INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We Protect Hoosiers and Our Environment.*
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Eric J. Holcomb**
*Governor*

**Bruno L. Pigott**
*Commissioner*

**NOTICE OF 30-DAY PERIOD**
**FOR PUBLIC COMMENT**

Preliminary Findings Regarding the Renewal of a
Minor Source Operating Permit (MSOP)

for Forest River Inc., Shasta Division in Elkhart County

MSOP Renewal No.: M039-40502-00094

The Indiana Department of Environmental Management (IDEM) has received an application from Forest River Inc., Shasta Division located at 105 County Road 14, Middlebury, Indiana 46540 for a renewal of its MSOP issued on January 27, 2014. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Forest River Inc., Shasta Division to continue to operate its existing source.

This draft MSOP does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

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

Middlebury Community Public Library
101 East Winslow
Middlebury, IN 46540

and

IDEM Northern Regional Office
300 North Dr. Martin Luther King Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

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

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing,

you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M039-40502-00094 in all correspondence.

**Comments should be sent to:**

Michaela Hecox
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Michaela Hecox or (317) 233-3031
Or dial directly: (317) 233-3031
Fax: (317) 232-6749 attn: Michaela Hecox
E-mail: MHecox@idem.IN.gov

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

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

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, 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 Michaela Hecox of my staff at the above address.

Brian Williams, Section Chief
Permits Branch
Office of Air Quality

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*Commissioner*

DRAFT

# Minor Source Operating Permit Renewal
# OFFICE OF AIR QUALITY

## Forest River Inc., Shasta Division
## 105 County Road 14
## Middlebury, Indiana 46540

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 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.: M039-40502-00094<br>Master Agency ID.: 32424 | |
| Issued by:<br><br>Brian Willams, Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date:<br><br>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 recreational vehicle assembly and surface coating operation.

| | |
|---|---|
| Source Address: | 105 County Road 14, Middlebury, Indiana 46540 |
| General Source Phone Number: | 574-825-7178 |
| SIC Code: | 3792 (Travel Trailers and Campers) |
| County Location: | Elkhart |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source Operating Permit Program<br>Minor Source, under PSD and Emission Offset Rules<br>Minor Source, Section 112 of the Clean Air Act<br>Not 1 of 28 Source Categories |

### A.2 Emission Units and Pollution Control Equipment Summary

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

**Building 53**

(a) One (1) recreational vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(b) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone, processing 200 pounds per hour of lumber.

(c) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater with a maximum heat input capacity of 0.46 MMBtu/hr.

(2) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.045 MMBtu/hr.

**Building 127**

(d) One (1) recreational vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(e) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone, processing 200 pounds per hour of lumber.

(f) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater, with a maximum heat input capacity of 0.053 MMBtu/hr.

(2) Four (4) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.045 MMBtu/hr.

(g) One (1) lamination line, identified as L-1, approved for construction in 2010, using flow coating with a maximum capacity of 4.5 panels (30 ft x 7 ft per panel) per hour, using no controls, and exhausting indoors.

**Building 410**

(h) One (1) recreational vehicle (RV) assembly area, approved in 2014 for construction, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(i) One (1) woodworking area, approved in 2014 for construction, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone, processing 200 pounds per hour of lumber.

(j) Natural gas-fired combustion units, consisting of the following:

(1) Three (3) indirect natural gas-fired heaters, each with a maximum heat input capacity of 0.04 MMBtu/hr.

(2) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.464 MMBtu/hr.

## SECTION B GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

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

(a) This permit, M039-40502-00094, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

### B.4 Enforceability

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

### B.5 Severability

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

### B.6 Property Rights or Exclusive Privilege

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

### B.7 Duty to Provide Information

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

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

B.8 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(c) 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.

(d) 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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M039-40502-00094 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.11 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.12 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.13 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.14 Source Modification Requirement

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

B.15 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 13-30-3-1]

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

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

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

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

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

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

B.16 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.17 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 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

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

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

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

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

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

(a) Violation of any conditions of this permit.

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

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

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

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

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 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.8 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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 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.11 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.12 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.13 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.14 Malfunctions Report [326 IAC 1-6-2]

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

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

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

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

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

C.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.16 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 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

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

(c) 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:**

**Building 53**

(a) One (1) Recreational Vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(b) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone exhausting indoors, processing 200 pounds per hour of lumber.

**Building 127**

(c) One (1) Recreational Vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(d) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone exhausting indoors, processing 200 pounds per hour of lumber.

**Building 410**

(g) One (1) Recreational Vehicle (RV) assembly area, approved in 2014 for construction, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(h) One (1) woodworking area, approved in 2014 for construction, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with a cyclone exhausting indoors, processing 200 pounds per hour of lumber.

(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 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators when coating metal at the three (3) RV assembly lines shall be limited to 4.3 pounds of VOC per gallon of coating less water for clear coatings, and 3.5 pounds of VOCs per gallon of coating less water for air dried coatings, forced warm air dried or extreme performance coatings. If more than one emission limitation applies to a specific coating, then the least stringent emission limitation shall be applied.

D.1.2 Volatile Organic Compounds (VOC) Work Practices [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9(f) (Miscellaneous Metal and Plastic Parts Coating Operations), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:

(1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.

(2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.

(3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.

(4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.

(5) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

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

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

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

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC content limit in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [\sum (c \times U) / \sum U]$$

Where:

A is the volume weighted average in pounds VOC per gallon less water as applied;

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

D.1.6 Particulate Control

In order to ensure the Woodworking Areas in Buildings 53, 127, and 410 are exempt from the requirements of 326 IAC 6-3-2, the cyclones for PM, PM10 and PM2.5 control shall be in operation and control emissions from the woodworking facilities at all times the facilities are in operation.

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

D.1.7 Cyclone Failure Detection

In the event that a cyclone malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.8 Cyclone Inspections

The Permittee shall perform semi-annual inspections of the cyclone controlling particulate from Woodworking Areas in Building 53, 127, and 410 to verify that they are being operated and maintained in accordance with the manufacturer's specifications. A record shall be kept of the results of each inspection.

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

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.1.1.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(3) The volume weighted average VOC content of the coatings used for each day;

(4) The daily cleanup solvent usage; and

(5) The total VOC usage for each day.

---

(b) To document the compliance status with Condition D.1.6, the Permittee shall maintain semi-annual records of inspections of the cyclones.

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

**SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

**Building 53**

(c) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater with a maximum heat input capacity of 0.46 MMBtu/hr.

(2) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.045 MMBtu/hr.

**Building 127**

(f) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater, with a maximum heat input capacity of 0.053 MMBtu/hr.

(2) Four (4) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.045 MMBtu/hr.

**Building 410**

(j) Natural gas-fired combustion units, consisting of the following:

(1) Three (3) indirect natural gas-fired heaters, each with a maximum heat input capacity of 0.04 MMBtu/hr.

(2) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.464 MMBtu/hr.

(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.2.1 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the seventeen (17) indirect natural gas-fired heaters shall be limited to 0.6 pounds per MMBtu heat input.

**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:** | Forest River Inc., Shasta Division |
| **Address:** | 105 County Road 14 |
| **City:** | Middlebury, Indiana 46540 |
| **Phone #:** | 574-825-7178 |
| **MSOP #:** | M039-40502-00094 |

I hereby certify that Forest River Inc., Shasta Division is : ☐ still in operation.
☐ no longer in operation.

I hereby certify that Forest River Inc., Shasta Division is : ☐ in compliance with the requirements of MSOP M039-40502-00094.
☐ not in compliance with the requirements of MSOP M039-40502-00094.

| |
|---|
| **Authorized Individual (typed):** |
| **Title:** |
| **Signature:** |
| **Date:** |

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

| |
|---|
| **Noncompliance:** |
| |
| |
| |
| |

## MALFUNCTION REPORT

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
### OFFICE OF AIR QUALITY
### 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 PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 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: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

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

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

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

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

**326 IAC 1-6-1 Applicability of rule**

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

**326 IAC 1-2-39 "Malfunction" definition**

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

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

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

_____
_____

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

# Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP) Renewal

## Source Description and Location

| | |
|---|---|
| **Source Name:** | **Forest River Inc., Shasta Division** |
| **Source Location:** | **105 County Road 14, Middlebury, IN 46540** |
| **County:** | **Elkhart County** |
| **SIC Code:** | **3792 (Travel Trailers and Campers)** |
| **Permit Renewal No.:** | **M039-40502-00094** |
| **Permit Reviewer:** | **Michaela Hecox** |

On September 21, 2018, Forest River Inc., Shasta Division submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Forest River Inc., Shasta Division relating to a stationary recreational vehicle assembly and surface coating operation. Forest River Inc., Shasta Division was issued its first MSOP M039-33752-00094 on January 27, 2014.

In addition, Forest River Inc., Shasta Division notified IDEM that the recreational vehicle (RV) assembly areas have changed the materials being used since the first MSOP was issued. This increases the potential emissions of the source. This change in PTE will be evaluated in this renewal.

## Source Definition

Forest River, Inc., Shasta Division (formerly Pilgrim International), plant number 039-00094, 105 14th Street Middlebury, IN 46540 is a quarter mile from Forest River, Inc., Coachmen Division, plant number 039-00062, 423 North Main St, Middlebury, IN 46540. Forest River has many other plants in Elkhart County but they are all more than four miles from these two plants. IDEM, OAQ has examined whether the Shasta Division plant and the Coachman Division plant are part of the same major source. The term “major source” is defined at 326 IAC 2-7-1(22). In order for these plants to be considered one major source, they must meet all three of the following criteria:

(1) the plants must be under common ownership or common control;

(2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other(s); and,

(3) the plants must be located on contiguous or adjacent properties.

Both plants are owned by Forest River, Inc. Since common ownership exists, the first part of the definition is met.

The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at http://www.osha.gov/pls/imis/sic_manual.html on the internet. Both plants have the two-digit SIC code, 37, for the major group of Transportation Equipment.

A plant is considered a support facility if at least fifty percent of its output is dedicated to another plant. Neither plant provides any output to the other plant. Neither plant qualifies as a support facility. However, since the plants have the same two-digit SIC Code they meet the second part of the major source definition.

The last criterion of the definition is whether the plants are on contiguous or adjacent properties. The Shasta Division plant is located a quarter mile from the Coachmen Division plant. The plants are not located on contiguous properties.

The term “adjacent” is not defined in Indiana’s air permitting rules. IDEM, OAQ has located a May 21, 1988 letter from U.S. EPA Region VIII to the Utah Division of Air Quality regarding the term “adjacent”. This letter is in no way binding on IDEM, OAQ, but it is persuasive. Region VIII stated that any evaluation of what is “adjacent” must relate the guiding principal of a common sense notion of “source”. The evaluation should look at whether the distance between the plants is sufficiently small that it enables them to operate as a single source. Some sample questions are:

1. Are materials routinely transferred between the plants?

2. Do managers or other workers frequently shuttle back and forth to be involved actively in the plants?

3. Is the production process itself split in any way between the plants?

No materials are routinely transferred between the plants. Each plant has its own manager and no employees shuttle back and forth between the plants. The production process is not split in any way between the plants. The plants operate independently of each other. Therefore the plants are not adjacent.

Since the plants do not meet the third part of the major source definition, IDEM, OAQ finds that the plants are not part of the same major source. The Shasta Division plant should be permitted separately from the Coachmen Division plant.

Based on the above, Office of Air Quality has decided to treat the two sources as separate. This source determination relies on the assumption that neither plant shall send any significant output to the other. This determination was initially made under Registration No. R039-29659-000943, issued on October 21, 2010.

## Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

**Building 53**

(a) One (1) recreational vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(b) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with an integral cyclone, processing 200 pounds per hour of lumber.

(c) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater with a maximum heat input capacity of 0.46 MMBtu/hr.

(2) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) Three (3) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.045 MMBtu/hr.

**Building 127**

(d) One (1) recreational vehicle (RV) assembly area, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(e) One (1) woodworking area, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with an integral cyclone, processing 200 pounds per hour of lumber.

(f) Natural gas-fired combustion units, consisting of the following:

(1) One (1) indirect natural gas-fired heater, with a maximum heat input capacity of 0.053 MMBtu/hr.

(2) Four (4) indirect natural gas-fired space heaters, each with a maximum heat input capacity of 0.06 MMBtu/hr.

(3) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.045 MMBtu/hr.

(g) One (1) lamination line, identified as L-1, constructed in 2010, using flow coating with a maximum capacity of 4.5 panels (30 ft x 7 ft per panel) per hour, using no controls, and exhausting indoors.

**Building 410**

(h) One (1) recreational vehicle (RV) assembly area, constructed in 2014, with a maximum production capacity of 1.5 vehicles per hour, including the following:

(1) Airless spray coating to apply adhesives.

(2) Manual surface coating operation (non-spray) including extrusion, roll coating, brushing and wiping.

(i) One (1) woodworking area, constructed in 2014, including the following equipment: one (1) pin router, two (2) belt sanders, three (3) drill presses, two (2) band saws, two (2) radial arm saws, one (1) table saw, eight (8) miter saws (chop saws), one (1) groove router, equipped with an integral cyclone, processing 200 pounds per hour of lumber.

(j) Natural gas-fired combustion units, consisting of the following:

(1) Three (3) indirect natural gas-fired heaters, each with a maximum heat input capacity of 0.04 MMBtu/hr.

(2) One (1) indirect natural gas-fired space heater, with a maximum heat input capacity of 0.464 MMBtu/hr.

## Existing Approvals

The source was issued MSOP No. M039-33752-00094 on January 27, 2014. There have been no subsequent approvals issued.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

## "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 were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

## Enforcement Issue

There are no enforcement actions pending.

## Emission Calculations

See Appendix A of this document for detailed emission calculations.

## County Attainment Status

The source is located in Elkhart County.

| Pollutant | Designation |
|---|---|
| $SO_2$ | Better than national standards. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| $O_3$ | Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1] |
| $PM_{2.5}$ | Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard. |
| $PM_{2.5}$ | Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard. |
| $PM_{10}$ | Unclassifiable effective November 15, 1990. |
| $NO_2$ | Cannot be classified or better than national standards. |
| Pb | Unclassifiable or attainment effective December 31, 2011. |
| [1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. | |

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

(b) $PM_{2.5}$
Elkhart County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, $SO_2$, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

## Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

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

## Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting

decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

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

**Unrestricted Potential Emissions**

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

Based on the potential to emit calculations in Appendix A the increase in potential emissions associated with the change in materials could have been accomodated into the permit with an Administrative Amendment under the provisions of 326 IAC 2-6.1-6(d)(6) and 326 IAC 2-6.1-6(d)(11).

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, VOC is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this MSOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process/ Emission Unit | Potential To Emit of the Entire Source After Issuance of Renewal (tons/year) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $PM_{2.5}$** | $SO_2$ | $NO_x$ | VOC | CO | Total HAPs | Worst Single HAP |
| RV Assembly Areas | 0.97 | 0.97 | 0.97 | - | - | 53.24 | - | 8.97 | 3.50 |
| Woodworking Areas | 2.83 | 2.83 | 2.83 | - | - | - | - | - | Negl. |
| Natural Gas Combustion | 0.01 | 0.06 | 0.06 | 0.00 | 0.73 | 0.04 | 0.61 | 0.01 | 0.01 |
| Lamination | - | - | - | - | - | - | - | - | Negl. |
| Unpaved Roads | 0.60 | 0.16 | 0.02 | - | - | - | - | - | Negl. |
| Paved Roads | 7.66 | 1.53 | 0.38 | - | - | - | - | - | Negl. |
| **Total PTE of Entire Source**** | **12.07** | **5.55** | **4.25** | **0.00** | **0.73** | **53.28** | **0.61** | **8.98** | **3.51** |

| Process/ Emission Unit | Potential To Emit of the Entire Source After Issuance of Renewal (tons/year) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $PM_{2.5}$** | $SO_2$ | $NO_x$ | VOC | CO | Total HAPs | Worst Single HAP |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 25 | 10 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | NA | NA |

negl. = negligible
* 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."
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
***Single Highest Source-Wide HAP is Tetrachloroethylene.
****The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

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

## Federal Rule Applicability

**New Source Performance Standards (NSPS)**

(a) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operation, 40 CFR 60.390, Subpart MM, are still not included in the permit for the recreational vehicle assembly areas, since the source produces recreational vehicles that do not meet the definition of an automobile or light-duty truck, pursuant to 40 CFR 60.391.

(b) The requirements of the New Source Performance Standard for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines, 40 CFR 60.721, Subpart TTT, are still not included in the permit for the surface coating operations on recreational vehicles, since the recreational vehicles are not *business machines*, as defined in 40 CFR 60.721.

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

**National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Automobiles and Light-Duty Trucks, Subpart IIII are still not included in the permit for the recreational vehicle assembly areas, since the source produces recreational vehicles that are not an *automobile or light-duty truck*, as defined in 40 CFR 63.3176.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, Subpart MMMM are still not included in the permit for the recreational vehicle assembly areas, since the source is defined as an area

source of emissions and HAPs. Therefore, the source is not required to comply with the requirements of this subpart, pursuant to 40 CFR 63.3881(b).

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, Subpart PPPP are still not included in the permit for the recreational vehicle assembly areas, since the source is defined as an area source of emissions and HAPs. Therefore, the source is not required to comply with the requirements of this subpart, pursuant to 40 CFR 63.4481(b).

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Subpart HHHHHH are still not included in the permit for the recreational vehicle assembly areas, since the source does not perform paint stripping using MeCl, as defined in 40 CFR 63.11170. The source does not perform spray application coatings, as defined in 40 CFR 63.11180, since all spray coating is done with aerosols, non-atomizing application, or spraying using cups less than 3 fluid ounces. The source does not perform any spray coatings of target HAP, as defined in 40 CFR 63.11180.

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

**State Rule Applicability - Entire Source**

The following state rules are applicable to the source:

(a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
The potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance section above.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit 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 2-4.1.

(d) 326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

(e) 326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 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.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9* or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

(g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to 326 IAC 6-5-1 because it is not located in a nonattainment area for particulate matter.

(h) 326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 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.

(i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

**State Rule Applicability – Individual Facilities**

(a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(d), the seventeen (17) indirect natural gas-fired heaters which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

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

Where:

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

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

For Q less than 10 mmBtu/hr, Pt shall not exceed 0.6. For Q greater than or equal to 10,000 mmBtu/hr, Pt shall not exceed 0.1.

| Indirect Heating Units Which Began Operation After September 21, 1983 | | | | | | |
|---|---|---|---|---|---|---|
| Facility | Construction Date (Removal Date) | Operating Capacity (MMBtu/hr) | Q (MMBtu/hr) | Calculated Pt (lb/MMBtu) | Particulate Limitation, (Pt) (lb/MMBtu) | PM PTE based on AP-42 (lb/MMBtu) |
| Three (3) indirect natural gas-fired heaters | 2014 | 0.04 MMBtu/hr, each | 1.7 | 0.95, each | 0.6, each | 0.002 |

| Indirect Heating Units Which Began Operation After September 21, 1983 | | | | | | |
|---|---|---|---|---|---|---|
| Facility | Construction Date (Removal Date) | Operating Capacity (MMBtu/hr) | Q (MMBtu/hr) | Calculated Pt (lb/MMBtu) | Particulate Limitation, (Pt) (lb/MMBtu) | PM PTE based on AP-42 (lb/MMBtu) |
| Four (4) indirect natural gas-fired space heaters | 2014 | 0.045 MMBtu/hr, each | 1.7 | 0.95, each | 0.6, each | 0.002 |
| Two (2) indirect natural gas-fired heaters | 2014 | 0.464 MMBtu/hr, each | 1.7 | 0.95, each | 0.6, each | 0.002 |
| One (1) indirect natural gas-fired heater | 2014 | 0.053 MMBtu/hr, each | 1.7 | 0.95, each | 0.6, each | 0.002 |
| Seven (7) indirect natural gas-fired space heaters | 2014 | 0.06 MMBtu/hr, each | 1.7 | 0.95, each | 0.6, each | 0.002 |
| Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed. | | | | | | |
| Note: Emission units shown in strikethrough were subsequently removed from the source. The effect of removing these units on "Q" is shown in the year the boiler was removed.. | | | | | | |

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

(1) Pursuant to 326 IAC 6-3-1(b)(15), surface coating manufacturing processes that use less than five (5) gallons per day are exempt from the requirements of 326 IAC 6-3-2. The three (3) RV assembly line operations uses less than five (5) gallons per day. Therefore, the requirements of 326 IAC 6-3-2 do not apply to the three (3) RV assembly lines.

(2) Pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than 0.551 lb/hr of particulate matter (PM) are exempt from the requirements of 326 IAC 6-3-2. Each woodworking operation has a PTE less than 0.551 lbs/hr of PM. Therefore, the requirements of 326 IAC 6-3-2 do not apply to the woodworking operations.

(3) Pursuant to 326 IAC 6-3-1(b)(1), combustion for indirect heating is exempt from the requirements of 326 IAC 6-3-2. Therefore, the five (5) indirect natural gas-fired space heaters are exempt from the requirements of 326 IAC 6-3-2.

(c) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The three (3) RV assembly lines and one (1) lamination area are not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each unit is less than twenty-five (25) tons per year when applying VOC base materials to plastic substrates.

(d) 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)
This source performs surface coating operation for RVs which have an average weight of 7,483 pounds, which does not meet the definition of *light duty trucks* as specified in 326 IAC 8-2-2(a). Therefore, 326 IAC 8-2-2 does not apply.

(e) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
Pursuant to 326 IAC 8-2-9(a)(1)(E), the source is subject to the requirements of 326 IAC 8-2-9, because it is located in Elkart County and coats metal parts or products under the Standard Industrial Classification (SIC) Code of major group #37. The volatile organic compound (VOC) content of coating delivered to the applicators when coating metal at the three (3) RV assembly line shall be limited to 4.3 pounds of VOC per gallon of coating less water for clear coatings, and 3.5 pounds of VOCs per gallon of coating less water for air dried coatings, forced warm air dried or extreme performance coatings. If more than one emission limitation applies to a specific coating, then the least stringent emission limitation shall be applied.

Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:

(1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.

(2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.

(3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.

(4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.

(5) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

## Compliance Determination and Monitoring Requirements

*Compliance Determination Requirements*

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

Volatile Organic Compounds (VOC)

(a) Compliance with the VOC limitations contained in 326 IAC 8-2-9 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the VOC content limit in 326 IAC 8-2-9 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [\sum (c \times U) / \sum U]$$

Where:

A is the volume weighted average in pounds VOC per gallon less water as applied;

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

Particulate Control

(c) In order to ensure the woodworking facilities are exempt from the requirements of 326 IAC 6-2-3, the cyclones for PM, PM10 and PM2.5 control shall be in operation and control emissions from the woodworking facilities at all times while the woodworking facility is in operation.

*Compliance Monitoring Requirements*

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

Cyclone Inspections

| Control | Parameter | Frequency | Range | Excursions and Exceedances |
|---|---|---|---|---|
| Woodworking Areas in Building 53 Cyclone | Inspections | Semi-annual | Normal-Abnormal | Response Steps |
| Woodworking Areas in Building 127 Cyclone | Inspections | Semi-annual | Normal-Abnormal | Response Steps |
| Woodworking Areas in Building 410 Cyclone | Inspections | Semi-annual | Normal-Abnormal | Response Steps |

These monitoring conditions are necessary because the integral cyclone for the Woodworking Areas in Buildings 53, 127, and 410 must operate properly to assure the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) do not apply.

## Conclusion and Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on September 21, 2018.

The operation of this Forest River Inc., Shasta Division shall be subject to the conditions of the attached MSOP Renewal No. M039-40502-00094.

**IDEM Contact**

(a) If you have any questions regarding this permit, please contact Michaela Hecox, 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) 233-3031 or (800) 451-6027, and ask for Michaela Hecox or (317) 233-3031.

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

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

**Appendix A: Emission Calculations**
**Summary**

**Company Name:** **Forest River Inc., Shasta Division**
**ddress City IN Zip:** **105 County Road 14, Middlebury, Indiana 46540**
**Permit Number:** **M039-40502-00094**
**Reviewer:** **Michaela Hecox**
**Date:** **10/26/2018**

| Uncontrolled Potential To Emit of the Entire Source | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | PM | PM10 | PM2.5 | SO2 | NOx | VOC | CO | Total HAPs | Single Highest HAP |
| RV Assembly Areas | 0.97 | 0.97 | 0.97 | - | - | 53.24 | - | 8.97 | 3.50 |
| Woodworking Areas | 2.83 | 2.83 | 2.83 | - | - | - | - | - | - |
| Natural Gas Combustion | 0.01 | 0.06 | 0.06 | 0.00 | 0.73 | 0.04 | 0.61 | 0.01 | 0.01 |
| Lamination | - | - | - | - | - | 0.00 | - | 0.00 | - |
| Fugitive Emissions (Unpaved Roads) | 0.60 | 0.16 | 0.02 | - | - | - | - | - | - |
| Fugitive Emissions (Paved Roads) | 7.66 | 1.53 | 0.38 | - | - | - | - | - | - |
| **Total PTE (Non-Fugitive)**** | 3.81 | 3.85 | 3.85 | 0.00 | 0.73 | 53.28 | 0.61 | 8.98 | 3.51 |
| **Total PTE (Including Fugitive)*** | **12.07** | **5.55** | **4.25** | **0.00** | **0.73** | **53.28** | **0.61** | **8.98** | **3.51** |

**Notes:**
*The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
**Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit

***The PTE of Woodworking Areas is determined after control since a cyclone is integral to the process. The cyclone control efficiency is 95%.

**Appendix A: Emission Calculations**
**Modification Summary**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

| Process Description | Uncontrolled Potential to Emit (PTE) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Criteria Pollutants | | | | | | | Hazardous Air Pollutants | |
| | PM (tons/yr) | PM10 (tons/yr) | PM2.5 (tons/yr) | SO2 (tons/yr) | NOx (tons/yr) | VOC (tons/yr) | CO (tons/yr) | Total HAPs (tons/yr) | Highest Single HAP* (tons/yr) |
| RV Assembly Areas (Before Modification) | 0.05 | 0.05 | 0.05 | - | - | 47.04 | - | 3.45 | 0.41 |
| RV Assembly Areas (After Modification) | 0.97 | 0.97 | 0.97 | - | - | 53.24 | - | 8.97 | 3.50 |
| **Total:** | **0.92** | **0.92** | **0.92** | **0.00** | **0.00** | **6.20** | **0.00** | **5.52** | **3.09** |

**Notes:**
The source has modified the materials used in the RV Assembly Areas since the previous permit M039-33752-00094 was issued.

**Appendix A: Emission Calculations**
**RV Assembly Area VOC and PM**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

| Material | MSDS ID# | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Gallons per hour | Gallons per Year | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Application Method | Transfer Efficiency | Substrate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| swift bond 3U115-1N | 102455 | 9.10 | 0.00% | 0.00% | 0.00% | 0.00% | 10.00% | 1.032 | 4.5 | 4.644 | 9288.1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Manual | 100% | plastic |
| swiftlock 2US20-1N | 100912 | 9.59 | 0.02% | 0.00% | 0.02% | 0.00% | 40.00% | 0.678 | 4.5 | 3.052 | 6104.2 | 0.00 | 0.00 | 0.01 | 0.14 | 0.03 | 0.00 | 0.00 | Manual | 100% | plastic |
| STIQ 10 Insulation Adhesive for Temporary Bond | 102483 | 6.34 | 55.43% | 20.00% | 35.43% | 15.20% | 10.00% | 0.108 | 4.5 | 0.484 | 967.8 | 2.65 | 2.25 | 1.09 | 26.09 | 4.76 | 0.00 | 22.46 | Manual | 100% | plastic |
| Premier Super Stick HF Adhesive | 100287 | 5.79 | 71.82% | 20.00% | 51.82% | 13.88% | 0.00% | 0.084 | 4.5 | 0.378 | 756.9 | 3.48 | 3.00 | 1.14 | 27.25 | 4.97 | 0.00 | - | Manual | 100% | plastic |
| Boring Smith RV BOND Canister | 100323 | 5.67 | 76.68% | 0.00% | 76.68% | 0.00% | 20.00% | 0.040 | 4.5 | 0.182 | 364.3 | 4.35 | 4.35 | 0.79 | 19.01 | 3.47 | 0.00 | 21.74 | Manual | 100% | plastic |
| Parkland Premium TPO Adhesive | 100941 | 9.01 | 0.22% | 0.00% | 0.22% | 0.00% | 20.00% | 0.217 | 4.5 | 0.975 | 1950.3 | 0.02 | 0.02 | 0.02 | 0.46 | 0.08 | 0.00 | 0.10 | Manual | 100% | plastic |
| Geocel 2300 Vehicle Body Sealant Vintage Cream | 101470 | 8.01 | 25.00% | 0.00% | 25.00% | 0.00% | 50.00% | 0.189 | 4.5 | 0.849 | 1697.5 | 2.00 | 2.00 | 1.70 | 40.79 | 7.44 | 0.00 | 4.01 | Manual | 100% | plastic |
| STIQ 55 Polyurethane Bead Adhesive | 102932 | 9.42 | 0.00% | 0.00% | 0.00% | 0.00% | 10.00% | 0.019 | 4.5 | 0.085 | 169.4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Manual | 100% | plastic |
| 3M Polyurethane Adhesive Sealant 560, White, Gray, Black | 100005 | 9.76 | 44.78% | 40.00% | 4.78% | 46.81% | 95.00% | 0.167 | 4.5 | 0.751 | 1502.6 | 0.88 | 0.47 | 0.35 | 8.41 | 1.54 | 0.00 | 0.49 | Manual | 100% | plastic |
| ARV Bond Natural Air Assist - Cylinder | 102939 | 6.88 | 64.21% | 0.00% | 64.21% | 0.00% | 70.00% | 0.018 | 4.5 | 0.082 | 163.8 | 4.42 | 4.42 | 0.36 | 8.68 | 1.58 | 0.31 | 6.31 | Aerosol | 65% | plastic |
| Isopropyl Alcohol | 100276 | 6.55 | 100.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.096 | 4.5 | 0.430 | 860.9 | 6.55 | 6.55 | 2.82 | 67.66 | 12.35 | 0.00 | - | Manual | 100% | metal/plastic |
| 12724 SILAPRENE ALL WEATHER SEALANT | 100301 | 9.76 | 31.76% | 0.00% | 31.76% | 0.00% | 66.40% | 0.075 | 4.5 | 0.336 | 672.7 | 3.10 | 3.10 | 1.04 | 25.02 | 4.57 | 0.00 | 4.67 | Manual | 100% | plastic |
| DICOR 905BA | 100169 | 8.35 | 0.50% | 0.00% | 0.50% | 0.00% | 49.00% | 0.054 | 4.5 | 0.243 | 485.2 | 0.04 | 0.04 | 0.01 | 0.24 | 0.04 | 0.00 | 0.09 | Manual | 100% | plastic |
| STA'-PUT Big Sticky Multi-Purpose Canister Adhesive | 100122 | 5.84 | 74.10% | 18.62% | 55.48% | 13.03% | 30.00% | 0.009 | 4.5 | 0.040 | 80.4 | 3.72 | 3.24 | 0.13 | 3.13 | 0.57 | 0.00 | 10.80 | Manual | 100% | metal/plastic |
| COLOR PUTTY | 100255 | 17.51 | 0.48% | 0.00% | 0.48% | 0.00% | 89.00% | 0.003 | 4.5 | 0.012 | 23.8 | 0.08 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | 0.09 | Manual | 100% | wood |
| Geocel 2300 MHRV Sealant Clear | 101271 | 10.01 | 3.79% | 0.00% | 3.79% | 0.00% | 64.00% | 0.041 | 4.5 | 0.187 | 373.5 | 0.38 | 0.38 | 0.07 | 1.70 | 0.31 | 0.00 | 0.59 | Manual | 100% | plastic |
| SikaglA plus US clear | 102397 | 8.40 | 3.57% | 0.00% | 3.57% | 0.00% | 95.00% | 0.026 | 4.5 | 0.118 | 235.8 | 0.30 | 0.30 | 0.04 | 0.85 | 0.15 | 0.00 | 0.32 | Manual | 100% | plastic |
| TREMPRO 645 BLACK | 102566 | 8.55 | 2.83% | 0.00% | 2.83% | 0.00% | 90.00% | 0.021 | 4.5 | 0.095 | 190.7 | 0.24 | 0.24 | 0.02 | 0.55 | 0.10 | 0.00 | 0.27 | Manual | 100% | plastic |
| Geocel 2300 Vehicle Body Sealant Black | 101263 | 8.01 | 32.97% | 0.00% | 32.97% | 0.00% | 64.00% | 0.020 | 4.5 | 0.089 | 177.2 | 2.64 | 2.64 | 0.23 | 5.61 | 1.02 | 0.00 | 4.13 | Manual | 100% | plastic |
| NOCO Odorless Mineral Spirits | 100150 | 6.59 | 100.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.019 | 4.5 | 0.086 | 172.2 | 6.59 | 6.59 | 0.57 | 13.62 | 2.48 | 0.00 | - | Manual | 100% | metal/plastic |
| DT10 FAST ACRYLIC LACQUER THINNER | 100310 | 6.82 | 100.00% | 14.40% | 85.60% | 11.78% | 0.00% | 0.017 | 4.5 | 0.078 | 156.5 | 6.62 | 5.84 | 0.46 | 10.97 | 2.00 | 0.00 | - | Manual | 100% | plastic |
| SoudaFoam D&W | 100308 | 8.50 | 20.00% | 0.00% | 20.00% | 0.00% | 20.00% | 0.011 | 4.5 | 0.050 | 99.8 | 1.70 | 1.70 | 0.08 | 2.04 | 0.37 | 0.52 | 8.50 | Aerosol | 65% | plastic |
| REDUCER C | 102013 | 7.18 | 25.43% | 0.00% | 25.43% | 0.00% | 0.00% | 0.013 | 4.5 | 0.059 | 119.0 | 1.83 | 1.83 | 0.11 | 2.61 | 0.48 | 0.00 | - | Manual | 100% | plastic |
| 900 PREKLEANO | 100084 | 6.29 | 100.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.013 | 4.5 | 0.058 | 115.8 | 6.29 | 6.29 | 0.36 | 8.74 | 1.60 | 0.00 | - | Manual | 100% | plastic |
| Geocel 2350 MHRV Sealant Bright White | 101063 | 10.43 | 32.10% | 0.00% | 32.10% | 0.00% | 63.00% | 0.009 | 4.5 | 0.041 | 82.2 | 3.35 | 3.35 | 0.14 | 3.30 | 0.60 | 0.00 | 5.31 | Manual | 100% | plastic |
| Sikaflex-227 US | 100407 | 10.60 | 3.84% | 0.00% | 3.84% | 0.00% | 50.00% | 0.008 | 4.5 | 0.034 | 68.5 | 0.41 | 0.41 | 0.01 | 0.33 | 0.06 | 0.00 | 0.81 | Manual | 100% | plastic |
| 502 LSD | 100098 | 9.76 | 33.60% | 0.00% | 33.60% | 0.00% | 66.00% | 0.007 | 4.5 | 0.031 | 63.0 | 3.28 | 3.28 | 0.10 | 2.48 | 0.45 | 0.00 | 4.97 | Manual | 100% | plastic |
| OATEY CANADIAN STANDARD ABS YELLOW CEMENT | 100062 | 7.34 | 65.00% | 20.00% | 45.00% | 17.60% | 30.00% | 0.006 | 4.5 | 0.028 | 56.3 | 4.01 | 3.30 | 0.09 | 2.23 | 0.41 | 0.00 | 11.01 | Manual | 100% | plastic |
| Battery Protector | 100264 | 5.93 | 73.00% | 0.00% | 73.00% | 0.00% | 27.00% | 0.004 | 4.5 | 0.018 | 35.5 | 4.33 | 4.33 | 0.08 | 1.84 | 0.34 | 0.04 | 16.03 | Aerosol | 65% | metal |
| CASA Anti-Wick | 100769 | 8.43 | 48.76% | 45.00% | 3.76% | 45.49% | 52.00% | 0.003 | 4.5 | 0.016 | 31.3 | 0.58 | 0.32 | 0.00 | 0.12 | 0.02 | 0.00 | 0.61 | Manual | 100% | plastic |
| Geocel 2300 Vehicle Body Sealant Clear | 100055 | 8.01 | 33.04% | 0.00% | 33.04% | 0.00% | 64.00% | 0.003 | 4.5 | 0.015 | 29.4 | 2.65 | 2.65 | 0.04 | 0.93 | 0.17 | 0.00 | 4.14 | Manual | 100% | plastic |
| SPRAY RITE SP6-24 ADHESIVE SPRAY | 100179 | 5.01 | 67.00% | 25.00% | 42.00% | 15.02% | 20.00% | 0.003 | 4.5 | 0.014 | 28.2 | 2.48 | 2.10 | 0.03 | 0.71 | 0.13 | 0.04 | 10.52 | Aerosol | 65% | plastic |
| Quick Dry Adhesive | 100283 | 5.67 | 82.00% | 0.00% | 82.00% | 0.00% | 10.00% | 0.003 | 4.5 | 0.011 | 22.9 | 4.65 | 4.65 | 0.05 | 1.28 | 0.23 | 0.00 | 46.49 | Manual | 100% | plastic |
| 551LSD | 102503 | 9.76 | 33.60% | 0.00% | 33.60% | 0.00% | 66.40% | 0.002 | 4.5 | 0.011 | 21.6 | 3.28 | 3.28 | 0.04 | 0.85 | 0.15 | 0.00 | 4.94 | Manual | 100% | plastic |
| CD 757 Heavy Duty Citrus Degreaser Aerosol | 100437 | 6.76 | 97.48% | 0.00% | 97.48% | 0.00% | 0.00% | 0.002 | 4.5 | 0.007 | 14.1 | 6.59 | 6.59 | 0.05 | 1.11 | 0.20 | 0.00 | - | Aerosol | 65% | plastic |
| 0405 DIAM BASECOAT BLACK | 100224 | 9.00 | 23.00% | 0.00% | 23.00% | 0.00% | 33.00% | 0.001 | 4.5 | 0.006 | 12.9 | 2.07 | 2.07 | 0.01 | 0.32 | 0.06 | 0.00 | 6.27 | Manual | 100% | plastic |
| UR30 SPOT & PANEL REDUCER | 100173 | 6.93 | 96.00% | 0.00% | 96.00% | 0.00% | 4.00% | 0.001 | 4.5 | 0.006 | 12.5 | 6.65 | 6.65 | 0.04 | 1.00 | 0.18 | 0.00 | - | Manual | 100% | plastic |
| Silicone Spray | 100260 | 5.34 | 60.00% | 0.00% | 60.00% | 0.00% | 0.00% | 0.001 | 4.5 | 0.006 | 11.8 | 3.20 | 3.20 | 0.02 | 0.45 | 0.08 | 0.02 | - | Aerosol | 65% | plastic |
| WD-40 Multi-Use Product Bulk Liquid | 100444 | 6.81 | 93.00% | 43.00% | 50.00% | 35.11% | 26.00% | 0.001 | 4.5 | 0.005 | 9.7 | 5.25 | 3.41 | 0.02 | 0.40 | 0.07 | 0.00 | 13.10 | Manual | 100% | plastic |
| DH14 FAST HARDENER | 100230 | 8.51 | 44.00% | 0.00% | 44.00% | 0.00% | 50.00% | 0.001 | 4.5 | 0.004 | 8.6 | 3.74 | 3.74 | 0.02 | 0.39 | 0.07 | 0.00 | 7.49 | Manual | 100% | plastic |
| PVTMPP SSPR 6PK SPRAY N GO | 102959 | 6.19 | 69.29% | 0.00% | 69.29% | 0.00% | 20.00% | 0.000 | 4.5 | 0.002 | 3.5 | 4.29 | 4.29 | 0.01 | 0.18 | 0.03 | 0.01 | 21.45 | Aerosol | 50% | |
| Soudal PU Gun and Foam Cleaner | 100201 | 8.35 | 25.00% | 0.00% | 25.00% | 0.00% | 0.00% | 0.001 | 4.5 | 0.004 | 7.0 | 2.09 | 2.09 | 0.01 | 0.18 | 0.03 | 0.03 | - | Aerosol | 65% | metal |
| | | | | | | | | | | | | **Potential to Emit of all 3 lines (pounds per day):** | | | **291.71** | | | | | | |
| | | | | | | | | | | | | **Potential to Emit of all 3 lines (tpy):** | | | | **53.24** | **0.97** | | | | |
| | | | | | | | | | | | | **Potential to Emit of 1 line (tpy):** | | | | **17.75** | **0.32** | | | | |

**METHODOLOGY**

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

Forest River Inc is made up of three (3) buildings. Each building contains one (1) coating line and one (1) woodworking area. The coating lines and woodworking areas are identical.

**Appendix A: Emission Calculations**
**RV Assembly Area HAPs**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

| Material | MSDS ID# | Weight % Xylene | Weight % Ethylbenzene | Weight % Toluene | Weight % MEK | Weight % Hexane | Weight % Cumene | Weight % Naphthalene | Weight % Methyl Isobutyl Ketone | Weight % Methanol | Weight % Methylene diphenyl diisocyanate (MDI) | Weight % Tetrachloro-ethylene | Weight % Vinyl Acetate | Weight %Stryene | Weight % Dimethyl phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1330-20-7 | 100-41-4 | 108-88-3 | 108-10-1 | 110-54-3 | 98-82-8 | 91-20-3 | 108-10-1 | 67-56-1 | 101-68-8 | 127-18-4 | 108-05-4 | 100-42-5 | 1311-1-3 |
| swift bond 3U115-1N | 102455 | | | | | | | | | | | | | | |
| swiftlock 2U520-1N | 100912 | | | | | | | | | | | | | | |
| STIQ 10 Insulation Adhesive for Temporary Bond | 102483 | | | | | | | | | | | | | | |
| Premier Super Stick HF Adhesive | 100287 | 1.00% | | | | | | | | | | | | | |
| Boring Smith RV BOND Canister | 100323 | | | | | 7.25% | | | | | | | | | |
| Parkland Premium TPO Adhesive | 100941 | | | | | | | | | | | | | | |
| Geocel 2300 Vehicle Body Sealant Vintage Cream | 101470 | | | | | | 2.00% | | | | | | | | |
| STIQ 55 Polyurethane Bead Adhesive | 102932 | | | | | | | | | | | | | | |
| 3M Polyurethane Adhesive Sealant 560, White, Gray, Black | 100005 | 4.00% | 2.00% | | | | | | | | | | | | |
| ARV Bond Natural Air Assist - Cylinder | 102939 | | | | | | | 1.00% | | | | | | | |
| Isopropyl Alcohol | 100276 | | | | | | | | | | | | | | |
| 12724 SILAPRENE ALL WEATHER SEALANT | 100301 | | | | | | | | | | | | | | |
| DICOR 905BA | 100169 | | | | | | | | | 1.00% | | | | | |
| STA'-PUT Big Sticky Multi-Purpose Canister Adhesive | 100122 | | | | | 10.00% | | | | | | | | | |
| COLOR PUTTY | 100255 | | | | | | | | | | | | | | |
| Geocel 2300 MHRV Sealant Clear | 101271 | | | | | | 0.20% | | | | | 42.70% | | | |
| Sikasil-N plus US clear | 102397 | | | | | | | | | | | | | | |
| TREMPRO 645 BLACK - 12 CTG | 102566 | | | | | | | | | | | | | | |
| Geocel 2300 Vehicle Body Sealant, Black | 101263 | | | | | | 2.00% | | | | | | | | |
| NOCO Odorless Mineral Spirits | 100150 | | | | | | | | | | | | | | |
| DT10 FAST ACRYLIC LACQUER THINNER | 100310 | | | 50.00% | | | | | | 25.00% | | | | | |
| SoudaFoam D&W (Gun) | 100308 | | | | | | | | | | | | | | |
| REDUCER C | 102013 | | | | | | | | | | | | | | |
| 900 PREKLEANO | 100084 | 5.00% | 2.50% | 2.50% | | | | | | | | | | | |
| Geocel 2350 MHRV Sealant Bright White | 101063 | | | | | | 2.00% | | | | | | | | |
| Sikaflex-227 US | 100407 | 3.84% | | | | | | | | | | | | | |
| 502 LSD | 100098 | | | | | | | | | | | | | | |
| OATEY CANADIAN STANDARD ABS YELLOW CEMENT | 100062 | | | | | | | | | | | | | | |
| Battery Protector | 100264 | | | 10.00% | | | | | | | | | | | |
| CASA Anti-Wick | 100769 | | | | | | | | | | | | | | |
| Geocel 2300 Vehicle Body Sealant Clear | 100055 | | | | | | 2.00% | | | | | | | | |
| SPRAY RITE SP6-24 ADHESIVE SPRAY | 100179 | | | 3.00% | | 15.00% | | | | | | | | | |
| Quick Dry Adhesive | 100283 | | | | | | | | | | | | | | |
| 551LSD | 102503 | | | | | | | | | | | | | | |
| CD 757 Heavy Duty Citrus Degreaser Aerosol | 100437 | | | | | | | | | | | | | | |
| D403 DIAM BASECOAT BLACK | 100224 | 15.00% | 2.90% | | | | | | 9.50% | | | | | | |
| UR30 SPOT & PANEL REDUCER | 100173 | | 10.00% | | | | | | | | | | | | |
| Silicone Spray | 100260 | | | | | | | | | | | | | | |
| WD-40 Multi-Use Product Bulk Liquid | 100444 | | | | | | | | | | | | | | |
| DH14 FAST HARDENER | 100230 | | | 10.00% | | | | | | | | | | | |
| Soudal PU Gun and Foam Cleaner | 100201 | | | | | | | | | | | | | | |

| Material | Usage Rate (lbs/hr) | Xylene | Ethylbenzene | Toluene | MEK | Hexane | Cumene | Naphthalene | Methyl Isobutyl Ketone | Methanol | Methylene diphenyl diisocyanate (MDI) | Tetrachloro-ethylene | Vinyl Acetate | Stryene | Dimethyl phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1330-20-7 | 100-41-4 | 108-88-3 | 108-10-1 | 110-54-3 | 98-82-8 | 91-20-3 | 108-10-1 | 67-56-1 | 101-68-8 | 127-18-4 | 108-05-4 | 100-42-5 | 1311-1-3 |
| swift bond 3U115-1N | 42.26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| swiftlock 2U520-1N | 29.27 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| STIQ 10 Insulation Adhesive for Temporary Bond | 3.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Premier Super Stick HF Adhesive | 2.19 | 0.10 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Boring Smith RV BOND Canister | 1.03 | - | - | - | - | 0.33 | - | - | - | - | - | - | - | - | - |
| Parkland Premium TPO Adhesive | 8.79 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Geocel 2300 Vehicle Body Sealant Vintage Cream | 6.80 | - | - | - | - | - | 0.60 | - | - | - | - | - | - | - | - |
| STIQ 55 Polyurethane Bead Adhesive | 0.80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3M Polyurethane Adhesive Sealant 560, White, Gray, Black | 7.33 | 1.28 | 0.64 | - | - | - | - | - | - | - | - | - | - | - | - |
| ARV Bond Natural Air Assist - Cylinder | 0.56 | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - |
| Isopropyl Alcohol | 2.82 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12724 SILAPRENE ALL WEATHER SEALANT | 3.28 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DICOR 905BA | 2.03 | - | - | - | - | - | - | - | - | 0.09 | - | - | - | - | - |
| STA'-PUT Big Sticky Multi-Purpose Canister Adhesive | 0.23 | - | - | - | - | 0.10 | - | - | - | - | - | - | - | - | - |
| COLOR PUTTY | 0.21 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Geocel 2300 MHRV Sealant Clear | 1.87 | - | - | - | - | - | 0.02 | - | - | - | - | 3.50 | - | - | - |
| Sikasil-N plus US clear | 0.99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TREMPRO 645 BLACK - 12 CTG | 0.82 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Geocel 2300 Vehicle Body Sealant, Black | 0.71 | - | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - |
| NOCO Odorless Mineral Spirits | 0.57 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DT10 FAST ACRYLIC LACQUER THINNER | 0.53 | - | - | 1.17 | - | - | - | - | - | 0.58 | - | - | - | - | - |
| SoudaFoam D&W (Gun) | 0.42 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| REDUCER C | 0.43 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 900 PREKLEANO | 0.36 | 0.08 | 0.04 | 0.04 | - | - | - | - | - | - | - | - | - | - | - |
| Geocel 2350 MHRV Sealant Bright White | 0.43 | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - |
| Sikaflex-227 US | 0.36 | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 502 LSD | 0.31 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OATEY CANADIAN STANDARD ABS YELLOW CEMENT | 0.21 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Battery Protector | 0.11 | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - |
| CASA Anti-Wick | 0.13 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Geocel 2300 Vehicle Body Sealant Clear | 0.12 | - | - | - | - | - | 0.01 | - | - | - | - | - | - | - | - |
| SPRAY RITE SP6-24 ADHESIVE SPRAY | 0.07 | - | - | 0.01 | - | 0.05 | - | - | - | - | - | - | - | - | - |
| Quick Dry Adhesive | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 551LSD | 0.11 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CD 757 Heavy Duty Citrus Degreaser Aerosol | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| D403 DIAM BASECOAT BLACK | 0.06 | 0.04 | 0.01 | - | - | - | - | - | 0.02 | - | - | - | - | - | - |
| UR30 SPOT & PANEL REDUCER | 0.04 | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - |
| Silicone Spray | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WD-40 Multi-Use Product Bulk Liquid | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DH14 FAST HARDENER | 0.04 | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - |
| PVTMPP SSPR 6PK SPRAY N GO SCRLET RED105 | 0.01 | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Soudal PU Gun and Foam Cleaner | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Potential to Emit for All 3 lines, Single HAP (Ton/yr):** | | 1.56 | 0.71 | 1.28 | 0.00 | 0.48 | 0.72 | 0.02 | 0.02 | 0.67 | 0.00 | **3.50** | 0.00 | 0.00 | 0.00 |
| **Potential to Emit for All 3 Lines, Total HAPs (tons/yr):** | | **8.97** | | | | | | | | | | | | | |
| **Potential to Emit Single Line lines, Single HAP (Ton/yr):** | | 0.52 | 0.24 | 0.43 | 0.00 | 0.16 | 0.24 | 0.01 | 0.01 | 0.22 | 0.00 | **1.17** | 0.00 | 0.00 | 0.00 |
| **Potential to Emit for Single Line, Total HAPs (tons/yr):** | | **2.99** | | | | | | | | | | | | | |

**METHODOLOGY**
HAPS emission rate for all 3 lines (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
HAPS emission rate per line (tons/yr) = PTE of all 3 lines (tons/yr) / 3 lines
Forest River Inc is made up of three (3) buildings. Each building contains one (1) coating line and one (1) woodworking area. The coating lines and woodworking areas are identical.

**Appendix A: Emission Calculations**
**Woodworking**

**Company Name:** **Forest River Inc., Shasta Division**
**Address City IN Zip:** **105 County Road 14, Middlebury, Indiana 46540**
**Permit Number:** **M039-40502-00094**
**Reviewer:** **Michaela Hecox**
**Date:** **10/26/2018**

| Per One (1) Building | | | |
|---|---|---|---|
| Production Rate units/hr | Number of Units Produced Durning Collection | Sawdast Captured lbs | Amount collected lbs/unit |
| 1.50 | 120 | 327 | 2.73 |

| Per One (1) Building PM/PM10/PM2.5 PTE Before Integral Cyclone | | | | 3 Buildings Total |
|---|---|---|---|---|
| lbs/unit | lbs/hr | lbs/day | tons/year/building | tons/yr |
| 2.87 | 4.30 | 103.26 | 18.85 | 56.54 |

| Per One (1) Building PM/PM10/PM2.5 PTE After Integral Cyclone | | | | 3 Buildings Total |
|---|---|---|---|---|
| lbs/unit | lbs/hr | lbs/day | tons/year/building | tons/yr |
| 0.14 | 0.22 | 5.16 | 0.94 | 2.83 |

**Methodology:**
Uncontrolled emissions = (Amount collected lb/unit) / (control efficiency)
Controlled emissions = (Uncontrolled emission rate lb/hr) x (1- control efficiency)
The woodworking areas are controlled by a cyclone. Cyclone control efficiency is 95%. The cyclone is integral to the process, therefore PTE will be determined after control.

**Appendix A: Emission Calculations**
**Natural Gas Combustion Only**

**Company Name:** **Forest River Inc., Shasta Division**
**Address City IN Zip:** **105 County Road 14, Middlebury, Indiana 46540**
**Permit Number:** **M039-40502-00094**
**Reviewer:** **Michaela Hecox**
**Date:** **10/26/2018**

| Unit ID | Heat Input Capacity MMBtu/hr | Potential Throughput MMCF/yr |
|---|---|---|
| **Building 53** | | |
| (1) Indirect heater | 0.46 | 14.6 |
| (3) Indirect space heaters | 0.18 | |
| (3) Indirect space heaters | 0.14 | |
| **Building 127** | | |
| (1) Indirect heater | 0.053 | |
| (4) Indirect space heaters | 0.24 | |
| (1) Indirect space heater | 0.045 | |
| **Building 410** | | |
| (3) Indirect heaters | 0.12 | |
| (1) Indirect space heaters | 0.464 | |

| Heat Input Capacity MMBtu/hr | HHV mmBtu / mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 1.7 | 1020 | 14.6 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100<br>**see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.01 | 0.06 | 0.06 | 0.00 | 0.73 | 0.04 | 0.61 |

*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

**HAPS Calculations**

| | HAPs - Organics | | | | | |
|---|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene | **Total - Organics** |
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 | |
| Potential Emission in tons/yr | 1.534E-05 | 8.765E-06 | 5.478E-04 | 1.315E-02 | 2.483E-05 | **1.374E-02** |

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| Potential Emission in tons/yr | 3.652E-06 | 8.035E-06 | 1.023E-05 | 2.776E-06 | 1.534E-05 | **4.003E-05** |
| | | | | | **Total HAPs** | **0.01** |
| | | | | | **Worst HAP** | **0.01** |

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations**
**VOC from RV Roof and Wall Lamination Press located at Plant 1**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

**Reaction:**
**30% MDI + 70% PMDI + Water ----> 100% PMDI + Water + heat**

Assume all VOC is MDI

| | | |
|---|---|---|
| W = | 1.68077E-05 | Evaporation rate grams/second |
| W = | 1.331E-04 | Evaporation rate pounds/hour |

| | | |
|---|---|---|
| 4.5 panels per hour * W = | 5.990E-04 | VOC/HAP pounds/hour |
| hourly emissions * 8760 hours/year * (1 ton/2000 lbs) = | 2.624E-03 | VOC/HAP tons/year |

Assume all MDI is lost without reaction:

**METHODOLOGY**
The evaporation rate was determined using an equation developed by the Society of Plastic Industry (see TSD for more detail).
This methodolgy was used to determine the evaporation rate for a similar lamination process located at the Forest River, Inc. Millersburg facility (OAQ Permit #039-26183-00471, issued July 8, 2008).
$W = ((25.4)*(Pt^{o})*(MT)*(\mu^{0.78})*(A))/T$

W = evaporation rate in grams/second
$Pt^{o}$ = liquid vapor pressure in atmospheres 1.31E-5mmHg * (1atm/760mmHg = 1.72-8 atm)
MT = average molecular weight (MDI = 250)
T = temperature in degrees Kelvin (K° = (80°F - 32°F)*(5/9) +273 = 299)
μ = air speed across the curing adhesive in m/seconds (3 meters/second^$^{0.78}$ = 2.356)
A = exposed area in square meters ((30ft*7ft)* 0.093 $m^2/ft^2$ = 19.53 $m^2$ )

evaporation rate = emission factor
Assume all VOC is MDI and VOC = HAP

VOC lbs/hr = VOC emission factor * panels per hour
VOC tons/yr = VOC lbs/hr * (8760 hrs/1yr) * (1 ton/2000 lbs)

**Appendix A: Emission Calculations**
**Fugitive Dust Emissions - Unpaved Roads**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

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

Vehicle Information (provided by source)

| Type | Maximum number of vehicles | Number of one-way trips per day per vehicle | Maximum trips per day (trip/day) | Maximum Weight Loaded (tons/trip) | Total Weight driven per day (ton/day) | Maximum one-way distance (feet/trip) | Maximum one-way distance (mi/trip) | Maximum one-way miles (miles/day) | Maximum one-way miles (miles/yr) |
|---|---|---|---|---|---|---|---|---|---|
| Pick-up Trucks (entering plant) (one-way trip) | 15.0 | 1.0 | 15.0 | 3.2 | 48.0 | 300 | 0.057 | 0.9 | 311.1 |
| Pick-up Trucks (leaving plant) (one-way trip) | 15.0 | 1.0 | 15.0 | 2.5 | 37.5 | 300 | 0.057 | 0.9 | 311.1 |
| | | **Totals** | **30.0** | | **85.5** | | | **1.7** | **622.2** |

Average Vehicle Weight Per Trip = 2.9 tons/trip
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| where k = | 4.9 | 1.5 | 0.15 | lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads) |
| s = | 6.0 | 6.0 | 6.0 | % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production) |
| a = | 0.7 | 0.9 | 0.9 | = constant (AP-42 Table 13.2.2-2 for Industrial Roads) |
| W = | 2.9 | 2.9 | 2.9 | tons = average vehicle weight (provided by source) |
| b = | 0.45 | 0.45 | 0.45 | = constant (AP-42 Table 13.2.2-2 for Industrial Roads) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| Unmitigated Emission Factor, Ef = | 2.95 | 0.79 | 0.08 | lb/mile |
| Mitigated Emission Factor, Eext = | 1.94 | 0.52 | 0.05 | lb/mile |

| Process | Mitigated PTE of PM (Before Control) (tons/yr) | Mitigated PTE of PM10 (Before Control) (tons/yr) | Mitigated PTE of PM2.5 (Before Control) (tons/yr) |
|---|---|---|---|
| Pick-up Trucks (entering plant) (one-way trip) | 0.30 | 0.08 | 0.01 |
| Pick-up Trucks (leaving plant) (one-way trip) | 0.30 | 0.08 | 0.01 |
| **Totals** | **0.60** | **0.16** | **0.02** |

**Methodology**

| | |
|---|---|
| Total Weight driven per day (ton/day) | = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)] |
| Maximum one-way distance (mi/trip) | = [Maximum one-way distance (feet/trip) / [5280 ft/mile] |
| Maximum one-way miles (miles/day) | = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)] |
| Average Vehicle Weight Per Trip (ton/trip) | = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)] |
| Average Miles Per Trip (miles/trip) | = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)] |
| Mitigated PTE (Before Control) (tons/yr) | = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs) |

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

**Appendix A: Emission Calculations**
**Fugitive Dust Emissions - Paved Roads**

**Company Name:** Forest River Inc., Shasta Division
**Address City IN Zip:** 105 County Road 14, Middlebury, Indiana 46540
**Permit Number:** M039-40502-00094
**Reviewer:** Michaela Hecox
**Date:** 10/26/2018

**Paved Roads at Industrial Site**
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

| Type | Maximum number of vehicles per day | Number of one-way trips per day per vehicle | Maximum trips per day (trip/day) | Maximum Weight Loaded (tons/trip) | Total Weight driven per day (ton/day) | Maximum one-way distance (feet/trip) | Maximum one-way distance (mi/trip) | Maximum one-way miles (miles/day) | Maximum one-way miles (miles/yr) |
|---|---|---|---|---|---|---|---|---|---|
| Semi Trailer (entering plant) (one-way trip) | 90.0 | 1.0 | 90.0 | 35.0 | 3150.0 | 600 | 0.114 | 10.2 | 3733.0 |
| Semi Trailer (leaving plant) (one-way trip) | 90.0 | 1.0 | 90.0 | 13.0 | 1170.0 | 600 | 0.114 | 10.2 | 3733.0 |
| Pick-up Trucks (entering plant) (one-way trip) | 3.0 | 1.0 | 3.0 | 3.2 | 9.6 | 700 | 0.133 | 0.4 | 145.2 |
| Pick-up Trucks (leaving plant) (one-way trip) | 3.0 | 1.0 | 3.0 | 2.5 | 7.5 | 700 | 0.133 | 0.4 | 145.2 |
| | | **Totals** | **186.0** | | **4337.1** | | | **21.3** | **7756.3** |

Average Vehicle Weight Per Trip = 23.3 tons/trip
Average Miles Per Trip = 0.11 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| where k = | 0.011 | 0.0022 | 0.00054 | lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1) |
| W = | 23.3 | 23.3 | 23.3 | tons = average vehicle weight (provided by source) |
| sL = | 9.7 | 9.7 | 9.7 | g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| Unmitigated Emission Factor, Ef = | 2.160 | 0.432 | 0.1060 | lb/mile |
| Mitigated Emission Factor, Eext = | 1.975 | 0.395 | 0.0969 | lb/mile |

| Process | Mitigated PTE of PM (Before Control) (tons/yr) | Mitigated PTE of PM10 (Before Control) (tons/yr) | Mitigated PTE of PM2.5 (Before Control) (tons/yr) |
|---|---|---|---|
| Semi Trailer (entering plant) (one-way trip) | 3.69 | 0.74 | 0.18 |
| Semi Trailer (leaving plant) (one-way trip) | 3.69 | 0.74 | 0.18 |
| Pick-up Trucks (entering plant) (one-way trip) | 0.14 | 0.03 | 0.01 |
| Pick-up Trucks (leaving plant) (one-way trip) | 0.14 | 0.03 | 0.01 |
| **Totals** | **7.66** | **1.53** | **0.38** |

**Methodology**
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (Before Control) (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
*We Protect Hoosiers and Our Environment.*
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Eric J. Holcomb**
*Governor*

**Bruno L. Pigott**
*Commissioner*

November 26, 2018

William Conway
Forest River Inc., Shasta Division
PO Box 3030
Elkhart, IN 46515-3030

Re: Public Notice
Forest River, Inc., Shasta Division
Permit Level: MSOP Renewal
Permit Number: 039-40502-00094

Dear Mr. Conway:

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

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Elkhart Truth in Elkhart, IN publish the abbreviated version of the public notice no later than November 27, 2018. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Middlebury Community Public Library, 101 East Winslow in Middlebury, IN. 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 Michaela Hecox, 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 3-3031 or dial (317) 233-3031.

Sincerely,

*Theresa Weaver*

Theresa Weaver
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017

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*Governor*

**Bruno L. Pigott**
*Commissioner*

**ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

November 21, 2018

Elkhart Truth
421 South Second Street
P.O. Box 487
Elkhart, Indiana 46515

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Forest River, Inc., Shasta Division, Elkhart County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than November 27, 2018.

Please send the invoice, notarized form, clippings showing the date of publication to Bo Liu, at the Indiana Department of Environmental Management, Accounting, Room N1340, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

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

Sincerely,

*Theresa Weaver*

Theresa Weaver
Permit Branch
Office of Air Quality

Permit Level: MSOP Renewal
Permit Number: 039-40502-00094

Enclosure

PN Newspaper Letter 8/22/2018

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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**Eric J. Holcomb**
*Governor*
**Bruno L. Pigott**
*Commissioner*

November 26, 2018

To: Middlebury Community 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: Forest River, Inc., Shasta Division**
**Permit Number: 039-40502-00094**

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

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

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

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

If you have any questions concerning this public review process, please contact Joanne Smiddie-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.

Enclosures
PN Library 1/9/2017

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**Eric J. Holcomb**
*Governor*

**Bruno L. Pigott**
*Commissioner*

Notice of Public Comment

**November 26, 2018**
**Forest River, Inc., Shasta Division**
**039-40502-00094**

Dear Concerned Citizen(s):

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

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

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

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

Enclosure
PN AAA Cover Letter 1/9/2017

# Mail Code 61-53

| IDEM Staff | TAWEAVER 11/26/2018<br>Forest River Inc. Shasta Division 039-40502-00094 (draft) | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
|---|---|---|---|
| Name and address of Sender | ▶ | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**CERTIFICATE OF MAILING ONLY** |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee<br>Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | William Conway Forest River Inc. Shasta Division PO Box 3030 Elkhart IN 465153030 (Source CAATS) | | | | | | | | | |
| 2 | | Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 *(Health Department)* | | | | | | | | | |
| 3 | | Middlebury Town Council and Town Manager P.O. Box 812, 418 North Main Street Middlebury IN 46540 *(Local Official)* | | | | | | | | | |
| 4 | | Middlebury Public Library 101 East Winslow, P.O. Box 192 Middlebury IN 46540-0192 *(Library)* | | | | | | | | | |
| 5 | | Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 *(Local Official)* | | | | | | | | | |
| 6 | | Michael Furfaro DECA Environmental & Associates, Inc 410 1st Ave Carmel IN 46032 *(Consultant)* | | | | | | | | | |
| 7 | | Jeri Seely The Mail-Journal PO Box 188 Milford IN 46542 *(Affected Party)* | | | | | | | | | |
| 8 | | Mr. Roger Schneider The Goshen News 114 S. Main St Goshen IN 46526 *(Affected Party)* | | | | | | | | | |
| 9 | | | | | | | | | | | |
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| Total number of pieces Listed by Sender | Total number of Pieces Received at Post Office | Postmaster, Per (Name of Receiving employee) | The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels. |
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