 40 CFR 63, Subpart ZZZZ, the diesel engine is considered an existing affected unit.

(u) Grinding and machining operations controlled with fabric filters with a design outlet grain loading less than or equal to 0.03 grains per actual cubic feet and a gas flow rate less than or equal to 4,000 actual cubic feet per minute including the following:

(1) Two (2) Band saws with particulates controlled by Donaldson Model 84 Dust Collectors;

(2) One (1) Forrest Band Saw with particulates controlled by Donaldson Model 84 Dust Collector;

(3) Multiple cutting/sizing stations with particulates controlled by a central bag style dust collection system.

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

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).
SECTION B  GENERAL CONDITIONS

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

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

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

(a)  This permit, T169-31618-00009, 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.

(b)  If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a)  the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b)  the emission unit to which the condition pertains permanently ceases operation.

B.4  Enforceability [326 IAC 2-7-7][IC 13-17-12]

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

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

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

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

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

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

(a)  The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b)  For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

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

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

The Permittee shall implement the PMPs.
A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

1. An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

2. The permitted facility was at the time being properly operated;

3. During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

4. For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

   within two (2) working days of the time when emission limitations were exceeded due to the emergency.
The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded

(a) All terms and conditions of permits established prior to T169-31618-00009 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.
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

   (1) That this permit contains a material mistake.

   (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

   (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:
(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) 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)(1) and (c)(1). 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) and (c)(1).

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

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

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

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

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

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

C.2 Opacity  [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.6 Asbestos Abatement Projects  [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]  
The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]  
(a) Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

(b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.10 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.11 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.12 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.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:
(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

1. initial inspection and evaluation;
2. recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
3. any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

1. monitoring results;
2. review of operation and maintenance procedures and records; and/or
3. inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

(II) CAM Response to excursions or exceedances.

1. Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.

2. 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, monitoring results, review of operation and maintenance procedures and records,
and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) CAM recordkeeping requirements.

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements
of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6][326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-2][40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
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.

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

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

2. The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

1. The name, address, and telephone number of the major stationary source.

2. The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

3. The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

4. Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

**Stratospheric Ozone Protection**

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.
SECTION D.1  EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

(a) One (1) 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, a caustic injection system for control of SO$_2$ emissions approved in 2012, and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(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 SO$_2$ emissions, and a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(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. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected curing oven]

(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;

(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.

(j) One (1) adhesive coating operation, identified as EU-P12, approved in 2010 for construction, using air-assisted airless spray application method, with a maximum capacity of 7 gallons per hour coating usage rate, using dry filters for particulate control, and exhausting to stack S-12.

(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]

(a) 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, and #2 Line cooling section, identified as EU-P10, shall not exceed the emission limit shown in the table below:
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.

(b) Pursuant to 326 IAC 6-3-2(d), particulate from EU-P12 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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 SO\(_2\) emission rates at Cupola #2 and Cupola #4 shall be limited such that the total SO\(_2\) 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.

Compliance with this limit shall ensure that the increase in SO\(_2\) 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(12)]
A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 SO\(_2\) Emissions Determinations [326 IAC 2-2]
Compliance status with Condition D.1.2 shall be determined as follows:

(a) SO\(_2\) emissions from EU-P2A and EU-P4A shall be calculated using the following equation:

\[ E = \left[ (EF_{2U} \times P_{2U}) + (EF_{4U} \times P_{4U}) + (EF_{2C1} \times P_{2C1}) + (EF_{4C1} \times P_{4C1}) + (EF_{4C2} \times P_{4C2}) + (EF_{2C3} \times P_{2C3}) + (EF_{4C3} \times P_{4C3}) \right] \times \frac{1}{2,000} \]

Where:
\[
E = \text{SO}_2 \text{ emissions in tons per month} \\
EF = \text{SO}_2 \text{ emission factor in lb/ton} \\
P = \text{monthly cupola production in tons}
\]

Where:  
\[2U = \text{Uncontrolled Cupola #2 (EU-P2)}\]  
\[4U = \text{Uncontrolled Cupola #4 (EU-P4)}\]  
\[2C1 = \text{Controlled Cupola #2 (EU-P2), when using lime as the caustic media}\]  
\[4C1 = \text{Controlled Cupola #4 (EU-P4), when using lime as the caustic media}\]  
\[4C2 = \text{Controlled Cupola #4 (EU-P4), when using sodium bicarbonate as the caustic media}\]  
\[2C3 = \text{Controlled Cupola #2 (EU-P2) when using lime as the caustic media and an alternate fuel.}\]  
\[4C3 = \text{Controlled Cupola #4 (EU-P4) when using lime as the caustic media and an alternate fuel.}\]

(b) Within 60 days of completion of SO2 testing using EPA Method 6C, Thermafiber, Inc. shall establish new SO2 emission factors (in pounds per ton of melt) identified in paragraph (a) as EF_{2C1} and EF_{4C1} and use those factors for calculation of actual or potential SO2 until they are superseded by factors established by more recent testing.

(c) If an alternative fuel blend or caustic material is to be used, a further assessment to establish alternate SO2 emission factors for that fuel blend (identified in the equation in paragraph (a) as EF_{2C3} and EF_{4C3}) shall be made. The emission factors for such alternate fuel blend or caustic material shall be established by conducting testing using EPA Method 6C for at least 30 days (including at least 24 days of actual operation) on the new fuel or caustic material.

(d) In order to use a lower caustic injection rate or increase the amount of alternate fuel in the fuel blend (based on the most recent stack tests), new emission factors shall be established using three one-hour tests using EPA Method 6C.

(e) After results from the stack test 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) Pursuant to SSM 169-27407-00009 (issued June 30, 2009) and SPM 169-27436-00009 (issued July 22, 2009), and in order to demonstrate compliance with Condition D.1.2 - PSD Minor Limitations, the Permittee shall conduct performance tests on EU-P2A (uncontrolled only) and EU-P4A (controlled with sodium bicarbonate and uncontrolled) to verify the emission factors for SO2 emissions, utilizing methods as approved by the Commissioner.

(b) Not later than ninety (90) days after the issuance date of this permit, Part 70 Operating Permit Renewal No. 169-31618-00009, the Permittee shall conduct performance tests on EU-P2A (controlled with lime) and EU-P4A (controlled with lime) to verify the emission factors for SO2 emissions, utilizing methods as approved by the Commissioner.

(c) These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(d) Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
D.1.6 Caustic Injection System Operation [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

The caustic injection systems shall be operated on each Cupola during production consistent with the technological limitations, manufacturer's specifications and good engineering practices for such equipment.

D.1.7 Reserved

D.1.8 Particulate Matter (PM)

(a) In order to comply with Condition D.1.1(a), 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) blowchambers, identified as EU-P6 and EU-P8, 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring

(a) Reserved

(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 reading established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An
injection rate that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(c) The Permittee shall record the caustic injection rate used in conjunction with the Cupola #2, at least once per day when the Cupola #2 is in operation when exhausting to the atmosphere. When for any one reading, the injection rate is below the reading established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. An injection rate that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure drops and caustic injection rates shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced 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 stack S-12 while EU-P12 is in operation and the blowchamber stacks S4 and S6 while one or more of the blowchambers are in operation. If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the blowchamber and EU-P12 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.13 Record Keeping Requirements

(a) To document the compliance status 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, 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) Reserved

(c) To document the compliance status with Conditions D.1.10(b) and D.1.10(c), the Permittee shall maintain daily records of the caustic injection rate controlling Cupola #2 and 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) To document the compliance status with Condition D.1.12, the Permittee shall maintain a log of weekly particulate observations, and daily and monthly inspection of the filters.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.14 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
SECTION D.2  EMISSIONS UNIT OPERATION CONDITION

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]

(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 the modification approved under SPM 169-24879-00009, issued on September 18, 2007.

(b) The PM\sub{10} 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 PM\sub{10} emissions to less than fifteen (15) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification approved under SPM 169-24879-00009, issued on September 18, 2007.

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:

\[
E = 4.10 \ P^{0.67}
\]

Where:

\[E = \text{rate of emission in pounds per hour and} \]
\[P = \text{process weight rate in tons per hour}\]

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan (PMP) is required for the fiber bond cutting operation (EU-P30) and its control device. Section B - Preventive Maintenance Plan contains the Permittee’s obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.4 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced 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 the compliance status 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 the compliance status 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) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.
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

Under 40 CFR 63, Subpart DDDDD, the #1 boiler is an affected facility.

(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 6-2-4]

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:

\[
P_t = \frac{1.09}{Q^{0.26}}
\]

Where:

\( P_t \) = 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.
SECTION D.4  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Specifically Regulated Insignificant Activities

(k) 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

(q) Conveyors as follows: conveyors for coke conveying of maximum capacity 80 tons of coke per day [326 IAC 6-3-2].

(w) Grinding and machining operations controlled with fabric filters with a design outlet grain loading less than or equal to 0.03 grains per actual cubic feet and a gas flow rate less than or equal to 4,000 actual cubic feet per minute including the following:

(1) Two (2) Band saws with particulates controlled by Donaldson Model 84 Dust Collectors;

(2) One (1) Forrest Band Saw with particulates controlled by Donaldson Model 84 Dust Collector;

(3) Multiple cutting/sizing stations with particulates controlled by a central bag style dust collection system. [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]

(a) 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:

\[ E = 4.10 \times P^{0.67} \]

Where: \( P \) = process weight in tons/hr and \( E \) = rate of emission in pounds per hour.

(b) 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:

\[ E = 4.10 \times P^{0.67} \]

Where: \( P \) = process weight in tons/hr and
E = rate of emission in pounds per hour.

(c) Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the particulate matter (PM) emissions from the grinding and machining operations 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:  
\[ P = \text{process weight in tons/hr} \]
\[ E = \text{rate of emission in pounds per hour.} \]
SECTION D.5  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) One (1) #2 line trimming/sizing section, identified as EU-P9, with a maximum capacity of 7.0 tons of fiberized minerals per hour, and consisting of the following equipment:

(1) One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(2) Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(3) Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.

(4) Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(5) One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(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.5.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the particulate emissions from #2 line trimming/sizing section, identified as EU-P9 shall comply with the following:

(a) The PM emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7, shall be less than 4.10 pounds per hour.

(b) The PM_{10} emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall be less than 1.93 pounds per hour.

(c) The PM_{2.5} emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall be less than 0.95 pounds per hour.

Compliance with these limits combined with the potential to emit PM, PM_{10}, and PM_{2.5} from other emission units, will ensure that the PM, PM_{10}, and PM_{2.5} emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw are less than 25, 15 and 10 tons per year, respectively and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2017 modification.

D.5.2 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 allowable particulate matter emissions from the #2 line trimming/sizing section, identified as EU-P9 shall be limited to the following:
## D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

### D.5.4 Particulate Control

In order to ensure compliance with Condition D.5.1, the baghouse, identified as CE7 for PM, PM10, and PM2.5 control shall be in operation and control emissions from the #2 line trimming/sizing section, identified as EU-P9 at all times the fly saw, horizontal band saws, slitter saws, and guillotine saw on #2 line trimming/sizing section, identified as EU-P9 are in operation.

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.5.5 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Bag failure can be 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, dust traces or triboflows.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Process weight (tons/hr)</th>
<th>Allowable Limits (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2 line trimming/sizing section (EU-P9)</td>
<td>7.0</td>
<td>15.1</td>
</tr>
</tbody>
</table>

The pound per hour allowable was calculated with the following 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.5.6 Testing Requirements [326 IAC 2-1.1-11]

Not later than 180 days after installation of the new #2 line trimming/sizing section, identified as EU-P9, the Permittee shall perform PM, PM10, and PM2.5 testing on the baghouse, identified as CE7, utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

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

D.5.7 Parametric Monitoring

The Permittee shall record the pressure drop across baghouse CE7 used in conjunction with the #2 line trimming/sizing section, EU-P9, at least once per day when the associated facility is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.2 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments 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 or replaced at least once every six (6) months.

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

D.5.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.7 - Parametric Monitoring - baghouse, the Permittee shall maintain daily records of pressure drop across the baghouse, identified as CE7. 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).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.
SECTION E.1 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, a caustic injection system for control of SO\textsubscript{2} emissions approved in 2012, and a baghouse, exhausting through Stack S1, constructed in 2003, with a maximum capacity of 8.5 tons of minerals per hour. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(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 SO\textsubscript{2} emissions, and a baghouse, exhausting through Stack S3, constructed in 2003, with a maximum capacity of 9.5 tons of minerals per hour. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected cupola]

(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. [Under 40 CFR 63, Subpart DDD, this is considered an existing affected curing oven]

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

National Emissions Standards for Hazardous Air Pollutants


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 applicable 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 (National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production) Requirements [326 IAC 20-46][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 (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 20-46, for the existing mineral wool cupolas, identified as EU-P2, EU-P4 and curing oven, identified as EU-P7, as follows:

(a) 40 CFR 63.1175
(b) 40 CFR 63.1176
(c) 40 CFR 63.1177
(d) 40 CFR 63.1178 (a)(1), (b)(1), and (b)(2),
(e) 40 CFR 63.1179
(f) 40 CFR 63.1180 (a), (c), and (d)
(g) 40 CFR 63.1181
(h) 40 CFR 63.1183
(i) 40 CFR 63.1184
(j) 40 CFR 63.1185
(k) 40 CFR 63.1186
(l) 40 CFR 63.1187
(m) 40 CFR 63.1188 (a), (b), (c), (e), (f), (g), (h), and (i)
(n) 40 CFR 63.1189 (a), (b), (c), (d), (e), (g), and (h)
(o) 40 CFR 63.1190
(p) 40 CFR 63.1191
(q) 40 CFR 63.1192
(r) 40 CFR 63.1193
(s) 40 CFR 63.1194
(t) 40 CFR 63.1195
(u) 40 CFR 63.1196
(v) Table 1 to Subpart DDD of Part 63 - Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart DDD of Part 63 - the applicable portions
(w) Appendix A to Subpart DDD of Part 63—Free Formaldehyde Analysis of Insulation Resins by the Hydroxylamine Hydrochloride Method
SECTION E.2  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

Under 40 CFR 60, Subpart Dc, the #1 boiler is an affected facility.

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

New Source Performance Standards (NSPS)

E.2.1 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue,
MC 61-53 IGCN 1003
Indianapolis, Indiana  46204-2251

E.2.2 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 (included as Attachment B in this permit) for the #1 Boiler, identified as EU-P11 as follows:

(1) 40 CFR 60.40c (a)(b);
(2) 40 CFR 60.41c; and
(3) 40 CFR 60.48c (a)(1), (g)(i)(j).
SECTION E.3  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(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 Under 40 CFR 63, Subpart DDDDD, the #1 boiler is an affected facility.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP)


(a) Pursuant to 40 CFR 63.800, 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 unless otherwise specified in 40 CFR 63, Subpart DDDDD (National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters).

E.3.2 Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment D of this permit):

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490
(4) 40 CFR 63.7495(b), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3)
(7) 40 CFR 63.7501
(8) 40 CFR 63.7505(a)
(9) 40 CFR 63.7515(e)
(10) 40 CFR 63.7530 (d) and (e)
(11) 40 CFR 63.7540(a)(10), (a)(11), (a)(12), (b)
(12) 40 CFR 63.7545(a), (b), (h)
(13) 40 CFR 63.7550(a), (b), (c), (d), (f)
(14) 40 CFR 63.7555(a)
(15) 40 CFR 63.7560
(16) 40 CFR 63.7565
(17) 40 CFR 63.7570
(18) 40 CFR 63.7575
(19) Table 3 to Subpart DDDDD of Part 63, items 1, 2 and 3
(20) Table 9 to Subpart DDDDD of Part 63
(21) Table 10 to Subpart DDDDD of Part 63
SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(v) Other emergency equipment as follows: stationary fire pumps.

(1) one (1) diesel engine, with a maximum capacity of 0.153 MMBtu/hr, driving a fire protection water pump.

Under 40 CFR 63, Subpart ZZZZ, the diesel powered fire pump is an affected facility.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP)


(a) Pursuant to 40 CFR 63.800, 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 unless otherwise specified in 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

E.4.2 NESHAP Subpart ZZZZ Requirements [40 CFR 63, Subpart ZZZZ][326 IAC 20-82]

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as 'Attachment C'), which are incorporated by reference as 326 IAC 20-82:

(1) 40 CFR § 63.6580
(2) 40 CFR § 63.6585(a), (b)
(3) 40 CFR § 63.6590(a)(1)(ii)
(4) 40 CFR § 63.6595
(5) 40 CFR § 63.6602
(6) 40 CFR § 63.6605
(7) 40 CFR § 63.6625(e)(2),(f),(h), (i)
(8) 40 CFR § 63.6640(a), (b), (e), (f)
(9) 40 CFR § 63.6645(a)(5)
(10) 40 CFR § 63.6655(e), (f)(1)
(11) 40 CFR § 63.6660
(12) 40 CFR § 63.6665
(13) 40 CFR § 63.6670
(13) 40 CFR § 63.6675
(14) Table 2c to Subpart ZZZZ, (applicable portions)
(15) Table 8 to Subpart ZZZZ, (applicable portions)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

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:
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

<table>
<thead>
<tr>
<th>Date/Time Emergency started:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Emergency was corrected:</td>
</tr>
<tr>
<td>Was the facility being properly operated at the time of the emergency?</td>
</tr>
<tr>
<td>Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NOₓ, CO, Pb, other:</td>
</tr>
<tr>
<td>Estimated amount of pollutant(s) emitted during emergency:</td>
</tr>
<tr>
<td>Describe the steps taken to mitigate the problem:</td>
</tr>
<tr>
<td>Describe the corrective actions/response steps taken:</td>
</tr>
<tr>
<td>Describe the measures taken to minimize emissions:</td>
</tr>
</tbody>
</table>

If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: __________________________
Title / Position: ____________________________
Date: ____________________________
Phone: ____________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Thermafiber Inc., Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Part 70 Permit No.: T169-31618-00009
Facility: Cupola #2 and Cupola #4 and the thermal oxidizers EU-P2A and EU-P4A
Parameter: SO₂ emissions
Limit: 620 tons per 12 consecutive month period

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 1</td>
<td></td>
</tr>
<tr>
<td>Month 2</td>
<td></td>
</tr>
<tr>
<td>Month 3</td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

  Deviation has been reported on:

Submitted by: ____________________________________________
Title / Position: _______________________________________
Signature: _____________________________________________
Date: _________________________________________________
Phone: _______________________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Thermafiber Inc., Wabash Plant
Source Address: 3711 Mill Street, Wabash, Indiana 46992
Part 70 Permit No.: T169-31618-00009

Months: ______ to ______ Year: ___

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C -General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Deviations:</td>
<td></td>
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<tr>
<td>Probable Cause of Deviation:</td>
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<tr>
<td>Response Steps Taken:</td>
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<td></td>
<td></td>
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<tr>
<td>Response Steps Taken:</td>
<td></td>
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<td>Permit Requirement (specify permit condition #)</td>
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</tr>
<tr>
<td>Date of Deviation:</td>
<td>Duration of Deviation:</td>
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<tr>
<td>Number of Deviations:</td>
<td></td>
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<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
<td></td>
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<tr>
<td>Response Steps Taken:</td>
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</tbody>
</table>

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<td></td>
</tr>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
</table>

Form Completed by: ________________________________
Title / Position: ________________________________
Date: ________________________________
Phone: ________________________________
Source Description and Location

Source Name: Thermafiber Inc., Wabash Plant
Source Location: 3711 Mill Street, Wabash, Indiana 46992
County: Wabash
SIC Code: 3296 (Mineral Wool)
Operation Permit No.: T169-31618-00009
Operation Permit Issuance Date: June 25, 2013
Significant Source Modification No.: 169-38543-00009
Significant Permit Modification No.: 169-38562-00009
Permit Reviewer: Monica Dick

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T169-31618-00009 on June 25, 2013. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Wabash County:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 5, 2005, for the annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Cannot be classified or better than national standards.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011.</td>
</tr>
</tbody>
</table>

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards
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) PM₂.₅
Wabash County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Wabash County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as 'Major' based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.
Source Status - Existing Source

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:

<table>
<thead>
<tr>
<th>Process/ Emission Unit</th>
<th>Source-Wide Emissions Before Modification (ton/year)</th>
<th>PM</th>
<th>PM_{10}^*</th>
<th>PM_{2.5}^{**}</th>
<th>SO_{2}</th>
<th>NO_{x}</th>
<th>VOC</th>
<th>CO</th>
<th>GHGs</th>
<th>Total HAPs</th>
<th>Worst Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coke-fueled Cupola #2 EU-P2</td>
<td>74.22 35.63 35.63 &lt;620</td>
<td>49.06</td>
<td>0.12</td>
<td>76.6(^1)</td>
<td>33,238</td>
<td>0.9(^1)</td>
<td>0.9 (carbonyl sulfide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coke-fueled Cupola #4 EU-P4</td>
<td>65.29 33.95 33.95</td>
<td>56.06</td>
<td>0.14</td>
<td>87.6(^1)</td>
<td>37,149</td>
<td>1.05(^1)</td>
<td>1.05 (carbonyl sulfide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal Oxidizers/EU-P2A and EU-P4A</td>
<td>0.2 0.7 0.7</td>
<td>8.6</td>
<td>0.5</td>
<td>7.2</td>
<td>10,328</td>
<td>Negl.</td>
<td>Negl.</td>
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<tr>
<td>Blowchamber #4 EU-P6</td>
<td>58.01 41.34 41.34 3.05</td>
<td>0.0</td>
<td>29.01</td>
<td>0.0</td>
<td>--</td>
<td>4.56</td>
<td>4.56</td>
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<tr>
<td>Curing Oven EU-P7</td>
<td>0.60 0.57 0.57 1.84</td>
<td>0.25</td>
<td>1.53</td>
<td>0.0</td>
<td>2,943</td>
<td>Negl.</td>
<td>Negl.</td>
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<tr>
<td>Blowchamber #2 EU-P8</td>
<td>25.84 25.31 25.31 26.67</td>
<td>0.0</td>
<td>27.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.34</td>
<td>0.34</td>
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<tr>
<td>#2 Line trimming/Sizing EU-P9</td>
<td>15.2 15.2 15.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>--</td>
<td>0.0</td>
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<tr>
<td>#2 Line Cooling EU-P10</td>
<td>73.58 58.25 58.25 2.08</td>
<td>0.0</td>
<td>1.2</td>
<td>0.0</td>
<td>--</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Fiber bond cutting EU-P30 (Baghouse)</td>
<td>7.88 7.88 7.88</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>--</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
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<tr>
<td>Boiler #1</td>
<td>0.1 0.4 0.4 0.03</td>
<td>5.5</td>
<td>0.3</td>
<td>4.6</td>
<td>6,454</td>
<td>0.11</td>
<td>0.004</td>
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<tr>
<td>Insignificant Activities</td>
<td>0.2 0.2 0.2 0.2</td>
<td>3.0</td>
<td>0.5</td>
<td>0.6</td>
<td>1,962</td>
<td>Negl.</td>
<td>Negl.</td>
<td></td>
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</tr>
<tr>
<td><strong>Total PTE of Entire Source</strong></td>
<td>321.1 219.4 219.4 &lt;653.9 122.5 60.9 176.6 92,141 &lt;25 &lt;10</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Title V Major Source Thresholds</strong></td>
<td>NA 100 100 100 100 100 100 100,000 CO_{2}e 25 10</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>PSD Major Source Thresholds</strong></td>
<td>250 250 250 250 250 250 250 100,000 CO_{2}e NA NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

negl. = negligible

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**PM_{2.5} listed is direct PM_{2.5}.

1 Based on the actual-to-projected-actual test done in SSM 169-27436-00009

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, PM and SO2 is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25)
tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based on the TSD of Part 70 Operating Permit Renewal No. T169-31618-00009 on June 25, 2013.

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Thermafiber Inc., Wabash Plant on May 12, 2017, relating to the replacement of some of the saws associated with the Line #2 trimming section, identified as EU-P9 as well as adding additional new saws and the removal of old saws from the plant.

The following is a list of new and modified emission unit and pollution control device:

(a) One (1) #2 line trimming/sizing section, identified as EU-P9, with a maximum capacity of 7.0 tons of fiberized minerals per hour and consisting of the following equipment:

1. One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
2. Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
3. Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.
4. Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
5. One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**Permit Level Determination - Part 70 Modification to an Existing Source**

Pursuant to 326 IAC 2-1.1-1(12), 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 and 326 IAC 2-7-11. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.
### PTE Before Controls of the New Emission Units (ton/year)

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_2)</th>
<th>NO(_X)</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP</th>
<th>Combined HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slitter Saw 1</td>
<td>4.80</td>
<td>4.80</td>
<td>4.80</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Slitter Saw 2</td>
<td>4.92</td>
<td>4.92</td>
<td>4.92</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Slitter Saw 3</td>
<td>5.04</td>
<td>5.04</td>
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</tr>
<tr>
<td>Slitter Saw 4</td>
<td>4.62</td>
<td>4.62</td>
<td>4.62</td>
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<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Slitter Saw 5</td>
<td>4.66</td>
<td>4.66</td>
<td>4.66</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>--</td>
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</tr>
<tr>
<td>Slitter Saw 6</td>
<td>4.75</td>
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</tr>
<tr>
<td>Slitter Saw 7</td>
<td>5.29</td>
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<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fly Saw</td>
<td>16.16</td>
<td>16.16</td>
<td>16.16</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>Guillotine Saw</td>
<td>2.92</td>
<td>2.92</td>
<td>2.92</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Horizontal Band Saw 1</td>
<td>6.96</td>
<td>6.96</td>
<td>6.96</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Horizontal Band Saw 2</td>
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<td>6.96</td>
<td>6.96</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Horizontal Band Saw 3</td>
<td>6.96</td>
<td>6.96</td>
<td>6.96</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vertical Saw 1</td>
<td>2.91</td>
<td>2.91</td>
<td>2.91</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vertical Saw 2</td>
<td>2.91</td>
<td>2.91</td>
<td>2.91</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>Total Emissions:</td>
<td>79.85</td>
<td>79.85</td>
<td>79.85</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Appendix A of this TSD reflects the potential emissions of the modification in detail.

Pursuant to 326 IAC 2-7-10.5(g)(4), a Significant Source Modification is required because this modification has the potential to emit PM/PM10/direct PM2.5 at greater than or equal to twenty-five (25) tons per year.

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

**Emissions from the two (2) vertical saws**

The vertical saws, two hammermills (also referred to as trim choppers), the fan and the blow chamber are part of the same process, therefore, these units can be referred to as a Process.

**Pursuant to 326 IAC 2-1.1-1(13):**

(13) "Process" means any combination of equipment that is physically connected and operated in sequence that, when the process is operated, could operate independently to:
(A) generate energy;
(B) refine or produce materials or parts; or
(C) produce a finished product.

The mineral wool insulation pack’s edges are trimmed by the two vertical band saws. Edge trim from each side of the insulation pack is pulled into ductwork connected to an enclosed hammermill (trim chopper). The area where edge trim is pulled into ductwork and sent to the hammermills (trim choppers) is not fully enclosed, and negligible loss of mineral wool occurs. Edge trim is broken apart in the hammermills (trim choppers); the mineral wool is then pulled by a fan into a common duct and air-
conveyed (pushed) into the blow chamber. This material joins mineral wool fibers being formed in the blow chamber, and mineral wool fibers are drawn down onto a newly-formed insulation pack of binder-coated mineral wool. There is no change to how edge trim is recycled back into the blow chamber. Current blow chamber particulate (PM) emissions include mineral wool fibers from edge trim that did not become part of the insulation pack when sent back to the blow chamber.

Negligible PM emissions occur at the point where edge trim enters ductwork and is fed to the hammermills (trim choppers). IDEM has reviewed the information provided by the source and determined that it is reasonable to conservatively estimate that 5% of the vertical saws' potential PM emissions do not enter the ductwork to the hammermills (trim choppers). The 5% estimated PM emissions equals 2.91 tons per year, per vertical saw. This potential to emit from the two (2) vertical saws does not change the outcome of the permit level or the limits for the new #2 line trimming/sizing section. The definition of “Potential to emit” can be seen below.

**Pursuant to 326 IAC 2-1.1-1(12):**

(12) "Potential to emit" means the maximum capacity of a stationary source or emissions 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, the department, or the appropriate local air pollution control agency. The term does not alter or affect the use of potential to emit for any other purpose under the CAA, (or "capacity factor" as used in Title IV of the CAA) or the regulations promulgated thereunder.
The table below summarizes the potential to emit of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM (ton/year)</th>
<th>PM&lt;sub&gt;10&lt;/sub&gt;</th>
<th>PM&lt;sub&gt;2.5&lt;/sub&gt;*</th>
<th>SO&lt;sub&gt;2&lt;/sub&gt;</th>
<th>NO&lt;sub&gt;x&lt;/sub&gt;</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slitter Saw 1</td>
<td>17.94</td>
<td>8.44</td>
<td>4.17</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Slitter Saw 2</td>
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<td>--</td>
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<tr>
<td>Slitter Saw 3</td>
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<tr>
<td>Slitter Saw 4</td>
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<td>--</td>
</tr>
<tr>
<td>Slitter Saw 5</td>
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<td>--</td>
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<tr>
<td>Slitter Saw 6</td>
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<td>--</td>
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<tr>
<td>Slitter Saw 7</td>
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<td>--</td>
</tr>
<tr>
<td>Fly Saw</td>
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<td>--</td>
</tr>
<tr>
<td>Guillotine Saw</td>
<td>--</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Horizontal Band Saw 1</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Horizontal Band Saw 2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vertical Saw 1</td>
<td>2.91</td>
<td>2.91</td>
<td>2.91</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vertical Saw 2</td>
<td>2.91</td>
<td>2.91</td>
<td>2.91</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total for Modification</strong></td>
<td><strong>23.76</strong></td>
<td><strong>14.26</strong></td>
<td><strong>9.99</strong></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

Significant Levels  
*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

(a) This modification to an existing major PSD stationary source is not major because the emissions increase of each PSD regulated pollutant is less than the PSD significant level. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(b) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable, the particulate emissions from #2 line trimming/sizing section, identified as EU-P9 shall comply with the following:

(a) The PM emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7, shall not exceed 4.1 pounds per hour.

(b) The PM<sub>10</sub> emissions from the slitter saws, fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall not exceed 1.93 pounds per hour.

(c) The PM<sub>2.5</sub> emissions from the slitter saws, fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall not exceed 0.95 pounds per hour.

Compliance with these limits combined with the potential to emit PM, PM10, and PM2.5 from other emission units, will ensure that the PM, PM10, and PM2.5 emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw are less than 25, 15 and 10 tons per year, respectively and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2017 modification.
The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

<table>
<thead>
<tr>
<th>Process/Emission Unit</th>
<th>Source-Wide Emissions After Modification (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>Coke-fueled Cupola #2 EU-P2</td>
<td>74.22</td>
</tr>
<tr>
<td>Coke-fueled Cupola #4 EU-P4</td>
<td>65.29</td>
</tr>
<tr>
<td>Thermal Oxidizers/EU-P2A and EU-P4A</td>
<td>0.2</td>
</tr>
<tr>
<td>Blowchamber #4 EU-P6</td>
<td>58.01</td>
</tr>
<tr>
<td>Curing Oven EU-P7</td>
<td>0.6</td>
</tr>
<tr>
<td>Blowchamber #2 EU-P8</td>
<td>25.84</td>
</tr>
<tr>
<td>#2 Line trimming/Sizing EU-P9</td>
<td>15.2</td>
</tr>
<tr>
<td>#2 Line Cooling EU-P10</td>
<td>73.58</td>
</tr>
<tr>
<td>Fiber bond cutting EU-P30 (Baghouse)</td>
<td>7.88</td>
</tr>
<tr>
<td>Boiler #1</td>
<td>0.1</td>
</tr>
<tr>
<td>Insignificant Activities</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total PTE of Entire Source</strong></td>
<td>321.1</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
</tr>
</tbody>
</table>

negl. = negligible
\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
\**PM\textsubscript{2.5} listed is direct PM\textsubscript{2.5}.

The revised Table - Source-Wide Emissions Before Modification (ton/year) is included below.
<table>
<thead>
<tr>
<th>Process/ Emission Unit</th>
<th>PM</th>
<th>PM\textsubscript{10}\textsuperscript{*}</th>
<th>PM\textsubscript{2.5}\textsuperscript{**}</th>
<th>SO\textsubscript{2}</th>
<th>NO\textsubscript{x}</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Worst Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coke-fueled Cupola #2 EU-P2</td>
<td>74.22</td>
<td>35.63</td>
<td>35.63</td>
<td>&lt;620</td>
<td>49.06</td>
<td>0.12</td>
<td>76.6\textsuperscript{1}</td>
<td>0.9\textsuperscript{1} (carbonyl sulfide)</td>
<td></td>
</tr>
<tr>
<td>Coke-fueled Cupola #4 EU-P4</td>
<td>65.29</td>
<td>33.95</td>
<td>33.95</td>
<td>&lt;620</td>
<td>56.06</td>
<td>0.14</td>
<td>87.6\textsuperscript{1}</td>
<td>1.05\textsuperscript{1} (carbonyl sulfide)</td>
<td></td>
</tr>
<tr>
<td>Thermal Oxidizers/EU- P2A and EU-P4A</td>
<td>0.2</td>
<td>0.7</td>
<td>0.7</td>
<td>8.6</td>
<td>0.5</td>
<td>7.2</td>
<td>Negl.</td>
<td>Negl.</td>
<td></td>
</tr>
<tr>
<td>Blowchamber #4 EU-P6</td>
<td>58.01</td>
<td>41.34</td>
<td>41.34</td>
<td>3.05</td>
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<td>29.01</td>
<td>0.0</td>
<td>4.56</td>
<td>4.56</td>
</tr>
<tr>
<td>Curing Oven EU- P7</td>
<td>0.60</td>
<td>0.57</td>
<td>0.57</td>
<td>1.84</td>
<td>0.25</td>
<td>1.53</td>
<td>0.0</td>
<td>Negl.</td>
<td>Negl.</td>
</tr>
<tr>
<td>Blowchamber #2 EU-P8</td>
<td>25.84</td>
<td>25.31</td>
<td>25.31</td>
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<td>0.34</td>
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<tr>
<td>#2 Line trimming/Sizing EU-P9</td>
<td>23.77</td>
<td>14.27</td>
<td>9.99</td>
<td>0.0</td>
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<tr>
<td>#2 Line Cooling EU-P10</td>
<td>73.58</td>
<td>58.25</td>
<td>58.25</td>
<td>2.08</td>
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<td>1.2</td>
<td>0.0</td>
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<tr>
<td>Fiber bond cutting EU-P30 (Baghouse)</td>
<td>7.88</td>
<td>7.88</td>
<td>7.88</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
<tr>
<td>Boiler #1</td>
<td>0.1</td>
<td>0.4</td>
<td>0.4</td>
<td>0.03</td>
<td>5.5</td>
<td>0.3</td>
<td>4.6</td>
<td>0.11</td>
<td>0.004</td>
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<tr>
<td>Insignificant Activities</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>3.0</td>
<td>0.5</td>
<td>0.6</td>
<td>Negl.</td>
<td>Negl.</td>
</tr>
<tr>
<td><strong>Total PTE of Entire Source</strong></td>
<td><strong>329.69</strong></td>
<td><strong>218.50</strong></td>
<td><strong>214.22</strong></td>
<td><strong>&lt;653.9</strong></td>
<td><strong>122.5</strong></td>
<td><strong>60.9</strong></td>
<td><strong>176.6</strong></td>
<td><strong>&lt;25</strong></td>
<td><strong>&lt;10</strong></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Source</th>
<th>PM</th>
<th>PM\textsubscript{10}\textsuperscript{*}</th>
<th>PM\textsubscript{2.5}\textsuperscript{**}</th>
<th>SO\textsubscript{2}</th>
<th>NO\textsubscript{x}</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>NA</td>
</tr>
</tbody>
</table>

negl. = negligible
*Under the Part 70 Permit Program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**PM\textsubscript{2.5} listed is direct PM\textsubscript{2.5}.

This existing major PSD stationary source will continue to be major under 326 IAC 2-2 because at least one pollutant, PM and SO\textsubscript{2} have emissions equal to or greater than the PSD major source threshold.

**Federal Rule Applicability Determination**

Due to the modification at this source, federal rule applicability has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants 40 CFR 60, Subpart PPP and 326 IAC 12, are not
included in the permit for this operation because fly saw, horizontal band saws, vertical band saws, slitter saws, and guillotine saw identified as EU-P9 does not meet the definition of a wool fiberglass insulation manufacturing line because the operation does not produce insulation material composed of glass fibers made from glass produced or melted at the source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production, 40 CFR 63, Subpart DDD and 326 IAC 20-46 are not included in the permit for this new operation, because the fly saw, horizontal band saws, vertical band saws, slitter saws, and guillotine saw identified as EU-P9 is not a cupolas or curing oven.

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

Compliance Assurance Monitoring (CAM):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); 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 CAM to each existing emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-P9/PM*</td>
<td>Baghouse</td>
<td>326 IAC 6-3-2-(e)</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>EU-P9/PM10</td>
<td>Baghouse</td>
<td>326 IAC 2-2</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to EU-P9 as part of this modification.
State Rule Applicability Determination

Due to the modification at this source, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD)
   PSD applicability is discussed under the Permit Level Determination - PSD section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
   The operation of the new operation 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.

326 IAC 2-7-6(5) (Annual Compliance Certification)
   The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
   Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate matter emissions from the #2 line trimming/sizing section, identified as EU-P9, shall be limited to the following:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Process weight (tons/hr)</th>
<th>Allowable Limits (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2 line trimming/sizing section (EU-P9)</td>
<td>7.0</td>
<td>15.1</td>
</tr>
</tbody>
</table>

The pound per hour allowable was calculated with the following equation:

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.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Timeframe for Testing/Testing Condition</th>
<th>Control Device</th>
<th>Frequency of Testing</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-P9 emissions from Stack CE7</td>
<td>PM, PM10, &amp; PM2.5</td>
<td>No later than 180 days after installation</td>
<td>Baghouse</td>
<td>Every 5 years</td>
<td>326 IAC 2-2 and 326 IAC 6-3-2</td>
</tr>
</tbody>
</table>

#2 line trimming/sizing shall be stack tested to demonstrate compliance with the minor 326 IAC 2-2 (PSD) limits for PM, PM10, and PM2.5.

This monitoring condition is necessary because the baghouse for the #2 line trimming/sizing section, identified as EU-P9 must operate properly to assure compliance with the requirements of 326 IAC 6-3 (Process Operations) and 326 IAC 2-2 (PSD).

### Proposed Changes

The following changes listed below are due to the proposed modification. Deleted language appears as strikethrough text and new language appears as **bold** text:

**Change 1:** The modification to EU-P9 includes the addition of new saws and removal of old saws. The changes to the permit associated with the modification are shown below:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

---

(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 consisting of the following equipment:

1. **One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.**
2. **Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.**
3. **Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.**
4. **Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.**
5. **One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.**
SECTION D.1  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(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

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

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

(a) 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:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Process weight (tons/hr)</th>
<th>Allowable Limits (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blowchamber #4 EU-P6</td>
<td>8.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Blowchamber #2 EU-P8</td>
<td>8.4</td>
<td>17.1</td>
</tr>
<tr>
<td>Line trimming/sizing section #2 EU-P9</td>
<td>7.0</td>
<td>15.1</td>
</tr>
<tr>
<td>#2 Line cooling section EU-P10</td>
<td>7.0</td>
<td>15.1</td>
</tr>
</tbody>
</table>

D.1.7 Particulate Matter (PM) Reserved

(a) In order to comply with Condition D.1.1(a), 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.1.9 Visible Emissions Notations

(a) 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 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.

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. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned...
range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

---

**D.1.13 Record Keeping Requirements**

(a) To document the compliance status 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) Reserved To document the compliance status with Condition D.1.10(a) the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the #2 line trimmings/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).

---

**SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

(f) One (1) #2 line trimming/sizing section, identified as EU-P9, with a maximum capacity of 7.0 tons of fiberized minerals per hour. and consisting of the following equipment:

1. One (1) fly saw, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
2. Three (3) horizontal band saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
3. Two (2) vertical band saws, approved in 2017 for construction, with particulate emissions recycled back into the manufacturing process.
4. Seven (7) slitter saws, approved in 2017 for construction, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.
5. One (1) guillotine saw, constructed in 1955, replaced in 1978, and reconditioned in 2003, with particulate emissions controlled by baghouse CE7, and exhausting through stack S7.

(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.5.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable, the particulate emissions from #2 line trimmings/sizing section, identified as EU-P9 shall comply with the following:

(a) The PM emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7, shall be less than 4.10 pounds per hour.
(b) The PM\(_{10}\) emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall be less than 1.93 pounds per hour.

(c) The PM\(_{2.5}\) emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw, controlled by baghouse CE7 shall be less than 0.95 pounds per hour.

Compliance with these limits combined with the potential to emit PM, PM\(_{10}\), and PM\(_{2.5}\) from other emission units, will ensure that the PM, PM\(_{10}\), and PM\(_{2.5}\) emissions from the fly saw, horizontal band saws, slitter saws, and guillotine saw are less than 25, 15 and 10 tons per year, respectively and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2017 modification.

D.5.2 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 allowable particulate matter emissions from the #2 line trimming/sizing section, identified as EU-P9 shall be limited to the following:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Process weight (tons/hr)</th>
<th>Allowable Limits (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2 line trimming/sizing section (EU-P9)</td>
<td>7.0</td>
<td>15.1</td>
</tr>
</tbody>
</table>

The pound per hour allowable was calculated with the following equation:

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: 
\[ P = \text{process weight in tons/hr}; \] and \[ E = \text{rate of emission in pounds per hour}. \]

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

D.5.4 Particulate Control

In order to ensure compliance with Condition D.5.1, the baghouse, identified as CE7 for PM, PM\(_{10}\), and PM\(_{2.5}\) control shall be in operation and control emissions from the #2 line trimming/sizing section, identified as EU-P9 at all times the fly saw, horizontal band saws, slitter saws, and guillotine saw on #2 line trimming/sizing section, identified as EU-P9 are in operation.

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.5.5 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down
immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Bag failure can be 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, dust traces or triboflows.

D.5.6 Testing Requirements [326 IAC 2-1.1-11]

Not later than 180 days after installation of the new #2 line trimming/sizing section, identified as EU-P9, the Permittee shall perform PM, PM10, and PM2.5 testing on the baghouse, identified as CE7, utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

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

D.5.7 Parametric Monitoring

The Permittee shall record the pressure drop across baghouse CE7 used in conjunction with the #2 line trimming/sizing section, EU-P9, at least once per day when the associated facility is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.2 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments 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 or replaced at least once every six (6) months.

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

D.5.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.7 - Parametric Monitoring - baghouse, the Permittee shall maintain daily records of pressure drop across the baghouse, identified as CE7. 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).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

***
Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on May 12, 2017.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 169-38543-00009. The operation of this proposed modification shall be subject to the conditions of the attached Significant Permit Modification No. 169-38562-00009.

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Monica Dick at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-1243 or toll free at 1-800-451-6027, extension (317) 234-1243.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.
## Appendix A: Emissions Calculations

### Emission Summary

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Uncontrolled Potential Emissions

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM  (tons/yr)</th>
<th>PM$_{10}$ (tons/yr)</th>
<th>PM2.5 (tons/yr)</th>
<th>SO$_2$ (tons/yr)</th>
<th>NOx (tons/yr)</th>
<th>VOC (tons/yr)</th>
<th>CO (tons/yr)</th>
<th>HAPs (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coke-fueled Cupola #2 EU-P2</td>
<td>687.27</td>
<td>329.90</td>
<td>329.90</td>
<td>536.11</td>
<td>59.57</td>
<td>1.49</td>
<td>9307.5</td>
<td>112.38</td>
</tr>
<tr>
<td>Coke-fueled Cupola #4 EU-P4</td>
<td>768.12</td>
<td>399.41</td>
<td>399.41</td>
<td>644.96</td>
<td>66.58</td>
<td>1.66</td>
<td>10402.5</td>
<td>125.05</td>
</tr>
<tr>
<td>Thermal Oxidizers EU-P2A and EU-P2B</td>
<td>0.16</td>
<td>0.65</td>
<td>0.65</td>
<td>0.05</td>
<td>8.59</td>
<td>0.47</td>
<td>7.21</td>
<td>0.16</td>
</tr>
<tr>
<td>Blowchamber #4 EU-P6</td>
<td>93.56</td>
<td>41.35</td>
<td>41.35</td>
<td>30.48</td>
<td>-</td>
<td>322.37</td>
<td>-</td>
<td>4.55</td>
</tr>
<tr>
<td>Curing Oven EU-P7</td>
<td>11.96</td>
<td>11.34</td>
<td>11.34</td>
<td>36.79</td>
<td>4.91</td>
<td>4.91</td>
<td>30.66</td>
<td>-</td>
</tr>
<tr>
<td>Blowchamber #2 EU-P8</td>
<td>29.74</td>
<td>29.13</td>
<td>29.13</td>
<td>26.67</td>
<td>-</td>
<td>27.59</td>
<td>-</td>
<td>0.34</td>
</tr>
<tr>
<td>#2 Line trimming/Sizing EU-P9</td>
<td>79.84</td>
<td>79.84</td>
<td>79.84</td>
<td>0.00</td>
<td>-</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>#2 Line Cooling EU-P10</td>
<td>73.58</td>
<td>58.25</td>
<td>58.25</td>
<td>2.08</td>
<td>-</td>
<td>1.23</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fiber bond cutting EU-P30 (Baghouse)</td>
<td>79</td>
<td>39</td>
<td>39</td>
<td>-</td>
<td>322.37</td>
<td>-</td>
<td>4.55</td>
<td>-</td>
</tr>
<tr>
<td>Boiler #1</td>
<td>0.1</td>
<td>0.4</td>
<td>0.4</td>
<td>0.03</td>
<td>5.5</td>
<td>0.3</td>
<td>4.6</td>
<td>0.11</td>
</tr>
<tr>
<td>Insignificant Activities</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
<td>0.2</td>
<td>3</td>
<td>0.5</td>
<td>0.6</td>
<td>neg</td>
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<tr>
<td><strong>Total Emissions</strong></td>
<td><strong>1823.4</strong></td>
<td><strong>989.9</strong></td>
<td><strong>989.9</strong></td>
<td><strong>1277.38</strong></td>
<td><strong>148.1</strong></td>
<td><strong>360.52</strong></td>
<td><strong>19753.07</strong></td>
<td><strong>242.6</strong></td>
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</table>

### Limited Potential Emissions

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM  (tons/yr)</th>
<th>PM$_{10}$ (tons/yr)</th>
<th>PM2.5 (tons/yr)</th>
<th>SO$_2$ (tons/yr)</th>
<th>NOx (tons/yr)</th>
<th>VOC (tons/yr)</th>
<th>CO (tons/yr)</th>
<th>HAPs (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coke-fueled Cupola #2 EU-P2</td>
<td>74.22</td>
<td>35.63</td>
<td>35.63</td>
<td>49.06</td>
<td>0.12</td>
<td>76.61</td>
<td>0.91</td>
<td>Negl.</td>
</tr>
<tr>
<td>Coke-fueled Cupola #4 EU-P4</td>
<td>65.29</td>
<td>33.95</td>
<td>33.95</td>
<td>56.06</td>
<td>0.14</td>
<td>87.61</td>
<td>1.051</td>
<td>Negl.</td>
</tr>
<tr>
<td>Thermal Oxidizers EU-P2A and EU-P2B</td>
<td>0.2</td>
<td>0.7</td>
<td>0.7</td>
<td>8.6</td>
<td>0.5</td>
<td>7.2</td>
<td>Negl.</td>
<td>Negl.</td>
</tr>
<tr>
<td>Blowchamber #4 EU-P6</td>
<td>58.01</td>
<td>41.34</td>
<td>41.34</td>
<td>0</td>
<td>29.01</td>
<td>-</td>
<td>4.56</td>
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<tr>
<td>Curing Oven EU-P7</td>
<td>0.6</td>
<td>0.57</td>
<td>0.57</td>
<td>1.84</td>
<td>0.25</td>
<td>1.53</td>
<td>-</td>
<td>Negl.</td>
</tr>
<tr>
<td>Blowchamber #2 EU-P8</td>
<td>25.84</td>
<td>25.31</td>
<td>25.31</td>
<td>26.67</td>
<td>-</td>
<td>27.6</td>
<td>-</td>
<td>0.34</td>
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<tr>
<td>#2 Line trimming/Sizing EU-P9</td>
<td>23.75</td>
<td>14.25</td>
<td>9.98</td>
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<td>-</td>
<td>0</td>
<td>-</td>
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<td>#2 Line Cooling EU-P10</td>
<td>73.58</td>
<td>58.25</td>
<td>58.25</td>
<td>2.08</td>
<td>-</td>
<td>1.2</td>
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<tr>
<td>Fiber bond cutting EU-P30 (Baghouse)</td>
<td>7.88</td>
<td>7.88</td>
<td>7.88</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Boiler #1</td>
<td>0.1</td>
<td>0.4</td>
<td>0.4</td>
<td>0.03</td>
<td>5.5</td>
<td>0.3</td>
<td>4.6</td>
<td>0.11</td>
</tr>
<tr>
<td>Insignificant Activities</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>3</td>
<td>0.5</td>
<td>0.6</td>
<td>Negl.</td>
</tr>
<tr>
<td><strong>Total Emissions</strong></td>
<td><strong>329.67</strong></td>
<td><strong>218.48</strong></td>
<td><strong>214.21</strong></td>
<td><strong>&lt;653.9</strong></td>
<td><strong>122.5</strong></td>
<td><strong>60.9</strong></td>
<td><strong>176.6</strong></td>
<td><strong>&lt;25</strong></td>
</tr>
</tbody>
</table>
Appendix A: Emissions Calculations
Facility Emissions Summary
#2 Trimming Section Modification Threshold

Source Name: Thermafiber Inc., Wabash Plant  
Source Location: 3711 Mill Street, Wabash, Indiana 46992  
Permit Numbers: 169-38543-00009 & 169-38562-00009  
Permit Reviewer: Monica Dick

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTE Before Modification</td>
<td>15.18</td>
<td>15.18</td>
<td>15.18</td>
</tr>
<tr>
<td>PTE After Modification</td>
<td>79.84</td>
<td>79.84</td>
<td>79.84</td>
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<tr>
<td>PTE Increase From Modification</td>
<td>64.66</td>
<td>64.66</td>
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<tr>
<td>SSM Threshold</td>
<td>25</td>
<td>25</td>
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</tbody>
</table>
## Appendix A: Emissions Calculations

### Project Emissions Summary

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Annual Emission Rates

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>Uncontrolled Emissions (tpy)</th>
<th>Controlled Emissions (tpy)</th>
<th>Proposed Limited Emissions (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
</tr>
<tr>
<td>Slitter Saw 1</td>
<td>4.80</td>
<td>4.80</td>
<td>4.80</td>
</tr>
<tr>
<td>Slitter Saw 2</td>
<td>4.92</td>
<td>4.92</td>
<td>4.92</td>
</tr>
<tr>
<td>Slitter Saw 3</td>
<td>5.04</td>
<td>5.04</td>
<td>5.04</td>
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<tr>
<td>Slitter Saw 4</td>
<td>4.62</td>
<td>4.62</td>
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<td>Slitter Saw 5</td>
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</tr>
<tr>
<td>Slitter Saw 6</td>
<td>4.75</td>
<td>4.75</td>
<td>4.75</td>
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<td>Slitter Saw 7</td>
<td>5.29</td>
<td>5.29</td>
<td>5.29</td>
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<tr>
<td>Fly Saw</td>
<td>16.16</td>
<td>16.16</td>
<td>16.16</td>
</tr>
<tr>
<td>Guillotine Saw</td>
<td>2.92</td>
<td>2.92</td>
<td>2.92</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>79.84</td>
<td>79.84</td>
<td>79.84</td>
</tr>
<tr>
<td>Total Emissions</td>
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<td>79.84</td>
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<tr>
<td>PSD Significant Emission Rates</td>
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<td></td>
<td></td>
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<tr>
<td>PSD Minor Limit Needed?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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### Hourly Emission Rates

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>Uncontrolled Emissions (lb/hr)</th>
<th>Controlled Emissions (lb/hr)</th>
<th>Proposed Limited Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
</tr>
<tr>
<td>Slitter Saw 1</td>
<td>1.09</td>
<td>1.09</td>
<td>1.09</td>
</tr>
<tr>
<td>Slitter Saw 2</td>
<td>1.12</td>
<td>1.12</td>
<td>1.12</td>
</tr>
<tr>
<td>Slitter Saw 3</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
</tr>
<tr>
<td>Slitter Saw 4</td>
<td>1.05</td>
<td>1.05</td>
<td>1.05</td>
</tr>
<tr>
<td>Slitter Saw 5</td>
<td>1.06</td>
<td>1.06</td>
<td>1.06</td>
</tr>
<tr>
<td>Slitter Saw 6</td>
<td>1.08</td>
<td>1.08</td>
<td>1.08</td>
</tr>
<tr>
<td>Slitter Saw 7</td>
<td>1.21</td>
<td>1.21</td>
<td>1.21</td>
</tr>
<tr>
<td>Fly Saw</td>
<td>3.69</td>
<td>3.69</td>
<td>3.69</td>
</tr>
<tr>
<td>Guillotine Saw</td>
<td>0.67</td>
<td>0.67</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>1.59</td>
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</tr>
<tr>
<td></td>
<td>0.66</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>18.23</td>
<td>18.23</td>
<td>18.23</td>
</tr>
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</table>
### Particulate Emissions Calculations

Emissions from the slitter saws, fly saw, guillotin saw, and horizontal band saws are controlled by a shared dust collector. Dust from the vertical band saws is directed back into the process.

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Air Flow (CFM)</th>
<th>Total Controlled PM Emissions (lb/hr)</th>
<th>Total Uncontrolled PM Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(tpy)</td>
<td>(tpy)</td>
</tr>
<tr>
<td>Dust Collector</td>
<td>20,174</td>
<td>7.57</td>
<td>17.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75.74</td>
<td></td>
</tr>
<tr>
<td>Vertical Saws</td>
<td>N/A</td>
<td>5.81</td>
<td>5.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18.62</td>
<td>81.55</td>
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<tr>
<td>Total</td>
<td>3.06</td>
<td>13.39</td>
<td>18.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>81.55</td>
<td></td>
</tr>
</tbody>
</table>

#### Assumptions

Outlet grain loading was obtained from https://www3.epa.gov/ttnchie1/mkb/documents/ff-pulse.pdf, which has 0.01 as a conservative factor.

PM = PM$_{10}$ = PM$_{2.5}$

- 100% Capture Efficiency
- 60 min/hr
- 8760 hr/yr
- 90% Control Efficiency
- 7000 gr/lb
- 2000 lb/ton
- 0.01 gr/dscf

#### Methodology

Controlled PM Emissions (lb/hr) = Flow Rate (cfm) x Grain Loading (gr/dscf) x 60 min/hr / 7000 gr/lb

Controlled PM Emissions (tpy) = Controlled PM Emissions (lb/hr) x 8760 hr/yr / 2000 lb/ton

Uncontrolled PM Emissions (lb/hr) = Controlled PM Emissions (lb/hr) / (1 - Control Efficiency)

Uncontrolled PM Emissions (tpy) = Controlled PM Emissions (tpy) / (1 - Control Efficiency)
# Appendix A: Emissions Calculations

## Sawing Operations - Line 2 Trimming Section

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Summary of Particulate Emissions by Saw

<table>
<thead>
<tr>
<th>Saw</th>
<th>Status</th>
<th>Controlled PM Emissions $^2$ (lb/hr)</th>
<th>Uncontrolled PM Emissions $^2$ (lb/hr)</th>
<th>Project Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slitter Saw 1 $^2$</td>
<td>existing</td>
<td>0.11</td>
<td>1.09</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 2 $^2$</td>
<td>existing</td>
<td>0.11</td>
<td>1.12</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 3 $^2$</td>
<td>existing</td>
<td>0.12</td>
<td>1.15</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 4 $^2$</td>
<td>existing</td>
<td>0.11</td>
<td>1.05</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 5 $^2$</td>
<td>existing</td>
<td>0.11</td>
<td>1.06</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 6 $^2$</td>
<td>existing</td>
<td>0.11</td>
<td>1.08</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Slitter Saw 7 $^2$</td>
<td>proposed</td>
<td>0.12</td>
<td>1.21</td>
<td>new equipment; new pick-up point on dust collector</td>
</tr>
<tr>
<td>Fly Saw $^2$</td>
<td>existing</td>
<td>0.37</td>
<td>3.69</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Guillotine Saw</td>
<td>existing</td>
<td>0.07</td>
<td>0.67</td>
<td>no changes planned</td>
</tr>
<tr>
<td>Horizontal Band Saw 1</td>
<td>proposed</td>
<td>0.16</td>
<td>1.59</td>
<td>like kind replacement; new pick-up point on dust collector</td>
</tr>
<tr>
<td>Horizontal Band Saw 2</td>
<td>proposed</td>
<td>0.16</td>
<td>1.59</td>
<td>like kind replacement; new pick-up point on dust collector</td>
</tr>
<tr>
<td>Horizontal Band Saw 3</td>
<td>proposed</td>
<td>0.16</td>
<td>1.59</td>
<td>like kind replacement; new pick-up point on dust collector</td>
</tr>
<tr>
<td>Vertical Saw 1</td>
<td>proposed</td>
<td>0.66</td>
<td>0.66</td>
<td>like kind replacement</td>
</tr>
<tr>
<td>Vertical Saw 2</td>
<td>proposed</td>
<td>0.66</td>
<td>0.66</td>
<td>like kind replacement</td>
</tr>
</tbody>
</table>

**Total Emissions**

- Controlled PM Emissions: 3.02 lb/hr, 13.22 tpy
- Uncontrolled PM Emissions: 18.23 lb/hr, 79.84 tpy

### Notes - Vertical Saws

All dust generated at the vertical saws will be cycled back into the process.

- Assumed Loss Rate = 5%
- Cutting Area = 12.00 ft$^2$/saw
- Cut Thickness = 0.0197 in
- Cut Rate = 6.00 cuts/min
- Material Density = 1.87 lb/ft$^3$

### Methodology - Vertical Saws

- Volume of cut (ft$^3$) = Cutting Area (ft$^2$) x Cut Thickness (in) / 12 in/ft
- Uncontrolled PM Emissions (lb/hr) = Volume of Cut (ft$^3$) x Density (lb/ft$^3$) x Cut Rate (cuts/min) x 60 min/hr
- Uncontrolled PM Emissions (tpy) = Uncontrolled PM Emissions (lb/hr) x 8760 hr/yr / 2000 lb/ton
- Controlled PM Emissions (lb/hr) = Uncontrolled PM Emissions (lb/hr) x Loss Rate (%)
- Controlled PM Emissions (tpy) = Controlled PM Emissions (lb/hr) x 8760 hr/yr / 2000 lb/ton
## Appendix A: Emissions Calculations
### Sawing Operations - Line 2 Trimming Section

**Source Name:** ThermoFiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Air Flow Apportionment

To obtain individual actual and uncontrolled PM emissions, the air flows are used to apportion PM (calculated above).

<table>
<thead>
<tr>
<th>Pick-Up Point</th>
<th>Associated Equipment</th>
<th>Air Flow (CFM)</th>
<th>Portion of Total Air Flow to Dust Collector</th>
<th>Controlled PM Emissions (lb/hr)</th>
<th>Uncontrolled PM Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Slitter Saw 1</td>
<td>597</td>
<td>2.96%</td>
<td>0.05</td>
<td>0.51</td>
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<tr>
<td>3</td>
<td>Slitter Saw 2</td>
<td>630</td>
<td>3.12%</td>
<td>0.05</td>
<td>0.54</td>
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<tr>
<td>4</td>
<td>Slitter Saw 3</td>
<td>662</td>
<td>3.28%</td>
<td>0.06</td>
<td>0.57</td>
</tr>
<tr>
<td>5</td>
<td>Slitter Saw 4</td>
<td>549</td>
<td>2.72%</td>
<td>0.05</td>
<td>0.47</td>
</tr>
<tr>
<td>6</td>
<td>Slitter Saw 5</td>
<td>560</td>
<td>2.78%</td>
<td>0.05</td>
<td>0.48</td>
</tr>
<tr>
<td>7</td>
<td>Slitter Saw 6</td>
<td>584</td>
<td>2.89%</td>
<td>0.05</td>
<td>0.50</td>
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<tr>
<td>8</td>
<td>Under Slitter Saws</td>
<td>4,762</td>
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<tr>
<td>9</td>
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<td>1,066</td>
<td>5.28%</td>
<td>0.09</td>
<td>0.91</td>
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<td>10</td>
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<td>4.85%</td>
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<td>0.84</td>
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<tr>
<td>11</td>
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<td>2.84%</td>
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<td>0.49</td>
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<tr>
<td>13</td>
<td>Guillotine</td>
<td>777</td>
<td>3.85%</td>
<td>0.07</td>
<td>0.67</td>
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<tr>
<td>14</td>
<td>Horizontal Band Saw</td>
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<td>9.19%</td>
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<td>1.59</td>
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<tr>
<td>15</td>
<td>Vertical Saw 1</td>
<td>N/A</td>
<td>0%</td>
<td>0.66</td>
<td>0.66</td>
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<td>16</td>
<td>Stacking Table</td>
<td>457</td>
<td>2.27%</td>
<td>0.04</td>
<td>0.39</td>
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</tbody>
</table>

### Total Emissions

100%  
3.06  
13.39  
18.62  
81.55

**Notes**

1. Air flow rates are based on a study conducted by Owens Corning at the Thermofiber Wabash Facility.
2. For the slitter and fly saws, there are additional pick-up points ("under" pick-up points) that are one individual pick-up point associated with multiple saws. The PM from this collective pick-up point is divided evenly between all saws that contribute.
3. For saws that (a) are existing but do not have a pick-up point (to be added) or (b) are proposed new saws, the air flow used in PM calculations was the maximum air flow seen from a similar saw with a pick-up point multiplied times 1.10 for a +10% buffer in potential pick-up point air flow.
4. The air flow for the guillotine pick-up point was multiplied by 0.25 because PM emissions are being calculated based on outlet grain loading and inlet flows, and the fact that PM emissions from a guillotine are dramatically reduced from a tradition saw (as guillotine cutting action is different), the air flow was biased down to bias down associated PM emissions.
5. Dust from the vertical band saws is directed back into the process.
6. The pick up point for the guillotine is at the narrow hood that runs the width of the pack just after the guillotine.
7. During the test, the hose associated with Slitter Saw 1 was plugged; therefore, the normal airflow is calculated as the average of slitter saws 2-6.
## Appendix A: Emission Calculations

**EU-P2, P4, P6, P7, P8, & P10**

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Source Name:
Thermafiber Inc., Wabash Plant

### Source Location:
3711 Mill Street, Wabash, Indiana 46992

### Permit Numbers:
169-38543-00009 & 169-38562-00009

### Permit Reviewer:
Monica Dick

<table>
<thead>
<tr>
<th>Process</th>
<th>Rate (ton/hr)</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
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<tbody>
<tr>
<td>Cupola #2 EU-P2</td>
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<td>89.20%</td>
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<td>Cupola #4 EU-P4</td>
<td>9.5</td>
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<td>99%</td>
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<td>91%</td>
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<td>#2 Line cooling section EU-P10</td>
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### Un-controlled and Controlled Emissions:

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<tr>
<th>Pollutant</th>
<th>EF (lb/ton)</th>
<th>Un-controlled Emissions (tons/yr)</th>
<th>Controlled Emissions (tons/yr)</th>
<th>EF (lb/ton)</th>
<th>Un-controlled Emissions (tons/yr)</th>
<th>Controlled Emissions (tons/yr)</th>
<th>EF (lb/ton)</th>
<th>Un-controlled Emissions (tons/yr)</th>
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<td>687.27</td>
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<td>PM2.5</td>
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<td>NOx</td>
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<td>Carbonyl sulfide</td>
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</tbody>
</table>

*Emission factors are based on lbs of pollutant emitted per ton of product.

**Methodology**

- **Uncontrolled Emissions** = Capacity (tons/hr) * Emission Factor (lb/ton) * 8760 hrs/yr * 1 ton/2000lb
- **Controlled Emissions** = Uncontrolled Emissions * (1 - Control Efficiency)

**Cupola #2 EU-P2 & Cupola #4 EU-P4:**
PM and PM$_{10}$ emission factor from stack testing
Other emission factors from AP 42 Ch 11 Table 11.18-4 (SO$_2$ and CO) and Table 11.18-6 (NOx)
Carbonyl sulfide emission factor was based on engineering judgement
All other HAPs emission factor from US EPA Birmingham tests

**Blowchamber #4 EU-P6:**
PM and PM$_{10}$ emission factors from stack testing
SO$_2$ emission factor from SCC# 3-05-017-03
The emission factor for VOC and fine mineral fiber was from a test from a similar plant.

**Curing Oven #2 EU-P7:**
PM and PM$_{10}$ EFs were based on testing at Tacoma Washington Plt (4.42 TPH curing oven)
Other emission factors from US EPA SCC# 3-05-017-04

**Blowchamber #2 EU-P8:**
Emission factors for PM, PM$_{10}$ and Mineral fiber were from stack testing
Other emission factors from US EPA SCC# 3-05-017-03

**#2 Line cooling section EU-P10:**
Emission factors from US EPA Airs SCC# 3-05-017-05
Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Source Name: Thermafiber Inc., Wabash Plant
Source Location: 3711 Mill Street, Wabash, Indiana 46992
Permit Numbers: 169-38543-00009 & 169-38562-00009
Permit Reviewer: Monica Dick

Boiler #1
Heat Input Capacity 12.5 MMBtu/hr
HHV Potential Throughput
mmBTU 1020 mmscf
MMCF/yr 107.4

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>direct PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>1.9</td>
<td>7.6</td>
<td>7.6</td>
<td>0.6</td>
<td>100</td>
<td>5.5</td>
<td>84</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.1</td>
<td>0.4</td>
<td>0.4</td>
<td>0.0</td>
<td>5.4</td>
<td>0.3</td>
<td>4.5</td>
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</tbody>
</table>

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

The five highest organic and metal HAPs emission factors are provided above.
## Appendix A: Emissions Calculations
### Natural Gas Combustion Only

**MM BTU/HR <100**

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>Heat Input Capacity MMBtu/hr</th>
<th>Emission Units</th>
<th>Emission Units MMBtu/hr</th>
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</thead>
<tbody>
<tr>
<td>Curing Oven</td>
<td>5.7</td>
<td>HHV</td>
<td>28.14</td>
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<tr>
<td>Cupola P2</td>
<td>10.47</td>
<td>mmBtu</td>
<td>1020</td>
</tr>
<tr>
<td>Cupola P4</td>
<td>11.97</td>
<td>mmBcf</td>
<td>241.7</td>
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</table>

### Pollutants

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.9</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.9</td>
</tr>
<tr>
<td>SO2</td>
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<td>0.1</td>
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<tr>
<td>NOx</td>
<td>100</td>
<td>12.1</td>
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<tr>
<td>VOC</td>
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<td>0.7</td>
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<tr>
<td>CO</td>
<td>84</td>
<td>10.2</td>
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</table>

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

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

### Methodology

All emission factors are based on normal firing.  
MMBtu = 1,000,000 Btu  
MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

### HAPs - Organics

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCf</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
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<td>2.1E-03</td>
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<tr>
<td>Dichlorobenzene</td>
<td>1.2E-03</td>
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<td>Formaldehyde</td>
<td>7.5E-02</td>
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<tr>
<td>Hexane</td>
<td>1.8E+00</td>
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<td>Toluene</td>
<td>3.4E-03</td>
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### HAPs - Metals

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<td>Cadmium</td>
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<td>Chromium</td>
<td>1.4E-03</td>
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<tr>
<td>Manganese</td>
<td>3.8E-04</td>
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<tr>
<td>Nickel</td>
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<td>Potential Emission in tons/yr</td>
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The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter
Appendix A: Emission Calculations
PM and PM10 Emissions (New Baghouse)
From Saw Cutting Stations (EU-P30) at Fiber Board Cutting Operation

Source Name: Thermafiber Inc., Wabash Plant
Source Location: 3711 Mill Street, Wabash, Indiana 46992
Permit Numbers: 169-38543-00009 & 169-38562-00009
Permit Reviewer: Monica Dick

1. Potential to Emit PM/PM10 - Captured Emissions:

<table>
<thead>
<tr>
<th>Baghouse ID</th>
<th>Process Description</th>
<th>Control Device</th>
<th>Outlet Grain Loading (gr/dscf)</th>
<th>Maximum Air Flow Rate (scfm)</th>
<th>PM/PM10 After Control * (lb/hr)</th>
<th>PM/PM10 After Control * (ton/yr)</th>
<th>PM Control Efficiency (%)</th>
<th>PM Before Control (ton/yr)</th>
<th>PM10 Control Efficiency (%)</th>
<th>PM10 Before Control (ton/yr)</th>
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<tr>
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<td>Saw Cutting</td>
<td>Baghouse</td>
<td>0.03</td>
<td>7,000</td>
<td>1.80</td>
<td>7.88</td>
<td>90.0%</td>
<td>79</td>
<td>80.0%</td>
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* Assume all PM emissions equal PM10 emissions.

Methodology
PTE of PM/PM10 After Control (lb/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 min/hr x 1 lb/7000 gr
PTE of PM/PM10 After Control (ton/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 min/hr x 1 lb/7000 gr x 8760 hr/yr x 1 ton/2000 lb
PTE of PM/PM10 Before Control (ton/yr) = PTE of PM/PM10 After Control (ton/yr) / (100% - Control Efficiency %)
### Emission Calculations

**Emergency Fire Pump Diesel Engine**

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

Emissions calculated based on heat input capacity (MMBtu/hr)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>direct PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMBtu</td>
<td>0.31</td>
<td>0.31</td>
<td>0.31</td>
<td>0.29</td>
<td>4.41</td>
<td>0.36</td>
<td>0.95</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.17</td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

### Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Benzene</th>
<th>Toluene</th>
<th>Xylene</th>
<th>1,3-Butadiene</th>
<th>Formaldehyde</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Total PAH HAPs***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>3.57E-05</td>
<td>1.56E-05</td>
<td>1.09E-05</td>
<td>1.50E-06</td>
<td>4.51E-05</td>
<td>2.93E-05</td>
<td>3.54E-06</td>
<td>6.43E-06</td>
</tr>
</tbody>
</table>

**Potential Emission of Total HAPs (tons/yr)** 1.48E-04
Appendix A: Emission Calculations
Insignificant Activities

Source Name: Thermafiber Inc., Wabash Plant
Source Location: 3711 Mill Street, Wabash, Indiana 46992
Permit Numbers: 169-38543-00009 & 169-38562-00009
Permit Reviewer: Monica Dick

(1) VOC Emissions From Degreasing Operations

145 gallons/year x 7.36 lbs VOC/gal x 1 ton/2000lbs = 0.5 tons VOC/year

(2) Conveyors for coal or coke conveying of less than 50 tons per day.

The source supplied and emission factor of 0.02827 lbs/ton

80 tons/day x 0.02827 lbs/tons = 2.26 lbs/day

2.26 lbs/day /24hr = 0.094 lbs/hr
### Appendix A: Emissions Calculations

#### VOC, HAPs and Particulate

From Surface Coating Operation - EU-P12

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
** Permit Numbers:** 169-38543-00009 & 169-38562-00009  
** Permit Reviewer:** Monica Dick

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Weight % solids</th>
<th>Gal of Mat. (gal/square foot)</th>
<th>Maximum (square feet/hour)</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Particulate Potential (ton/yr)</th>
<th>Transfer Efficiency</th>
<th>Dry Filter Efficiency</th>
<th>Controlled Particulate Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fastbond 49 (as applied)</td>
<td>8.3</td>
<td>45.00%</td>
<td>30.0%</td>
<td>0.2%</td>
<td>55.00%</td>
<td>0.00050</td>
<td>14000</td>
<td>0.01</td>
<td>0.09</td>
<td>2.08</td>
<td>0.38</td>
<td>34.78</td>
<td>75%</td>
<td>85%</td>
<td>5.22</td>
</tr>
</tbody>
</table>

#### METHODOLOGY

- **Pounds of VOC per Gallon Coating less Water** = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics)
- **Potential VOC Pounds per Hour** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/square foot) * Maximum (square foot/hr)
- **Potential VOC Pounds per Day** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/square foot) * Maximum (square foot/hr) * (24 hr/day)
- **Potential VOC Tons per Year** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/square foot) * Maximum (square foot/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **Particulate Potential Tons per Year** = (square foot/hour) * (gal/square foot) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)
- **Pounds VOC per Gallon of Solids** = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
- **Total Potential Emissions** = Worst Coating + Sum of all solvents used

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<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Gallons of Material (gal/square foot)</th>
<th>Maximum (square feet/hour)</th>
<th>Weight % Xylene</th>
<th>Weight % Toluene</th>
<th>Weight % Formaldehyde</th>
<th>Weight % Benzene</th>
<th>Weight % Hexane</th>
<th>Weight % Glycol Ethers</th>
<th>Weight % Methanol</th>
<th>Xylene Emissions (ton/yr)</th>
<th>Toluene Emissions (ton/yr)</th>
<th>Formaldehyde Emissions (ton/yr)</th>
<th>Benzene Emissions (ton/yr)</th>
<th>Hexane Emissions (ton/yr)</th>
<th>Methanol Emissions (ton/yr)</th>
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</thead>
<tbody>
<tr>
<td>Fastbond 49 (as applied)</td>
<td>8.3</td>
<td>0.00050</td>
<td>14000.0</td>
<td>0.00%</td>
<td>0.15%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.38</td>
<td>0.00</td>
<td>0.00</td>
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Total Potential Emissions

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<td>0.00</td>
<td>0.38</td>
<td>0.00</td>
<td>0.00</td>
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</tbody>
</table>

#### METHODOLOGY

- **HAPS emission rate (tons/yr)** = Density (lb/gal) * Gal of Material (gal/square foot) * Maximum (square foot/hr) * Weight % HAP * 8760 hrs/yr
## Appendix A: Emissions Calculations
### Natural Gas Combustion Only

**MM BTU/HR <100**

Two (2) 10.0 MMBtu/hr Thermal Oxidizers, identified as EU-P2A and EU-P4A

**Source Name:** Thermafiber Inc., Wabash Plant  
**Source Location:** 3711 Mill Street, Wabash, Indiana 46992  
**Permit Numbers:** 169-38543-00009 & 169-38562-00009  
**Permit Reviewer:** Monica Dick

### Heat Input Capacity and Potential Throughput

<table>
<thead>
<tr>
<th>Heat Input Capacity MMBtu/hr</th>
<th>HHV mmBtu</th>
<th>Potential Throughput MMCF/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.0</td>
<td>1020</td>
<td>171.8</td>
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</tbody>
</table>

### Emission Factors and Potential Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.7</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.7</td>
</tr>
<tr>
<td>SO2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>NOx</td>
<td>8.6</td>
<td>0.5</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.5</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>7.2</td>
</tr>
</tbody>
</table>

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

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

### Methodology

All emission factors are based on normal firing:

- MMBtu = 1,000,000 Btu
- MMCF = 1,000,000 Cubic Feet of G

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

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

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

**HAPs - Organics**

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene 2.1E-03</td>
<td>1.804E-04</td>
</tr>
<tr>
<td>Dichlorobenzen 1.2E-03</td>
<td>1.031E-04</td>
</tr>
<tr>
<td>Formaldehyde 7.5E-02</td>
<td>6.441E-03</td>
</tr>
<tr>
<td>Hexane 1.8E+00</td>
<td>1.546E-01</td>
</tr>
<tr>
<td>Toluene 3.4E-03</td>
<td>2.920E-04</td>
</tr>
</tbody>
</table>

**HAPs - Metals**

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 5.0E-04</td>
<td>4.294E-05</td>
</tr>
<tr>
<td>Cadmium 1.1E-03</td>
<td>9.447E-05</td>
</tr>
<tr>
<td>Chromium 1.4E-03</td>
<td>1.202E-04</td>
</tr>
<tr>
<td>Manganese 3.8E-04</td>
<td>3.264E-05</td>
</tr>
<tr>
<td>Nickel 2.1E-03</td>
<td>1.804E-04</td>
</tr>
</tbody>
</table>

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapl
June 13, 2017

Eric Hamm
Thermafiber Inc., Wabash Plant
3711 West Mill Street
Wabash, IN  46992

Re:  Public Notice
Thermafiber Inc., Wabash Plant
Permit Level: Title V SSM & Title V SPM
Permit Number: 169-38543-00009 & 169-38562-00009

Dear Mr. Hamm:

Enclosed is a copy of your draft Title V SSM and Title V SPM, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM’s website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Wabash Plain Dealer in Wabash Indiana publish the abbreviated version of the public notice no later than Friday, June 16, 2017. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Wabash Carnegie Public Library, 188 West Hill Street in Wabash Indiana. As a reminder, you are obligated by 328 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Monica Dick, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-1243 or dial (317) 234-1243.

Sincerely,

Catherine Denny
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 1/9/2017
ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

June 13, 2017

Wabash Plain Dealer
123 West Canal Street
Wabash, Indiana 46992

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Thermafiber, Inc. in Wabash County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than Friday, June 16, 2017.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor’s Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Catherine Denny at 800-451-6027 and ask for extension 4-5256 or dial 317-234-5256.

Sincerely,

Catherine Denny
Permit Branch
Office of Air Quality

Permit Level: TV SSM and TV SPM
Permit Number: 169 - 38543 - 00009 & 169 - 38562 - 00009

Enclosure

PN Newspaper.dot 1/9/2017
June 13, 2017

To: Wabash Carnegie Public Library

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

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Thermafiber, Inc.
Permit Number: 169 - 38543 - 00009 & 169 - 38562 - 00009

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smidie-Bush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 1/9/2017
Notice of Public Comment

June 13, 2017
Thermafiber Inc-
169 - 38543 - 00009 & 169 - 38562 - 00009

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.
**Mail Code 61-53**

IDEM Staff | CDENNY 6/13/2017 | Thermafiber Inc., Wabash Plant 169-38562-00009 & 169-38543-00009 (draft)
---|---|---
Name and address of Sender | Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204 | Type of Mail: CERTIFICATE OF MAILING ONLY

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<td></td>
<td>Eric Hamm Thermafiber Inc., Wabash Plant 3711 West Mill Street Wabash IN 46992 (Source CAATS)</td>
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<td>Rick Copp Plant Leader Thermafiber Inc., Wabash Plant 3711 West Mill Street Wabash IN 46992 (RO CAATS)</td>
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<td>Wabash County Commissioners 1 West Hill Street Wabash IN 46992 (Local Official)</td>
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<td>Wabash City Council and Mayors Office 202 South Wabash Street Wabash IN 46992 (Local Official)</td>
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<td>Wabash County Health Department 89 W. Hill, Memorial Hall Wabash IN 46992-3184 (Health Department)</td>
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<td>Ted Little Wabash County Council 1076 West 900 North Manchester IN 46962 (Affected Party)</td>
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<td>Kim Cottrell Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 (Consultant)</td>
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