September 20, 2019

To: Osgood Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

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

Applicant Name: Napoleon Hardwood Lumber Company, Inc
Permit Number: 137-40679-00052

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

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

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

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

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.
September 20, 2019

Mr. Will Borden
Napoleon Hardwood Lumber Company, Inc.
PO Box 99
Napoleon, IN 47034

Re: Public Notice
Napoleon Hardwood Lumber Company, Inc.
Permit Level: MSOP – New Source Construction
Permit Number: 137-40679-00052

Dear Mr. Borden:

Enclosed is a copy of your draft MSOP – New Source Construction, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: [https://www.in.gov/idem/5474.htm](https://www.in.gov/idem/5474.htm)

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Osgood Public Library, 136 West Ripley Street in Osgood, IN 47037. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Natalie Moore, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-8279 or dial (317) 233-8279.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
Notice of Public Comment

September 20, 2019
Napoleon Hardwood Lumber Company, Inc
137-40679-00052

Dear Concerned Citizen(s):

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

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

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

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

Enclosure
PN AAA Cover Letter 4/12/2019
NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Construction and
Minor Source Operating Permit (MSOP)

for Napoleon Hardwood Lumber Company, Inc. in Ripley County

MSOP No.: M137-40679-00052

The Indiana Department of Environmental Management (IDEM) has received an application from Napoleon Hardwood Lumber Company, Inc., located at 3511 West Napoleon Main Street, Napoleon, Indiana 47034, for a new source construction and MSOP. If approved by IDEM’s Office of Air Quality (OAQ), this proposed permit would allow Napoleon Hardwood Lumber Company, Inc. to construct and operate a new stationary green hardwood processing and saw milling operation.

IDEM is aware that the facility has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft permit contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

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

Osgood Public Library
136 West Ripley Street
Osgood, IN 47037

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, IN 47220-9557

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

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

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

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M137-40679-00052 in all correspondence.

Comments should be sent to:

Natalie Moore
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-8279
Or dial directly: (317) 233-8279
Fax: (317) 232-6749 attn: Natalie Moore
E-mail: NMoore@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (328 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

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

What will happen after IDEM makes a decision?

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

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

Madhumita D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality
New Source Construction and Minor Source Operating Permit
OFFICE OF AIR QUALITY

Napoleon Hardwood Lumber Company, Inc.
3511 West Napoleon Main Street
Napoleon, Indiana 47034

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

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.

Operation Permit No.: M137-40679-00052
Master Agency Interest ID: 62276

Issued by:

Madhurima D. Moulik, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Issuance Date:
Expiration Date:
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SECTION A  

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 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 stationary green hardwood processing and saw milling operation.

Source Address: 3511 West Napoleon Main Street, Napoleon, Indiana 47034
General Source Phone Number: 812-852-4090
SIC Code: 2421 (Sawmills and Planing Mills, General)
County Location: Ripley
Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit Program

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) log preparation area, constructed in 1980s, including the following:

(1) One (1) de-barker, identified as L-1, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(2) One (1) head saw, identified as L-2, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(3) One (1) screening operation, identified as L-3, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(b) One (1) chipper, identified as L-4, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-2.

(c) One (1) sawmill, constructed in 1980s, including the following:

(1) One (1) gang rip/ledger, with a maximum capacity of 0.628 mbf per hour, using a cyclone for PM control, exhausting to Stack S-3.

(2) One (1) trimmer, with a maximum capacity of 0.628 mbf per hour, using a cyclone for PM control, exhausting to Stack S-3.

(3) One (1) sawdust handling operation, with a maximum capacity of 8,888 pounds per hour of sawdust.

(d) One (1) planing operation, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-3.
(e) One (1) kiln dryer, constructed in 1980s, with a maximum capacity of 0.157 mbf* per hour, using no control, exhausting to Stack S-4.

(f) One (1) natural gas-fired unit, with a maximum heat input capacity of 1.45 MMBtu/hr.

(g) Unpaved roads.

[*mbf = thousand board feet per hour]
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 Revocation of Permits [326 IAC 2-1.1-9(5)]

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

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

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

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as described in the application or the permit. The emission units covered in this permit may continue operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as described.

(b) If actual construction of the emission units differs from the description described in the application, the source may not continue operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M137-40679-00052, 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.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

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

B.6 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
B.7 Severability

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

B.8 Property Rights or Exclusive Privilege

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

B.9 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. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.10 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:

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

(c) 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.11 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) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The Permittee shall implement the PMPs.

(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.

(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.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]
(a) All terms and conditions of permits established prior to M137-40679-00052 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.13 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 one hundred twenty (120) days prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-6.1-7.

B.14 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 an affirmation that the statements in the application are true and complete 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
 Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:
(1) Submitted at least one hundred twenty (120) 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.15 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Source Modification Requirement

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

B.17 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][IC 13-17-3-2][IC 13-30-3-4]

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.18 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete 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.19 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-2334230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.20 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 construct and 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 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

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

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

C.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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.
C.6 Fugitive Dust Emissions [326 IAC 6-4]

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

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

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

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

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

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

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

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

   (A) Asbestos removal or demolition start date;

   (B) Removal or demolition contractor; or

   (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control

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

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

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

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

C.9 Performance Testing [326 IAC 3-6]
(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

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

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]
The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.11 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.12 Instrument Specifications [326 IAC 2-1.1-11]

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

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

Corrective Actions and Response Steps

C.13 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

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

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

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

C.14 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

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

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

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

C.15 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and 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 emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.

(c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).

(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.15 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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
C.17 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 51-53 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, 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.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) log preparation area, constructed in 1980s, including the following:

(1) One (1) de-barker, identified as L-1, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(2) One (1) head saw, identified as L-2, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(3) One (1) screening operation, identified as L-3, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(b) One (1) chipper, identified as L-4, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-2.

(c) One (1) sawmill, constructed in 1980s, including the following:

(1) One (1) gang rip/edger, with a maximum capacity of 0.628 mbf* per hour, using a cyclone for PM control, exhausting to Stack S-3.

(2) One (1) trimmer, with a maximum capacity of 0.628 mbf* per hour, using a cyclone for PM control, exhausting to Stack S-3.

(3) One (1) sawdust handling operation, with a maximum capacity of 8,888 pounds per hour of sawdust.

(d) One (1) planing operation, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-3.

(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 Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Woodworking Operation (shall not exceed 11.13 pounds per hour when operating at a process weight rate of 4.44 tons per hour. The pound per hour limitation was calculated with the following equation:

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

(a) \[ E = 4.10 \ P^{0.67} \]

where

E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>P (ton/hr)</th>
<th>E (lb/hr)</th>
<th>Equation Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodworking</td>
<td>4.44</td>
<td>11.13</td>
<td>(a)</td>
</tr>
</tbody>
</table>

D.1.2 Visible Emissions Notations

(a) Visible emission notations of Stack S-3 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT 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).

Company Name: Napoleon Hardwood Lumber Company, Inc.

<table>
<thead>
<tr>
<th>Address:</th>
<th>3511 West Napoleon Main Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>City:</td>
<td>Napoleon, Indiana 47034</td>
</tr>
<tr>
<td>Phone #:</td>
<td>812-852-4090</td>
</tr>
<tr>
<td>MSOP #:</td>
<td>M137-40679-00052</td>
</tr>
</tbody>
</table>

I hereby certify that Napoleon Hardwood Lumber Company, Inc. is:

- [ ] still in operation.
- [ ] no longer in operation.

I hereby certify that Napoleon Hardwood Lumber Company, Inc. is:

- [ ] in compliance with the requirements of MSOP M137-40679-00052.
- [ ] not in compliance with the requirements of MSOP M137-40679-00052.

Authorized Individual (typed):

<table>
<thead>
<tr>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

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
COMPLIANCE AND ENFORCEMENT BRANCH
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
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
PERMIT 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: __________________________ INSPECTION PERIOD: __________________________

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:

________________________________________________________________________

________________________________________________________________________
Affidavit of Construction

I, ____________________________, being duly sworn upon my oath, do depose and say:

(Name of the Authorized Representative)

1. I live in __________________________, County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of ____________________________ for ____________________________.

   (Title)                                      (Company Name)

3. By virtue of my position with ____________________________, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of ____________________________.

   (Company Name)

4. I hereby certify that Napoleon Hardwood Lumber Company, Inc. 3511 West Napoleon Main Street, Napoleon, Indiana 47034, has constructed and will operate a green girdwood processing and saw milling operation on ____________________________ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on November 8, 2018, and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M137-40676-00052, Plant ID No. 137-00052 issued on ____________________________.

5. Permittee, please cross out the following statement if it does not apply: Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

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

Signature ____________________________

Date ____________________________

STATE OF INDIANA)

)SS

COUNTY OF ____________________________

Subscribed and sworn to me, a notary public in and for ____________________________ County and State of Indiana on this ____________________________ day of ____________________________ 20____, My Commission expires:

Signature ____________________________

Name ____________________________ (typed or printed)
Indiana Department of Environmental Management  
Office of Air Quality  

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

<table>
<thead>
<tr>
<th>Source Description and Location</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Name:</td>
<td>Napoleon Hardwood Lumber Company, Inc.</td>
</tr>
<tr>
<td>Source Location:</td>
<td>3511 West Napoleon Main Street, Napoleon, IN 47034</td>
</tr>
<tr>
<td>County:</td>
<td>Ripley</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2421 (Sawmills and Planing Mills, General)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>M137-40679-00052</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Luda Lang/Natalie Moore</td>
</tr>
</tbody>
</table>

On November 8, 2018, the Office of Air Quality (OAQ) received an application from Napoleon Hardwood Lumber Company, Inc. related to the construction and operation of a new green hardwood and saw milling operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Ripley County.

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

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

(a) Ozone Standards

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

(b) PM₂.₅

Ripley County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
(c) Other Criteria Pollutants
Ripley County has been classified as attainment or unclassifyable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4q18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

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

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Napoleon Hardwood Lumber Company, Inc. on November 8, 2018, relating to an unpermitted green hardwood processing and saw milling operation.

The following emission units that were constructed and/or operated without a permit:

(a) One (1) log preparation area, constructed in 1980s, including the following:

(1) One (1) de-barker, identified as L-1, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(2) One (1) head saw, identified as L-2, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(3) One (1) screening operation, identified as L-3, with a maximum throughput of 4.4 tons per hour, using no control, exhausting to Stack S-1.

(b) One (1) chipper, identified as L-4, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-2.

(c) One (1) sawmill, constructed in 1980s, including the following:

(1) One (1) gang rip/edger, with a maximum capacity of 0.628 mbf* per hour, using a cyclone for PM control, exhausting to Stack S-3.
(2) One (1) trimmer, with a maximum capacity of 0.628 mbf* per hour, using a cyclone for PM control, exhausting to Stack S-3.

(3) One (1) sawdust handling operation, with a maximum capacity of 8,888 pounds per hour of sawdust.

(d) One (1) planing operation, constructed in 1980s, with a maximum throughput of 4.4 tons per hour, using a cyclone for PM control, exhausting to Stack S-3.

(e) One (1) kiln dryer, constructed in 1980s, with a maximum capacity of 0.157 mbf* per hour, using no control, exhausting to Stack S-4.

(f) One (1) natural gas-fired unit, with a maximum heat input capacity of 1.45 MMBtu/hr.

(g) Unpaved roads.

[*mbf = thousand board feet per hour]

"Integral Part of the Process" Determination

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations was calculated after control for purposes of determining permitting level and applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

Enforcement Issues

IDEM is aware that equipment has been constructed and/or operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit and/or operating rules.

Emission Calculations

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

Permit Level Determination - MSOP

This table reflects the unrestricted potential emissions of the source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Unrestricted Source-Wide Emissions (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitives*</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
</tr>
</tbody>
</table>
Unrestricted Source-Wide Emissions (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM₁</th>
<th>PM₁₀⁺</th>
<th>PM₂.₅⁽¹⁾,⁽²⁾</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP⁽³⁾</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>36.95</td>
<td>15.11</td>
<td>13.49</td>
<td>3.65</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.95 Methanol</td>
<td>1.78</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

¹ Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."
² PM₂.₅ listed is direct PM₂.₅.
³ Single highest source-wide HAP.
*Fugitive HAP emissions are always included in the source-wide emissions.

The woodworking units (Sawmill) and Planer use a cyclone as an integral control.

Appendix A of this TSD reflects the detailed unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1) of PM is less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The potential to emit of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. The source will be issued an Minor Source Operating Permit (MSOP).

(b) The potential to emit (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. The source will be issued an Minor Source Operating Permit (MSOP).

Federal Rule Applicability Determination

Federal rule applicability for this source has been reviewed as follows:

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

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(a) The requirements of National Emission Standards for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ (326 IAC 20-14), are still not included in this permit, since this source does not manufacture wood furniture or wood furniture components as described in 40 CFR 63.801 and it is not a major source of HAPs.

(b) There are no National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included in the permit.

**Compliance Assurance Monitoring (CAM):**

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

State rule applicability for this source has been reviewed as follows:

326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination - MSOP section of this document.

326 IAC 2-2 (PSD)
The unrestricted potential to emit of all PSD regulated pollutants from this source are less than 250 tons per year, and this source is not one of the listed 28 source categories. Therefore, 326 IAC 2-2 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, LaPorte, or Lawrenceburg Township, Dearborn County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does 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 this permit:

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

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
The source is subject to the requirements of 326 IAC 6-4, because the unpaved roads have the potential to emit fugitive particulate emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Ripley County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Ripley County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.
State Rule Applicability – Individual Facilities

State rule applicability for this source has been reviewed as follows:

Natural Gas-Fired Furnace

326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)
The 1.45 MMBtu/hr natural gas fired furnace is not a source of indirect heating. Therefore, 326 IAC 6-2 does not apply.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
This emission unit is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, this unit was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the unit, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the unit, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

Woodworking Operation

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
(a) Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the woodworking process (including head saw, edger and trimmer operations in the log preparation area, sawmill and planer), since it is a manufacturing process not exempted from this rule under 326 IAC 6-3-1(b) and is not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c).

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from woodworking operations shall not exceed 11.13 pounds per hour when operating at a process weight rate of 4.44 tons per hour. The pound per hour limitation was calculated with the following equation:

\[ E = 4.10 P^{0.57} \]

where

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

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>P (ton/hr)</th>
<th>E (lb/hr)</th>
<th>Equation Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodworking Operations</td>
<td>4.44</td>
<td>11.13</td>
<td>(a)</td>
</tr>
</tbody>
</table>

Based on calculations, a control device is not needed to comply with this limit as the uncontrolled PM emissions from this operation is 5.34 pounds/hr.
[Note: Some of the woodworking operations are controlled by an integral cyclone). However, under 326 IAC 6-3-2 the entire woodworking operation including log preparation area and sawmill are treated as a manufacturing process. Therefore, all the units (controlled or uncontrolled) have been considered as a single manufacturing process subject to a single PM limit]

Klin Dryer

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The kiln dryer has uncontrolled PM PTE of less than 0.551 lb/hr. Therefore, 326 IAC 6-3-2 does not apply.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
This emission unit is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, this unit was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the unit, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the unit, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

### Compliance Determination and Monitoring Requirements

<table>
<thead>
<tr>
<th>Compliance Determination Requirements applicable to this source are as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no compliance determination requirements applicable to this source.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance Monitoring Requirements applicable to this source are as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Compliance Monitoring Requirements applicable to this source are as follows:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Device or Emission Units</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack S-3</td>
<td>Visible emission notations</td>
<td>Daily</td>
<td>Verify whether emissions are normal or abnormal</td>
</tr>
</tbody>
</table>

The monitoring conditions are necessary for the wood woodworking operation to assure compliance with 326 IAC 6-3 (Particulate Emissions Limitations for Manufacturing Processes).

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 8, 2018. Additional information was received on August 20, 2019.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and MSOP No. M137-40679-00052. The staff recommends to the Commissioner that the New Source Construction and MSOP be approved.
IDEM Contact

(a) Questions regarding this proposed permit can be directed to Natalie Moore at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-8279 or toll free at 1-800-451-6027 extension 3-8279.

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

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

**Company Name:** Napoelan Hardwood Lumber Company Inc  
**Source Address:** 3511 West Napoelan Main Street, Napoelan, IN 47034  
**Permit Number:** R157-49679-00052  
**Reviewer:** Linda Yang

#### PTE (Before Integral Woodworking Controls)

<table>
<thead>
<tr>
<th>Process</th>
<th>PM</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>VOC</th>
<th>NOx</th>
<th>SO2</th>
<th>CO</th>
<th>Single HAP</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Preparation (de-barking, Head Saw, Screening, Chipper)</td>
<td>14.00</td>
<td>7.96</td>
<td>7.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawmill</td>
<td>6.81</td>
<td>3.89</td>
<td>3.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Sawdust Handling</td>
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<td>7.06</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planer</td>
<td>2.56</td>
<td>1.48</td>
<td>1.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Kiln Dryer</td>
<td>0.31</td>
<td>0.31</td>
<td>0.31</td>
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<td></td>
<td></td>
<td></td>
<td>0.95</td>
<td>1.77</td>
</tr>
<tr>
<td>Natural Gas Furnace</td>
<td>0.01</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.01</td>
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</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitives</td>
<td>43.14</td>
<td>20.70</td>
<td>20.70</td>
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<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.95</td>
<td>1.78</td>
</tr>
<tr>
<td>Unpaved Roads</td>
<td>6.75</td>
<td>1.60</td>
<td>0.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTE (tons per year) (including fugitives)</td>
<td>49.89</td>
<td>22.50</td>
<td>20.88</td>
<td>3.65</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.95</td>
<td>1.78</td>
</tr>
</tbody>
</table>

#### PTE (After Integral Woodworking Controls)

<table>
<thead>
<tr>
<th>Process</th>
<th>PM</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>VOC</th>
<th>NOx</th>
<th>SO2</th>
<th>CO</th>
<th>Single HAP</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Preparation (de-barking, Head Saw, Screening, Chipper)</td>
<td>8.56</td>
<td>4.88</td>
<td>4.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawmill</td>
<td>1.36</td>
<td>0.78</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawdust Handling</td>
<td>10.45</td>
<td>7.00</td>
<td>7.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Planer</td>
<td>0.51</td>
<td>0.29</td>
<td>0.29</td>
<td></td>
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</tr>
<tr>
<td>Kiln Dryer</td>
<td>0.01</td>
<td>0.05</td>
<td>0.05</td>
<td>3.61</td>
<td></td>
<td></td>
<td></td>
<td>0.95</td>
<td>1.77</td>
</tr>
<tr>
<td>Natural Gas Furnace</td>
<td>0.01</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitives</td>
<td>30.20</td>
<td>13.31</td>
<td>13.31</td>
<td>3.65</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.95</td>
<td>1.78</td>
</tr>
<tr>
<td>Unpaved Roads</td>
<td>6.75</td>
<td>1.60</td>
<td>0.18</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>PTE (tons per year) (including fugitives)</td>
<td>36.95</td>
<td>15.11</td>
<td>13.49</td>
<td>3.65</td>
<td>0.62</td>
<td>0.00</td>
<td>0.52</td>
<td>0.95</td>
<td>1.78</td>
</tr>
</tbody>
</table>
Appendix A: Emissions Calculations

Company Name: Napolean Hardwood Lumber Company Inc
Source Address: 3511 West Napolean Main Street, Napolean, IN 47034
Permit Number: R137-40679-00052
Reviewer: Luda Lang

Emissions from Log Preparation, Debarking, Chipping - Criteria Pollutants

| Log Preparation - Bark Produced | 4.44 (tons/hr) |
| Log Prep. - Bark - Control Method | no control |
| Log Preparation - Chips Produced | 4.440 (tons/hr) |
| Log Prep. - Chips - Control Method | 80% control efficiency |

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM</th>
<th>PM&lt;sub&gt;10&lt;/sub&gt;</th>
<th>PM&lt;sub&gt;2.5&lt;/sub&gt;</th>
<th>SO&lt;sub&gt;2&lt;/sub&gt;</th>
<th>NO&lt;sub&gt;x&lt;/sub&gt;</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>De-Bark - Emission Factor (No Control) (lb/ton)</td>
<td>0.020</td>
<td>0.011</td>
<td>0.011</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PTE (tons/yr)</td>
<td>0.389</td>
<td>0.214</td>
<td>0.214</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emissions (lb/hr)</td>
<td>0.069</td>
<td>0.049</td>
<td>0.049</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Head &amp; Re-Saw, Edger, Trimmer (lb/ton)</td>
<td>0.350</td>
<td>0.200</td>
<td>0.200</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PTE (tons/yr)</td>
<td>6.807</td>
<td>3.869</td>
<td>3.869</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emissions (lb/hr)</td>
<td>1.554</td>
<td>0.868</td>
<td>0.868</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chipper - Emission Factor (lb/ton)</td>
<td>0.350</td>
<td>0.200</td>
<td>0.200</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PTE (tons/yr)</td>
<td>6.807</td>
<td>3.869</td>
<td>3.869</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PTE (tons/yr) (after integral control)</td>
<td>1.351</td>
<td>0.776</td>
<td>0.776</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emissions (lb/hr after integral control)</td>
<td>0.3108</td>
<td>0.1776</td>
<td>0.1776</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

PTE (tons/yr) = Production (ton/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb (Total for De-bark, head saw etc., and chipper)

Note:

*PM2.5 emissions assumed equal to PM10 emissions

**The manufacturing process is woodworking and includes log preparation area and sawmill. The PM limit applies to the entire woodworking operation.

Emission Factors are from AIRs Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants

EPA March 1990 for Sawmill Operations (Log Sawing: Generel) (SCC 3-07-008-01, SCC 3-07-008-02, SCC 3-07-008-03)

Methodology:
PTE (tons/yr) = Production (ton/yr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb (Total for De-bark, head saw etc., and chipper)
Appendix A: Emissions Calculations

Company Name: Napolean Hardwood Lumber Company Inc
Source Address: 3511 West Napolean Main Street, Napolean, IN 47034
Permit Number: R137-49679-00062
Reviewer: Luda Lang

Emissions from Sawmills - Criteria Pollutants

<table>
<thead>
<tr>
<th>Sawmill Throughput -</th>
<th>4.440 tons/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawmill Control Method -</td>
<td>Cyclone 80% control efficiency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planers</th>
<th>0</th>
<th>PM</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>Pollutant</th>
<th>NO_{x}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawmills - Emission Factor$^1$ (Cyclone) (lb/ton)</td>
<td>0.350</td>
<td>0.200</td>
<td>0.200</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PTE (tons/yr) uncontrolled</td>
<td>6.607</td>
<td>3.889</td>
<td>3.889</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PTE (tons/yr) after integral control</td>
<td>1.361</td>
<td>0.776</td>
<td>0.776</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sawdust Handling (lb/ton)</td>
<td>1.000</td>
<td>0.360</td>
<td>0.360</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PTE (tons/yr) uncontrolled</td>
<td>19.45</td>
<td>7.00</td>
<td>7.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note:

$^1$PM2.5 emissions assumed equal to PM10 emissions

Emission Factors are from AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants
EPA March 1990 for Sawmill Operations (Log Sawing: General) (SCG 3-07-008-01, SCC 3-07-008-02, SOG 3-07-008-03)
Sawdust Handling Emission Factors are from AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants EPA March 1990

Methodology

PTE (ton/yr) uncontrolled = Production (ton/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb
PTE (ton/yr) after integral control = Production (ton/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb x (1- control efficiency)
Appendix A: Emissions Calculations

Company Name: Napolean Hardwood Lumber Company Inc
Source Address: 3511 West Napoleon Main Street, Napoleon, IN 47034
Permit Number: R137-40679-00052
Reviewer: Luda Lang

| Throughput | 1.670 tons/hr |
| Cyclone    | 80% control eff. |

<table>
<thead>
<tr>
<th>Planers</th>
<th>Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>---------</td>
<td>----</td>
</tr>
<tr>
<td>Planers - Emission Factor(1) (lb/ton)</td>
<td>0.360</td>
</tr>
</tbody>
</table>

PTE (ton/yr) (uncontrolled)

|          | 2.56 | 1.46 | 1.46 | - | - | - | - |

PTE (ton/yr) after integral control

|          | 0.5  | 0.29 | 0.29 | - | - | - | - |

Note:
(1) Planing EFs conservatively assumed to be same as for sawing

*PM2.5 emissions assumed equal to PM10 emissions

Emission Factors are from AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants
EPA March 1990 for Sawmill Operations (Log Sawing, General) (SCC 3-07-008-01, SCC 3-07-008-02, SCC 3-07-008-03)

Methodology
PTE (ton/yr) uncontrolled = Production (ton/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb
PTE (ton/yr) after integral control = Production (ton/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb x (1 - control efficiency)
### Emissions from Kiln Drying - Criteria Pollutants and Hazardous Air Pollutants

#### Wood Profile for Kiln Activity

<table>
<thead>
<tr>
<th>Species</th>
<th>Kiln Throughput (Mbf/hr) (Yearly Basis)</th>
<th>Kiln Temp.</th>
<th>PM10 (lb/1000 Mbf)</th>
<th>PM2.5 (lb/1000 Mbf)</th>
<th>VOC</th>
<th>Methanol</th>
<th>Formaldehyde</th>
<th>Acetaldehyde</th>
<th>Propionaldehyde</th>
<th>Acrolein</th>
<th>Total HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Fir</td>
<td>0.3</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>0.938</td>
<td>0.148</td>
<td>0.0034</td>
<td>0.065</td>
<td>0.0028</td>
<td>0.0028</td>
<td>0.2107</td>
</tr>
<tr>
<td>Western hemlock</td>
<td>0.3</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>0.623</td>
<td>0.148</td>
<td>0.0034</td>
<td>0.1376</td>
<td>0.0018</td>
<td>0.0026</td>
<td>0.2921</td>
</tr>
<tr>
<td>Western Red Cedar</td>
<td>0.3</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>0.363</td>
<td>0.148</td>
<td>0.0034</td>
<td>0.1376</td>
<td>0.0018</td>
<td>0.0026</td>
<td>0.2921</td>
</tr>
<tr>
<td>Douglas Fir</td>
<td>0.4</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>1.167</td>
<td>0.009</td>
<td>0.0019</td>
<td>0.0082</td>
<td>0.0007</td>
<td>0.0011</td>
<td>0.1409</td>
</tr>
<tr>
<td>Engelmann Spruce</td>
<td>0.1</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>0.174</td>
<td>0.006</td>
<td>0.0003</td>
<td>0.0028</td>
<td>0.0007</td>
<td>0.0011</td>
<td>0.0304</td>
</tr>
<tr>
<td>Larch</td>
<td>0.1</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>0.156</td>
<td>0.006</td>
<td>0.0003</td>
<td>0.0028</td>
<td>0.0007</td>
<td>0.0011</td>
<td>0.0304</td>
</tr>
<tr>
<td>Lodgepole Pine</td>
<td>0.1</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>2.272</td>
<td>0.062</td>
<td>0.0041</td>
<td>0.0042</td>
<td>0.0032</td>
<td>0.0045</td>
<td>0.1168</td>
</tr>
<tr>
<td>Ponderosa Pine</td>
<td>0.4</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>2.609</td>
<td>0.074</td>
<td>0.0034</td>
<td>0.0042</td>
<td>0.0032</td>
<td>0.0045</td>
<td>0.1217</td>
</tr>
<tr>
<td>Western White Pine</td>
<td>0.3</td>
<td>&lt;200</td>
<td>0.05</td>
<td>0.05</td>
<td>2.865</td>
<td>0.074</td>
<td>0.0034</td>
<td>0.0042</td>
<td>0.0032</td>
<td>0.0045</td>
<td>0.1217</td>
</tr>
</tbody>
</table>

1. Emission factors for VOC and HAP are from EPA Region 10 HAP and VOC Emission Factors for Lumber Drying, December 2012.

---

#### PTE (tons/yr)

<table>
<thead>
<tr>
<th>Species</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>VOC</th>
<th>Methanol</th>
<th>Formaldehyde</th>
<th>Acetaldehyde</th>
<th>Propionaldehyde</th>
<th>Acrolein</th>
<th>Total HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Fir</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.1</td>
<td>0.008</td>
<td>0.003</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.12</td>
</tr>
<tr>
<td>Western hemlock</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.1</td>
<td>0.016</td>
<td>0.016</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.32</td>
</tr>
<tr>
<td>Western Red Cedar</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.1</td>
<td>0.16</td>
<td>0.016</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.32</td>
</tr>
<tr>
<td>Douglas Fir</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.1</td>
<td>0.11</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.28</td>
</tr>
<tr>
<td>Engelmann Spruce</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Larch</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.0</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Lodgepole Pine</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.0</td>
<td>0.17</td>
<td>0.01</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.06</td>
</tr>
<tr>
<td>Ponderosa Pine</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.0</td>
<td>0.12</td>
<td>0.01</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.06</td>
</tr>
<tr>
<td>Western White Pine</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>0.309</td>
<td>0.309</td>
<td>0.309</td>
<td>3.6</td>
<td>0.6</td>
<td>0.3</td>
<td>0.7</td>
<td>0.02</td>
<td>0.03</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Assume kilns are direct-fired (heat for kilns is from auxiliary heaters). Any particulate, SO2, NOx, and CO emissions are from combustion at the source of the heat.

**Methodology**

PTE (ton/yr) = Kiln Throughput (mbf/hr) x Emission Factor (lb/mbf) x 6750 lb/yr x 1 ton/2000 lbs
Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/Hr <100

Company Name: Napoleon Hardwood Lumber Company Inc
Source Address: 3511 West Napoleon Main Street, Napoleon, IN 47034
Permit Number: R137-40079-00052
Reviewer: Luda Lang

<table>
<thead>
<tr>
<th>Heat Input Capacity</th>
<th>HHV</th>
<th>Potential Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM Btu/hr</td>
<td>1.5</td>
<td>1900</td>
</tr>
<tr>
<td>Mcf</td>
<td></td>
<td>12.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.01</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.06</td>
</tr>
<tr>
<td>dry PM2.5*</td>
<td>7.5</td>
<td>0.05</td>
</tr>
<tr>
<td>SO2</td>
<td>0.5</td>
<td>0.00</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>0.82</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.03</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>0.52</td>
</tr>
</tbody>
</table>

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

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

Methodology
All emission factors are based on normal firing.
MM Btu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-00-02-02, 1-01-00-02-02, 1-03-00-02-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MM Btu/hr) x 8,760 hrs/yr x 1 MMCF/1,026 MM Btu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF/2,000 lb/ton)

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>HAPs - Organics</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>2.1E-03</td>
<td>1.2E-03</td>
<td>7.5E-02</td>
<td>1.8E+00</td>
<td>3.4E-03</td>
<td>2.1E-05</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>1.3E-05</td>
<td>7.5E-06</td>
<td>4.7E-04</td>
<td>0.01</td>
<td>2.1E-05</td>
<td>0.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAPs - Metals</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>5.0E-04</td>
<td>1.1E-03</td>
<td>1.4E-03</td>
<td>3.8E-04</td>
<td>2.1E-03</td>
<td>2.1E-03</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>3.1E-06</td>
<td>6.8E-06</td>
<td>8.7E-06</td>
<td>2.4E-06</td>
<td>1.3E-05</td>
<td>3.4E-05</td>
</tr>
</tbody>
</table>

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions caused by unpaved roads, based on 5,768 hours of use and API-42, CH 13.2.2 (11/2006).

### Vehicle Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day</th>
<th>Maximum trip per day (frontal)</th>
<th>Maximum one-way trips per day (sidewalk)</th>
<th>Maximum trip per day (sidewalk)</th>
<th>Total Weight of Loaded Vehicle (metric)</th>
<th>Maximum one-way distance (frontal)</th>
<th>Maximum one-way distance (sidewalk)</th>
<th>Maximum one-way distance (sidewalk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lethal Threats Moving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traction Tractors</td>
<td>1.0</td>
<td>10.6</td>
<td>15.6</td>
<td>20.0</td>
<td>25.0</td>
<td>30.0</td>
<td>35.0</td>
<td>40.0</td>
<td>45.0</td>
</tr>
<tr>
<td>Non-Defensive Tractors</td>
<td>1.0</td>
<td>10.6</td>
<td>15.6</td>
<td>20.0</td>
<td>25.0</td>
<td>30.0</td>
<td>35.0</td>
<td>40.0</td>
<td>45.0</td>
</tr>
<tr>
<td>Non-Reactive Tractors</td>
<td>1.0</td>
<td>10.6</td>
<td>15.6</td>
<td>20.0</td>
<td>25.0</td>
<td>30.0</td>
<td>35.0</td>
<td>40.0</td>
<td>45.0</td>
</tr>
</tbody>
</table>

**Totals:** 42.4 212.0 212.0 212.0 212.0

### Average Vehicle Weight Per Trip

| Average Vehicle Weight Per Trip | 56.2 lbs |
| Average Miles Per Trip | 0.5 |

### Unmitigated Emission Factor

\[
\text{E}_{\text{unmitigated}} = \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}}
\]

where:

- \( P_{\text{th}} \) = principal trip hour (API-42 Table 13.2.2.2 for industrial Routes)
- \( W_{av} \) = average vehicle weight
- \( W_{av} \) = average vehicle weight

### Mitigated Emission Factor

\[
\text{E}_{\text{mitigated}} = \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}}
\]

where:

- \( P_{\text{th}} \) = principal trip hour (API-42 Table 13.2.2.2 for industrial Routes)
- \( W_{av} \) = average vehicle weight
- \( W_{av} \) = average vehicle weight

### Unmitigated Emission Factor

\[
\text{E}_{\text{unmitigated}} = \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}}
\]

where:

- \( P_{\text{th}} \) = principal trip hour (API-42 Table 13.2.2.2 for industrial Routes)
- \( W_{av} \) = average vehicle weight
- \( W_{av} \) = average vehicle weight

### Mitigated Emission Factor

\[
\text{E}_{\text{mitigated}} = \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}}
\]

### Process

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated Emission Factor (Before Control) (ton/hr)</th>
<th>Mitigated Emission Factor (Before Control) (ton/hr)</th>
<th>Mitigated Emission Factor (Before Control) (ton/hr)</th>
<th>Mitigated Emission Factor (Before Control) (ton/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traction Tractors</td>
<td>1.04</td>
<td>1.68</td>
<td>1.68</td>
<td>1.68</td>
</tr>
<tr>
<td>Non-Defensive Tractors</td>
<td>1.04</td>
<td>1.68</td>
<td>1.68</td>
<td>1.68</td>
</tr>
<tr>
<td>Non-Reactive Tractors</td>
<td>1.04</td>
<td>1.68</td>
<td>1.68</td>
<td>1.68</td>
</tr>
</tbody>
</table>

### Methodology

- Maximum Weight of Loaded Vehicle (ton/hr) = \( \frac{W_{av}}{\text{Rate of Work}} \times \text{MTW} \times \text{W}_{\text{av}} \)
- Maximum one-way distance (frontal) = \( \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}} \)
- Maximum one-way distance (sidewalk) = \( \frac{P_{\text{th}}}{\text{MTW}} \times \text{W}_{\text{av}} \times \text{W}_{\text{av}} \)

### TSD App A

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Potential To Emit Calculator for Sawmill Facilities

Directions:
- Enter the facility’s information below.
- Write the letter “Y” or “N” next to each fuel type to indicate that the facility does or does not burn that type of fuel.
- Enter the maximum capacity information for the equipment at your sawmill.
- If you operate multiple facilities of the same type (more than one wood-fired boiler or more than one drying kiln), enter the total rated capacity.
- The potential emissions of criteria pollutants and hazardous air pollutants for the facility will be displayed under the “Output” tab.
- This calculator does not calculate emissions from non-emergency engines. Contact your reviewing authority if you use non-emergency engines to power your operations.
- If the throughput capacity of a piece of equipment limits (or bottlenecks) the maximum throughput of other equipment, then input the bottleneck capacity of that other equipment, but only if it impacts output of product.

### Facility Profile

<table>
<thead>
<tr>
<th>Facility Description</th>
<th>Unit</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Preparation - Bark Produced</td>
<td>Tons/ hr</td>
<td>1</td>
</tr>
<tr>
<td>Log Preparation - Chips Produced</td>
<td>Tons/ hr</td>
<td>1</td>
</tr>
<tr>
<td>Sawmill Throughput</td>
<td>Mbf/hr</td>
<td>2.5</td>
</tr>
<tr>
<td>Wood-Fired Boiler(s) Capacity</td>
<td>MMBtu/hr</td>
<td>30</td>
</tr>
<tr>
<td>Planer(s) Throughput</td>
<td>Mbf/hr</td>
<td>2.5</td>
</tr>
<tr>
<td>Wood Drying Kiln(s) Throughput</td>
<td>Mbf/hr</td>
<td>2.5</td>
</tr>
<tr>
<td>Latural Gas-fired Boilers and Auxiliary Heater(s) Capacity</td>
<td>MMBtu/hr</td>
<td>2</td>
</tr>
<tr>
<td>Propane-fired Auxiliary Heater(s) Capacity</td>
<td>MMBtu/hr</td>
<td>2</td>
</tr>
<tr>
<td>Distillate/Diesel-fired Auxiliary Heater(s) Capacity</td>
<td>MMBtu/hr</td>
<td>2</td>
</tr>
<tr>
<td>Diesel-fired Emergency Generator(s) Size</td>
<td>hp</td>
<td>550</td>
</tr>
<tr>
<td>Gasoline-fired Emergency Generator(s) Size</td>
<td>hp</td>
<td>250</td>
</tr>
</tbody>
</table>

### Control Technology Used (Y or N)

<table>
<thead>
<tr>
<th>Control Technology</th>
<th>No Controls</th>
<th>Cyclone</th>
<th>Baghouse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

* Sawmills are required to use a cyclone for control by conditions in the permit.
* Planer mills are required to use a baghouse for control by conditions in the permit.

<table>
<thead>
<tr>
<th>Species</th>
<th>% of Total Kiln Throughput</th>
<th>Kiln Temp. &lt; 200 °F (Y or N)</th>
<th>Kiln Temp. &gt; 200 °F (Y or N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Fir</td>
<td>5</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Western Hemlock</td>
<td>10</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Mbf = thousand board feet
MMBtu = million British thermal units

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