INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 5, 2007

RE: Blue River Wood Products / 175-23829-00016

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

New Source Review and Minor Source Operating Permit OFFICE OF AIR QUALITY

Blue River Wood Products
5170 West State Road 56
Salem, Indiana 47167

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

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 175-23829-00016	
Issued by: Matt Stuckey for: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 5, 2007 Expiration Date: July 5, 2012

TABLE OF CONTENTS

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 and A.2 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a staves and headings manufacturing source.

Source Address:	5170 West State Road 56, Salem, Indiana 47167
Mailing Address:	5170 West State Road 56, Salem, Indiana 47167
General Source Phone Number:	417 - 588 - 4151
SIC Code:	2429
County Location:	Washington
Source Location Status:	Attainment for all criteria pollutants Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) de-barker, identified as EP 1, constructed in 2000, capacity: 11,720 pounds of wood logs per hour.

(b) One (1) chipper, identified as EP 2, controlled by a cyclone, identified as C1, constructed in 2000, exhausted to Stack 1, capacity: 6,000 pounds of wood per hour.

(c) One (1) chipper load-out operation, identified as EP 3, constructed in 2000, capacity: 6,000 pounds of wood per hour.

(d) One (1) sawing operation, identified as EP 4, controlled by a cyclone, identified as C2, constructed in 2000, exhausted to Stack S2, consisting of:

(1) One (1) chainsaw, capacity: 11,720 pounds of wood logs per hour,

(2) One (1) circle-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(3) One (1) band-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(4) Two (2) band re-saws, capacity: 11,720 pounds of wood logs per hour,

(5) Two (2) first edgers, capacity: 11,720 pounds of wood per hour,

(6) Two (2) second edgers, capacity: 11,720 pounds of wood per hour,

(7) One (1) rip-saw edger, capacity: 3,140 pounds of wood per hour, and

(8) One (1) chop saw, capacity: 2,880 pounds of wood per hour.

(e) One (1) sawdust stockpile, identified as EP 5, throughput capacity: 229.5 pounds of sawdust per hour, storage capacity: 2,136 tons of sawdust.

(f) One (1) sawdust load-out operation, identified as EP 6, capacity: 229.5 pounds of sawdust per hour.

(g) One (1) sawdust wood waste-fired hot water heater, identified as EP 7, rated at 2.00 million British thermal units per hour, constructed in 2006, exhausted to Stack 3, capacity: 755 pounds of sawdust wood waste per hour.

(h) Two (2) drying kilns, identified as EP 8, constructed in 2006, capacity: 300 pounds of wood chips per hour, each.

(i) Six (6) mobile K-1 kerosene-fired space heaters, rated at 0.215 million British thermal units per hour, each.

(j) One (1) maintenance welding operation, using less than 625 pounds of rod or wire per day.

(k) One (1) storage tank, constructed in 2000, capacity: 500 gallons of diesel fuel.

(l) One (1) storage tank, constructed in 2000, capacity: 500 gallons of kerosene.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

(a) This permit, MSOP 175-23829-00016, 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 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

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

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

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

(c) The notification 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.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

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

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

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

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

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

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

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

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

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to MSOP 175-23829-00016 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

(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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least ninety (90) days 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 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

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

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2] [IC 13-30-3-1]

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

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

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

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

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

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any

photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [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) 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.19 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on April 2, 2007. The plan is included as Attachment A.

C.8 Stack Height [326 IAC 1-7]

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

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project

supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

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

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.11 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 commis-

sioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.12 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

Corrective Actions and Response Steps

C.14 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee

shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

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

(b) 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.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Chipper, Chipper Load-Out & Sawing Operations & Hot Water Heater

(b) One (1) chipper, identified as EP 2, controlled by a cyclone, identified as C1, constructed in 2000, exhausted to Stack 1, capacity: 6,000 pounds of wood per hour.

(c) One (1) chipper load-out operation, identified as EP 3, constructed in 2000, capacity: 6,000 pounds of wood per hour.

(d) One (1) sawing operation, identified as EP 4, controlled by a cyclone, identified as C2, constructed in 2000, exhausted to Stack S2, consisting of:

(1) One (1) chainsaw, capacity: 11,720 pounds of wood logs per hour,

(2) One (1) circle-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(3) One (1) band-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(4) Two (2) band re-saws, capacity: 11,720 pounds of wood logs per hour,

(5) Two (2) first edgers, capacity: 11,720 pounds of wood per hour,

(6) Two (2) second edgers, capacity: 11,720 pounds of wood per hour,

(7) One (1) rip-saw edger, capacity: 3,140 pounds of wood per hour, and

(8) One (1) chop saw, capacity: 2,880 pounds of wood per hour.

(g) One (1) sawdust wood waste-fired hot water heater, identified as EP 7, rated at 2.00 million British thermal units per hour, constructed in 2006, exhausted to Stack 3, capacity: 755 pounds of sawdust wood waste per hour.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the chipper, identified as EP 2, and chipper load-out operation, identified as EP 3, shall not exceed 8.56 pounds per hour each when operating at a process weight rate of 6,000 pounds per hour each.

The pounds per hour limitations were calculated with the following equation:

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

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

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the sawing operation, identified as EP 4, shall not exceed 42.1 pounds per hour when operating at a process weight rate of 76,340 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

D.1.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a), particulate emissions for the sawdust wood waste-fired hot water heater, identified as EP 7, shall not exceed 0.60 pounds per million British thermal units heat input.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the sawing operation, identified as EP 4 and its control device.

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with Condition D.1.1, the cyclones, identified as C1 and C2, for particulate control shall be in operation and control emissions from the chipper, identified as EP 2, and sawing operations, identified as EP 4, at all times that the chipper and sawing operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the sawing operation/cyclone C2 stack exhaust S2 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.6 Cyclone Failure Detection

(a) For a cyclone 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 cyclone 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.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain a daily record of visible emission notations of the sawing operations/cyclone stack exhaust C2. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g., the process did not operate that day).

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

MINOR SOURCE OPERATING PERMIT CERTIFICATION

Source Name: Blue River Wood Products
Source Address: 5170 West State Road 56, Salem, Indiana 47167
Mailing Address: 5170 West State Road 56, Salem, Indiana 47167
Permit No.: MSOP 175-23829-00016

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify) _____

☐ Notification (specify) _____

☐ Affidavit (specify) _____

☐ Other (specify) _____

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Source Name:	**Blue River Wood Products**
Address:	**5170 West State Road 56**
City:	**Salem, Indiana 47167**
Phone #:	**417 - 588 - 4151**
MSOP #:	**175-23829-00016**

I hereby certify that Blue River Wood Products is
- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that Blue River Wood Products is
- ☐ in compliance with the requirements of MSOP 175-23829-00016.
- ☐ not in compliance with the requirements of MSOP 175-23829-00016.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMI LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF ›MALFUNCTION‹ AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____
_____

Attachment A

FUGITIVE PARTICULATE MATTER EMISSION CONTROL PLAN

1. Name and Address of Source:

   Blue River Wood Products
   5170 West State Road 56
   Salem, Indiana 47617

2. Name and Address of Owner or Operator responsible for the execution of the control plan:

   Barry Shewmaker
   Blue River Wood Products
   5170 West State Road 56
   Salem, Indiana 47617

3. Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4:

   Unpaved roadways and parking lots
   Sawdust stockpiles

4. An attached map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.

5. The number and mix of vehicular activity occurring on paved roads, unpaved roads and parking lots.

Vehicle Type	Estimated No. of Vehicles / day
Log trucks	2
Front-end loader	1
Employee and visitor vehicles	30

6. Type and Quantity of material handled:

   Sawdust – 2136 ton storage capacity, 0.25 acres

7. Equipment used to maintain aggregate piles:

   Front-end loader

8. A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision 3:

   The unpaved roads, parking lots and stockpile will be visually inspected at least once daily (or more often as conditions warrant) for signs of fugitive particulate emissions. If needed, these areas will be sprayed with water to control emissions. The frequency of application

will be on an “as needed” basis.

9. A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations.

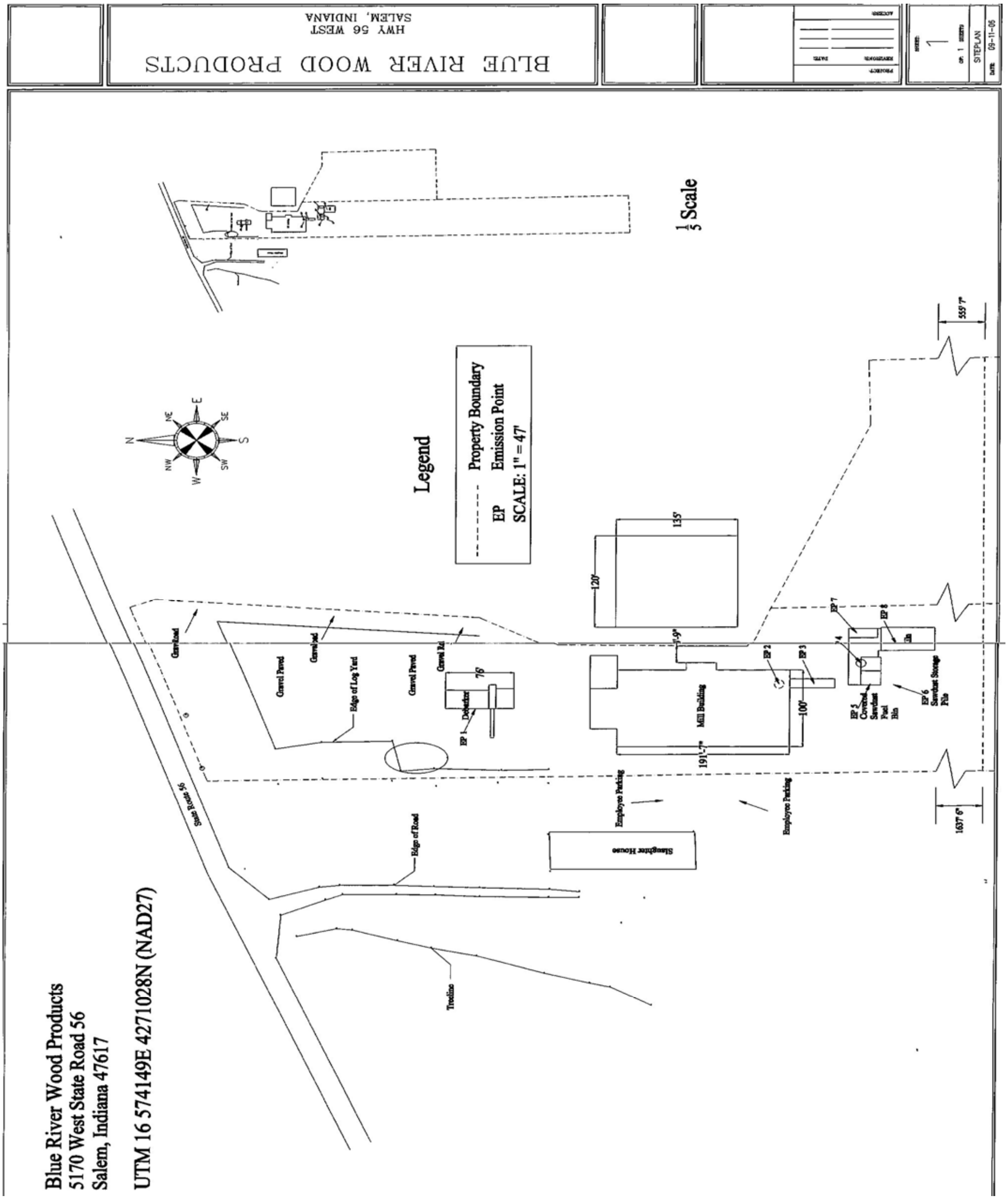
   The dust suppressant material is water. It is estimated that the frequency of application will vary throughout the year as the precipitation varies, such that the water will be sprayed from 0 (during periods of high precipitation) to 3 times per day (during the hot summer, arid times of the year).

10. A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.

    Water from well on the property applied by hose.

11. A schedule of compliance with the provisions of the control plan. Such a schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation or modification of the fugitive particulate matter emission control measures.

    Blue River Wood Products will designate and train existing employees to use water “as needed” to control fugitive emissions.


BLUE RIVER WOOD PRODUCTS
HWY 56 WEST
SALEM, INDIANA
SITEPLAN
09-11-05
1/5 Scale
Legend
Property Boundary
EP Emission Point
SCALE: 1" = 47'
Blue River Wood Products
5170 West State Road 56
Salem, Indiana 47617
UTM 16 574149E 4271028N (NAD27)
State Route 56
Edge of Road
Treeline
Gravel Road
Gravel Paved
Edge of Log Yard
EP 1
Mill Building
EP 2
EP 3
EP 5 Covered Sawdust Fuel Bin
EP 6 Sawdust Storage Pile
EP 7
EP 8
Employee Parking
Slaughter House
135'
120'
100'
76'
191'-7"
555'7"
1637'6"

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for New Source Review and a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	Blue River Wood Products
Source Location:	5170 West State Road 56, Salem, Indiana 47167
County:	Washington
SIC Code:	2429
Operation Permit No.:	MSOP 175-23829-00016
Permit Reviewer:	Mark L. Kramer/MES

The Office of Air Quality (OAQ) has reviewed an application from Blue River Wood Products, formerly known as Coopers Mill (CM3), relating to the operation of a staves and headings manufacturing source. Blue River Wood Products purchased the source from Coopers Mill (CM3) on November 14, 2005.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) One (1) de-barker, identified as EP 1, constructed in 2000, capacity: 11,720 pounds of wood logs per hour.

(b) One (1) chipper, identified as EP 2, controlled by a cyclone, identified as C1, constructed in 2000, exhausted to Stack 1, capacity: 6,000 pounds of wood per hour.

(c) One (1) chipper load-out operation, identified as EP 3, constructed in 2000, capacity: 6,000 pounds of wood per hour.

(d) One (1) sawing operation, identified as EP 4, controlled by a cyclone, identified as C2, constructed in 2000, exhausted to Stack S2, consisting of:

(1) One (1) chainsaw, capacity: 11,720 pounds of wood logs per hour,

(2) One (1) circle-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(3) One (1) band-saw splitter, capacity: 11,720 pounds of wood logs per hour,

(4) Two (2) band re-saws, capacity: 11,720 pounds of wood logs per hour,

(5) Two (2) first edgers, capacity: 11,720 pounds of wood per hour,

(6) Two (2) second edgers, capacity: 11,720 pounds of wood per hour,

(7) One (1) rip-saw edger, capacity: 3,140 pounds of wood per hour, and

(8) One (1) chop saw, capacity: 2,880 pounds of wood per hour.

(e) One (1) sawdust stockpile, identified as EP 5, throughput capacity: 229.5 pounds of sawdust per hour, storage capacity: 2,136 tons of sawdust.

(f) One (1) sawdust load-out operation, identified as EP 6, capacity: 229.5 pounds of sawdust per hour.

(g) One (1) sawdust wood waste-fired hot water heater, identified as EP 7, rated at 2.00 million British thermal units per hour, constructed in 2006, exhausted to Stack 3, capacity: 755 pounds of sawdust wood waste per hour.

(h) Two (2) drying kilns, identified as EP 8, constructed in 2006, capacity: 300 pounds of wood chips per hour, each.

(i) Six (6) mobile K-1 kerosene-fired space heaters, rated at 0.215 million British thermal units per hour, each.

(j) One (1) maintenance welding operation, using less than 625 pounds of rod or wire per day.

(k) One (1) storage tank, constructed in 2000, capacity: 500 gallons of diesel fuel.

(l) One (1) storage tank, constructed in 2000, capacity: 500 gallons of kerosene.

New Emission Units and Pollution Control Equipment

There are no proposed emission units during this review process.

Existing Approvals

This is the first proposed approval for this source.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the two (2) cyclones, identified as C1 and C2, be considered as an integral part of the chipper, identified as EP 2 and the sawing operations, identified as EP 4, respectively:

IDEM, OAQ considers that control equipment can be considered integral if any one (1) of the three (3) following criteria are met:

(1) The process itself could not function without the control equipment.

(2) The control equipment serves a primary purpose other than pollution control.

(3) The control equipment has an overwhelming positive net economic effect.

(a) Cyclone, identified as C1

The cyclone, identified as C1, collects chips from the chipper, identified as EP 2. The chips created by the chipper are not all uniform in shape and size. This cyclone collects the chips so they can be dropped into a shaker screen for sorting. The appropriate sized chips, based upon customer requests, are blown into a truck via an enclosed conveyor (chipper load-out operation, identified as EP 3). Chips that are too large for the customer's order are returned to the chipper for further processing.

IDEM, OAQ has evaluated the justifications and agrees that the cyclone, identified as C1, will be considered as an integral part of the chipper. The primary purpose of this cyclone is collection, not pollution control, so that the chips can be sorted by size. In other words, without the cyclone, Blue River Wood Products would not be able to sort the chips based upon size, and would not be able to produce a marketable product. Therefore, the permitting level will be determined using the potential to emit after the cyclone, identified as C1. Operating conditions in the proposed permit will specify that this cyclone, identified as C1, shall operate at all times when the chipper, identified as EP 2, is in operation.

(b) Cyclone, identified as C2

The cyclone, identified as C2, is used to collect sawdust from the sawing operation, identified as EP 4. The sawdust created from the sawing operation is a product of changing the size and shape of a piece of wood. The cyclone, identified as C2, collects the sawdust so it can be transferred by closed conveyance to a storage area and be used for the wood waste-fired hot water heater, identified as EP 7. Without this cyclone to collect the sawdust for fuel, the sawdust portion used to fuel the hot water heater that would have fallen to the ground, would have to be disposed of off-site. This would incur additional transportation and disposal costs for the source. Without sawdust for fuel for the hot water heater another fuel, such as propane, would have to be purchased. Natural gas is not readily available at the source and would require the installation of a pipeline to the source. The cost of not operating the cyclone is detailed in the following table:

Cost of Sawdust Disposal

Annual Sawdust Production	3,904 tons
Disposal Cost per Ton	$5.55
Annual Disposal Cost*	$21,667.20

*Estimated annual sawdust production based on maximum hourly design rate.

Cost of Propane Fuel

Heat Input for Hot Water Heater (EP 7)	2,000,000 Btu/hr
BTU Value for Propane	91,547 Btu/gal
Hourly Rate of Propane Consumed	21.85 gal/hr
Market Cost for Propane as of February 2007	$1.07 per gal
Hourly Cost for Propane Consumption	$23.38
Annual Fuel Cost **	$204,773.50
Total Economic Impact of Not Operating the Cyclones	**$226,440.70**

**Annual fuel cost based upon market price of propane and 8,760 hour per year of operation.

Cost of Propane Fuel Based Upon Actual Amount of Wood Sawdust Used

The source used 87.2% of the 3,904 tons of sawdust produced or 3,404.3 tons, equivalent to 6,808,600 pounds of sawdust. If green oak was used as a fuel with a heat content of 2,650 Btu per pound, then the 3,404.3 tons would have generated (6,808,600 lbs x 2,650 Btu/lb) 18,042,790,000 Btu's. Using the heat content of propane of 91,547 Btu/gal, the 18,042,790,000 Btu's would have required (18,042,790,000 Btu / 91,547 Btu/gal) 197,088 gallons of propane at a cost of $1.07 per gal equals $210,883 which is

comparable to the cost estimated above based purely on the rating of the hot water heater.

Cost of Operating the Cyclone

(a)	Electrical		
	(1)	Two (2) 50-horsepower electric motors	74.658 kw total
	(2)	Annual average operational hours	4,000 hours/year
	(3)	Price of electricity	$0.06 per kwh
	(4)	Annual Cost of Electricity	$17,896.32/year
(b)	Maintenance		
	(1)	Annual man-hours	90 hours/year
	(2)	Labor cost	$21.50/hour
	(3)	Annual Cost of Maintenance	$1,935.00/year
(c)	Replacement Parts for Cyclone		$3,125.00/year
(d)	Replacement Cost of Cyclone		
	(1)	Price	$31,560.00 total
	(2)	Life span	10 years
	(3)	Annual Replacement Cost	$3,156.00/year
Direct Operating Cost Per Year			$26,112.32

Revenue Generated from Sawdust/Chip Sales

Price per ton sold	$10.50/ton of sawdust/chips
Average load	24.29 tons of sawdust/chips
Income per load	$255.05/load
Loads per year	70/year
Annual income	$17,853.15/year
Hauling cost per load	$300/load
Annual hauling cost	$21,000/year
Net loss from sale/hauling per year	$3,146.85

Total Cost of Operating the Cyclone

Direct Operating Cost Per Year	$26,112.32
Net loss from sale/hauling per year	$ 3,146.85
Total	**$29,259.17**

Based on the cost analysis detailed above submitted by the applicant, Blue River Wood Product, saves more than $197,000 each year by using sawdust as a fuel instead of burning propane in the hot water heater. This annual cost savings takes into account the energy costs associated with operating the cyclone, identified as C2, and the estimated annual cost it would take to completely replace the cyclone dust collection system each year. Since such equipment has a lifetime of ten (10) years or more, this estimate is conservative.

IDEM, OAQ has evaluated the justifications and agreed that the cyclone, identified as C2, will be considered as an integral part of the sawing operations. The primary purpose of

this cyclone is collection, not pollution control so that the sawdust can be transferred via closed conveyance to fuel storage for the hot water heater and the cyclone has an overwhelming net positive economic effect. Therefore, the permitting level will be determined using the potential to emit after the cyclone. Operating conditions in the proposed permit will specify that the cyclone shall operate at all times when the sawing operations are in operation.

Enforcement Issue

(a) IDEM is aware that all of the equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
1	Chipper	20	1.5	3,000	Ambient
2	Sawing Operation	40	2.0	4,150	Ambient
3	Sawdust Wood Waste-Fired Water Heater	40	1.167	4,237	600

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 27, 2006 with additional information received on March 7 and 23, and April 2 and 16, 2007.

Emission Calculations

See Appendix A of this document for detailed emission calculations on pages 1 - 5 of 5.

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "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, inclulding 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."

Pollutant	Potential to Emit (tons/yr)
PM	47.3
PM_{10}	28.5
SO_2	3.21
VOC	8.70
CO	10.7
NO_x	2.77

HAPs	Potential to Emit (tons/yr)
Formaldehyde	1.17
Acrolein	0.035
Benzene	0.037
Hydrogen Chloride	0.166
Styrene	0.017
Manganese	0.014
Arsenic	0.00002
Beryllium	0.00002
Cadmium Compounds	0.00002
Chromium Compounds	0.00002
Lead Compounds	0.0001
Mercury Compounds	0.00002
Nickel Compounds	0.00002
Selenium Compounds	0.0001
Total	1.44

(a) The potential to emit of all criteria pollutants is less than one hundred (100) tons per year and the potential to emit of PM and PM_{10} is greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted towards the determination of Part 70 applicability.

County Attainment Status

The source is located in Washington County.

Pollutant	Status
$PM_{2.5}$	attainment
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
8-Hour Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and nitrogen oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Washington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Washington County has been classified as unclassifiable or attainment for $PM_{2.5}$. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions.

(c) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	47.3
PM_{10}	28.5
SO_2	3.21
VOC	8.70
CO	10.7
NO_x	2.77
Single HAP	1.17
Combination HAPs	1.44

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of two hundred fifty (250) tons per year or greater and it is not in one of the twenty-eight (28) listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one hundred (100) tons per year,

(b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and

(c) the combination of HAPs is less than twenty-five (25) tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) The sawdust wood waste-fired hot water heater, identified as EP 7, rated at 2.00 million British thermal units per hour, constructed in 2006, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.40c, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), because the heat input capacity is less than ten (10) million British thermal units per hour.

(b) The storage tank constructed in 2000 with a capacity of 500 gallons of diesel fuel and the storage tank constructed in 2000 with a capacity of 500 gallons of kerosene are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.110b, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984), because the storage capacity of each tank is less than seventy-five (75) cubic meters. Therefore, the requirements of 40 CFR 60.110b, Subpart Kb are not included in the permit.

(c) There are no other New Source Performance Standards included in the permit for this source.

(d) This source is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial/Commercial/Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD), because this source is not a major source of HAPs as defined in 40 CFR 63.2.

(e) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Parts 61 and 63) included in this permit for this source.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the 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.

326 IAC 6-4 (Fugitive Dust Emissions)

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 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5-1(b), this source is subject to the requirements of 326 IAC 6-5 because the source did not receive all the necessary preconstruction approvals before December 13, 1985. Fugitive particulate matter emissions shall be controlled according to plan submitted by the applicant on April 2, 2007. The plan is included as Attachment A to the TSD.

State Rule Applicability – Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source, which is not one of the twenty-eight (28) listed source categories, has an unrestricted potential to emit of each attainment criteria pollutant of less than two hundred fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2, PSD do not apply.

326 IAC 2-4.1-1 (New source toxics control)

The operation of entire source constructed on and after 2000 will emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply.

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

Pursuant to 326 IAC 6-2-1, particulate emissions from the combustion of fuel for indirect heating from facilities constructed on or after September 21, 1983 are subject to the emission limit specified by 326 IAC 6-2-4. The sawdust wood waste-fired hot water heater, identified as EP 7, rated at 2.00 million British thermal units per hour, constructed in 2006, is use for indirect heating.

Therefore, the sawdust wood waste-fired hot water heater shall comply with the requirements of 326 IAC 6-2-4. The emission limitation is based on the following equation:

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

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lbs/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

Pt = $1.09/(2.0)^{0.26}$ = 0.910 lb/mmBtu heat input

Pursuant to 326 IAC 6-2-4(a), particulate emissions for Q less than 10 million British thermal units per hour shall not exceed 0.60 lb/mmBtu heat input.

Based on Appendix A, the potential PM emission rate is 0.56 lbs of PM per million British thermal units, and therefore, the sawdust wood waste-fired hot water heater, identified as EP 7, can comply with this rule.

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

(a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the chipper, identified as EP 2, controlled by a cyclone, identified as C1, shall not exceed 8.56 pounds per hour when operating at a process weight rate of 6,000 pounds per hour (3.00 tons per hour).

The cyclone, identified as C1, shall be in operation at all times the chipper, identified as EP 2 is in operation, in order to comply with this limit. The potential to emit particulate after controls from the chipper from page 2 of 5 of Appendix A is 0.900 pounds per hour, which is less than 8.56 pounds per hour. Therefore, the chipper can comply with this rule.

(b) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the chipper load-out operation, identified as EP 3, shall not exceed 8.56 pounds per hour when operating at a process weight rate of 6,000 pounds per hour (3.00 tons per hour).

The potential to emit particulate after controls from the chipper load-out operation from page 2 of 5 of Appendix A is 6.00 pounds per hour, which is less than 8.56 pounds per hour. Therefore, the chipper load-out operation can comply with this rule.

(c) The above pounds per hour limitations were calculated with the following equation:

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

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

(d) Although each of the sawing operation has a potential to emit of less than 0.551 pounds of PM per hour, sawing is considered one (1) process operation and the emissions are exhausted to a common stack after the cyclone control. Therefore, pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the sawing operation, identified as EP 4, controlled by a cyclone, identified as C2, and exhausted to Stack 2 shall not exceed 42.1 pounds per hour when operating at a process weight rate of 76,340 pounds per hour (38.2 tons per hour).

The cyclone, identified as C2 shall be in operation at all times the sawing operation, identified as EP 4 is in operation, in order to comply with this limit. The potential to emit particulate after controls from the sawing operation from page 2 of 5 of Appendix A is 2.01 pounds per hour, which is less than 42.1 pounds per hour. Therefore, the sawing operation can comply with this rule.

(e) The pounds per hour limitation in item (d) was calculated with the following equation:

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

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

(f) The de-barker, identified as EP 1, the sawdust load-out operation, identified as EP 6, and the two (2) drying kilns, identified as EP 8, are all exempt from the requirements of 326 IAC 6-3 pursuant to 326 IAC 6-3-1(b)(14) due to their potential emissions being less than 0.551 pounds per hour of particulate each.

(g) The maintenance welding consumes less than 625 pounds of weld wire or rod per day. Therefore, pursuant to 326 IAC 6-3-1(b)(9), the maintenance welding is exempt from the requirements of 326 IAC 6-3.

(h) The six (6) mobile kerosene-fired space heaters, rated at 0.215 million British thermal units per hour, each, are all exempt from the requirements of 326 IAC 6-3-2 pursuant to 326 IAC 6-3-1(b)(1) since these space heaters are considered indirect heating facilities.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The two (2) drying kilns, identified as EP 8, constructed in 2006, after the January 1, 1980 applicability date of this rule, could be subject to the requirements of 326 IAC 8-1-6. However, since the total potential to emit VOC is 8.54 tons per year which is less than twenty-five (25) tons per year, the requirements of 326 IAC 8-1-6 are not applicable to either of the drying kilns, identified as EP 8.

Testing Requirements

No testing is proposed since all emission factors are from U.S. EPA AP-42 and FIRE.

Compliance Requirements

Permits issued under 326 IAC 2-6.1 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-6.1-5. As a result,

compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The chipper, identified as EP 2, controlled by a cyclone, identified as C1, has applicable compliance monitoring conditions as specified below:

(1) For a cyclone 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.

(2) For a cyclone 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.

These monitoring conditions are required for the chipper in order to ensure that the cyclone is operating properly at all times. The cyclone must operate properly to in order for the chipper to comply with 326 IAC 5-1 and 326 IAC 6-3-2.

(b) The sawing operation, identified as EP 4, controlled by a cyclone, identified as C2, has applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the sawing operation/cyclone C2 stack exhaust S2 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(2) 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.

(3) 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.

(4) 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.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(6) For a cyclone 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.

(7) For a cyclone 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.

These monitoring conditions are required for the sawing operations in order to ensure that the cyclone is operating properly at all times. The cyclone must operate properly to in order for the sawing operations to comply with 326 IAC 5-1 and 326 IAC 6-3-2. The following compliance monitoring conditions are applicable:

Conclusion

The operation of this staves and headings manufacturing source shall be subject to the conditions of the New Source Review and Minor Source Operating Permit 175-23829-00016.

Attachment A

FUGITIVE PARTICULATE MATTER EMISSION CONTROL PLAN
(Pursuant to 326 IAC 6-6-5)

1. Name and Address of Source:

   Blue River Wood Products
   5170 West State Road 56
   Salem, Indiana 47617

2. Name and Address of Owner or Operator responsible for the execution of the control plan:

   Barry Shewmaker
   Blue River Wood Products
   5170 West State Road 56
   Salem, Indiana 47617

3. Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4:

   Unpaved roadways and parking lots
   Sawdust stockpiles

4. An attached map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.

5. The number and mix of vehicular activity occurring on paved roads, unpaved roads and parking lots.

Vehicle Type	Estimated No. of Vehicles / day
Log trucks	2
Front-end loader	1
Employee and visitor vehicles	30

6. Type and Quantity of material handled:

   Sawdust – 2136 ton storage capacity, 0.25 acres

7. Equipment used to maintain aggregate piles:

   Front-end loader

8. A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision 3:

The unpaved roads, parking lots and stockpile will be visually inspected at least once daily (or more often as conditions warrant) for signs of fugitive particulate emissions. If needed, these areas will be sprayed with water to control emissions. The frequency of application will be on an "as needed" basis.

9. A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations.

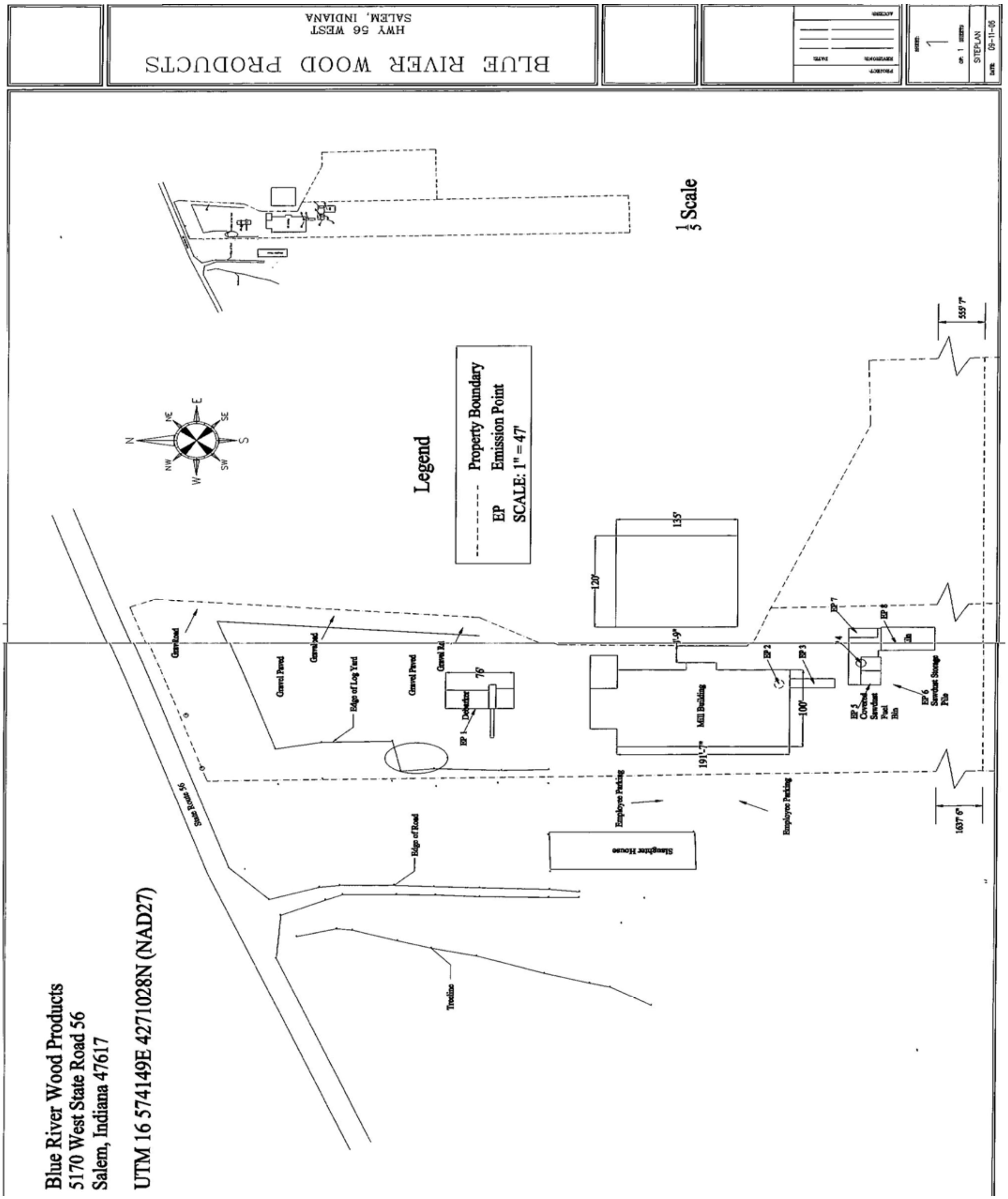
   The dust suppressant material is water. It is estimated that the frequency of application will vary throughout the year as the precipitation varies, such that the water will be sprayed from 0 (during periods of high precipitation) to 3 times per day (during the hot summer, arid times of the year).

10. A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.

    Water from well on the property applied by hose.

11. A schedule of compliance with the provisions of the control plan. Such a schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation or modification of the fugitive particulate matter emission control measures.

    Blue River Wood Products will designate and train existing employees to use water "as needed" to control fugitive emissions.


BLUE RIVER WOOD PRODUCTS
HWY 56 WEST
SALEM, INDIANA
SITEPLAN
09-11-06
1/5 Scale
Legend
Property Boundary
EP Emission Point
SCALE: 1" = 47'
120'
135'
Mill Building
100'
191'-7"
EP 1
EP 2
EP 3
EP 5 Covered Sawdust Fuel Bin
EP 6 Sawdust Storage Pile
EP 7
EP 8
Gravel Paved
Edge of Log Yard
Employee Parking
Slaughter House
State Route 56
Edge of Road
Treeline
555'7"
1637'6"
Blue River Wood Products
5170 West State Road 56
Salem, Indiana 47617
UTM 16 574149E 4271028N (NAD27)

Appendix A: Emissions Calculations

Wood Waste Combustion (uncontrolled)

Company Name: **Blue River Wood Products**
Address City IN Zip: **5170 West State Road 56, Salem, Indiana 47167**
Permit #: **MSOP 175-23829-00016**
Reviewer: **Mark L. Kramer**
Date: **May 22, 2007**

SCC 10200902

Sawdust Wood Waste-Fired Hot Water Heater (EP 7)

Capacity (MMBtu/hr) 2.00

	Pollutant						
	PM*	**PM10***	**PM2.5***	**SO2**	**NOx**	**VOC**	**CO**
Emission Factor in lb/MMBtu	0.56	0.517	0.447	0.025	0.22	0.017	0.6
Potential Emissions in tons/yr	4.91	4.53	3.92	0.219	1.93	0.149	5.26

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

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

All emission factors are from AP-42 for bark/bark and wet wood from Table 1.6-1 for PM, PM-2.5 and PM-10 and Table 1.6-2 for SO2, VOC, NOx and CO.

Methodology

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

Emissions (tons/yr) = Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760hrs/yr x 1ton/2000lbs

Sawdust Wood Waste-Fired Hot Water Heater (EP 7)

Capacity (MMBtu/hr) 2.00

	Selected Hazardous Air Pollutants						
	Acrolein	**Benzene**	**Formaldehyde**	**Hydrogen Chloride**	**Styrene**	**Manganese Compounds**	**Subtotal HAPs**
Emission Factor in lb/MMBtu	0.004	0.0042	0.0044	0.019	0.0019	0.0016	
Potential Emissions in tons/yr	0.035	0.037	0.039	0.166	0.017	0.014	0.307

Methodology

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

Emissions (tons/yr) = Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760hrs/yr x 1ton/2000lbs

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

Company Name: Blue River Wood Products
Address City IN Zip: 5170 West State Road 56, Salem, Indiana 47167
Permit #: MSOP 175-23829-00016
Reviewer: Mark L. Kramer
Date: May 22, 2007

Emission Unit	Capacity lbs/hr	Uncontrolled PM Emission Factor lbs/ton	Control Efficiency %	PM Uncontrolled PTE TPY	PM Controlled PTE TPY	PM-10 Emission Factor lbs/ton	PM-10 Uncontrolled PTE TPY	PM-10 Controlled PTE TPY
De-barker (EP 1) SCC 30700801	11,720	0.02	0.0%	0.513	0.513	0.011	0.282	0.282
Chipper (EP 2) SCC 30700808	6,000	2.00	85.0%	3.94	3.94	0.8	1.58	1.58
Chipper Load-Out (EP 3) SCC 30703002	6,000	2.00	0.0%	26.3	26.3	1.2	15.8	15.8
Chainsaw (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
Circle-Saw Splitter (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
Band-Saw Splitter (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
Band Re-Saw (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
First Edger (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
Second Edger (EP 4) SCC 30700802	11,720	0.35	85.0%	1.35	1.35	0.2	0.770	0.770
Rip-Saw Edger (EP 4) SCC 30700802	3,140	0.35	85.0%	0.361	0.361	0.2	0.206	0.206
Chop Saw (EP 4) SCC 30700802	2,880	0.35	85.0%	0.331	0.331	0.2	0.189	0.189
Subtotal EP 4				**8.78**	**8.78**		**5.0**	**5.02**
Sawdust Pile Handling (EP 5) SCC 30700803	229.5	1.00	0.0%	0.503	0.503	0.36	0.181	0.181
Wood Waste Storage (EP 5) SCC 30703001	229.5	1.00	0.0%	0.503	0.503	0.58	0.292	0.292
Subtotal EP 5				**1.01**	**1.01**		**0.472**	**0.472**
Sawdust Load-Out (EP 6) SCC 30703002	229.5	2.00	0.0%	**1.01**	**1.01**	1.2	**0.603**	**0.603**
Subtotal				**41.5**	**41.5**		**23.7**	**23.7**

Note that the cylcones C1 and C2 are integral to EP2 and EP4, so Potential to Emit is equal to after controls.
Emission Factors from Sawmill Operations & Misc. Woodworking Operations in Airs March 1990
Methodology
Potential before controls = Capacity (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 1 tons/2000 lbs
Potential after controls = Capacity (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 1 tons/2000 lbs x (1 - Control Efficiency)

Emission Unit	Total Capacity lbs/hr	VOC Emission Factor lbs/ton	Control Efficiency %	VOC Uncontrolled PTE TPY	CO Emission Factor lbs/ton	CO Uncontrolled PTE TPY	Formaldehyde Emission Factor lbs/ton	Formaldhyde Uncontrolled PTE TPY
2 Wood Drying Kilns (EP 8) SCC 30700925	600	6.5	0.0%	**8.54**	4	**5.26**	0.86	**1.13**

Emission Factor from Webfire for SCC 30700925

Methodology: Capacity (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 1 tons/2000 lbs

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)

Company Name: Blue River Wood Products
Address, City IN Zip: 5170 West State Road 56, Salem, Indiana 47167
Permit Number: MSOP 175-23829-00016
Reviewer: Mark L. Kramer
Date: May 22, 2007

Six (6) K-1 Kerosene-fired Space Heaters rated at 0.215 mmBtu/hr each

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
1.29	84.3	0.500

	Pollutant				
	PM*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.00	71.0 *(142.0S)*	20.0	0.340	5.00
Potential Emission in tons/yr	0.08	3.0	0.8	0.014	0.21

Methodology

1 gallon of K-1 kerosene has a heating value of 134,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.134 MM Btu
U.S. EPA in Area Source Category Abstract - Fuel Oil and Kerosene Combustion states that distillate fuel emission factors may also be used for kerosene.
Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Kerosene
HAPs Emissions

Six (6) K-1 Kerosene-fired Space Heaters rated at 0.215 mmBtu/hr each

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	0.000004	0.000003	0.000003	0.000003	0.000009
Potential Emission in tons/yr	0.00002	0.00002	0.00002	0.00002	0.0001

	HAPs - Metals (continued)				**Total HAPs**
	Mercury	Manganese	Nickel	Selenium	
Emission Factor in lb/mmBtu	0.000003	0.000006	0.000003	0.00002	
Potential Emission in tons/yr	0.00002	0.00003	0.00002	0.0001	**0.00028**

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations

Company Name: Blue River Wood Products
Address, City IN Zip: 5170 West State Road 56, Salem, Indiana 47167
Permit Number: MSOP 175-23829-00016
Reviewer: Mark L. Kramer
Date: May 22, 2007

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Unpaved Roads
Log Trucks

0.2 total trip/hr x
0.14 average miles/round trip x
8760 hr/yr = 245.28 miles per year

PM Emissions

Ef = k*[(s/12)^0.7]*[(W/3)^b]
= 9.29 lb/mile

where k =	4.9	(particle size multiplier for PM30 or TSP)	(k=4.9 for PM-30 or TSP)
s =	8.4	mean % silt content	
b =	0.45	Constant for PM-10 and PM-30 or TSP	
W =	22	tons average vehicle weight	

$$E = \frac{9.29 \text{ lb/mi} \times 245.28 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1.14 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

Eext = E * [(365-p)/365] = 0.75 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10 Emissions

Ef = k*[(s/12)^0.9]*[(W/3)^b]
= 2.65 lb/mile

where k =	1.5	(particle size multiplier for PM-10)	(k=4.9 for PM-30 or TSP)
s =	8.4	mean % silt content	
b =	0.45	Constant for PM-10 and PM-30 or TSP	
W =	22	tons average vehicle weight	

$$E = \frac{2.65 \text{ lb/mi} \times 245.28 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.32 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

Eext = E * [(365-p)/365] = 0.21 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

Appendix A: Emissions Calculations

Company Name: Blue River Wood Products
Address, City IN Zip: 5170 West State Road 56, Salem, Indiana 47167
Permit Number: MSOP 175-23829-00016
Reviewer: Mark L. Kramer
Date: May 22, 2007

`

Summary of Emissions

Uncontrolled Potential Emissions

Emission Unit Description (Identification)	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPs (tons/yr)
De-barker (EP 1)	0.513	0.282	0.00	0.00	0.00	0.00	0.00
Chipper (EP 2)	3.94	1.58	0.00	0.00	0.00	0.00	0.00
Chipper Load-Out (EP 3)	26.3	15.8	0.00	0.00	0.00	0.00	0.00
Sawing Operation (EP 4)	8.78	5.02	0.00	0.00	0.00	0.00	0.00
Sawdust Pile Handling & Wood Waste Storage (EP 5)	1.01	0.472	0.00	0.00	0.00	0.00	0.00
Sawdust Load-Out (EP-6)	1.01	0.603	0.00	0.00	0.00	0.00	0.00
Sawdust Wood Waste-Fired Hot Water Heater (EP 7)	4.91	4.53	0.219	1.93	0.149	5.26	0.307
Wood Drying Kilns (EP-8)	0.000	0.000	0.000	0.000	8.54	5.26	1.13
6 Kerosene Space Heaters	0.084	0.084	2.99	0.843	0.014	0.211	0.0003
Unpaved Roads	0.749	0.214	0.000	0.000	0.000	0.000	0.000
Total	47.3	28.5	3.21	2.77	8.70	10.7	1.44

Controlled Potential Emissions

Emission Unit Description (Identification)	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPs (tons/yr)
De-barker (EP 1)	0.513	0.282	0.000	0.000	0.000	0.000	0.000
Chipper (EP 2)	3.94	1.58	0.000	0.000	0.000	0.000	0.000
Chipper Load-Out (EP 3)	26.3	15.8	0.000	0.000	0.000	0.000	0.000
Sawing Operation (EP 4)	8.78	5.02	0.000	0.000	0.000	0.000	0.000
Sawdust Pile Handling & Wood Waste Storage (EP 5)	1.01	0.472	0.000	0.000	0.000	0.000	0.000
Sawdust Load-Out (EP-6)	1.01	0.603	0.000	0.000	0.000	0.000	0.000
Sawdust Wood Waste-Fired Hot Water Heater (EP 7)	4.91	4.53	0.219	1.93	0.149	5.26	0.307
Wood Drying Kilns (EP-8)	0.000	0.000	0.000	0.000	8.54	5.26	1.13
6 Kerosene Space Heaters	0.084	0.084	2.99	0.843	0.014	0.211	0.00028
Unpaved Roads	0.749	0.214	0.000	0.000	0.000	0.000	0.000
Total	47.3	28.5	3.21	2.77	8.70	10.7	1.44