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 a New Source Review and Renewal of a Minor Source Operating Permit (MSOP)

for Forest River, Inc. Plant 16 in Elkhart County

MSOP Renewal No.: M039-40360-00510

The Indiana Department of Environmental Management (IDEM) has received an application from Forest River, Inc. Plant 16, located at 3731 California Road, Elkhart, Indiana 46514, for a new source review and renewal of its MSOP issued on December 22, 2008. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Forest River, Inc. Plant 16 to make certain changes at its existing source. Forest River, Inc. Plant 16 has applied to update the permit to reflect an increase in production.

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

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

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

Elkhart Public Library
300 S 2nd St.
Elkhart, Indiana 46516

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 M039-40360-00510 in all correspondence.

**Comments should be sent to:**

Alexandrea Neuzerling
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Alexandrea Neuzerling or (317) 232-6634
Or dial directly: (317) 232-6634
Fax: (317) 232-6749 attn: Alexandrea Neuzerling
E-mail: ANeuzerl@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, the IDEM Northern Regional Office, 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 Alexandrea Neuzerling 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. Plant 16
## 3731 California Road
## Elkhart, Indiana 46514

(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.: M039-40360-00510<br>Master Agency Interest ID: 32736 | |
|---|---|
| Issued by:<br><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 towable cargo trailer manufacturing plant.

| | |
|---|---|
| Source Address: | 3731 California Road, Elkhart, Indiana 46514 |
| General Source Phone Number: | (574) 534-6913 |
| SIC Code: | 3799 (Transportation Equipment0 |
| 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:

(a) One (1) Trailer Assembly Operation, identified as EU1, constructed in 1998, with various coatings applied using aerosol cans, manual tube extrusion guns, and other methods for the coating of metal surfaces of cargo trailers with a maximum capacity of manufacturing 3.350 trailers per hour; uncontrolled, and exhausting within the building.

(b) One (1) Paint Booth, identified as EU2, constructed in 1998, using two (2) high volume low pressure (HVLP) guns for the coating of metal surfaces of cargo trailers with a maximum capacity of 3.350 trailers per hour, utilizing fabric filters for particulate control; exhausting through a stack.

(c) One (1) Plywood Painting Operation, identified as EU3, constructed in 1998, using an air assisted airless spray application to coat plywood decking, with a maximum throughput of 3.350 units per hour, using no control and exhausting into the building.

(d) One (1) Woodworking Operation, identified as WW1, constructed in 1998, consisting of five (5) table saws and five (5) radial arm saws, with a combined maximum capacity of 2,600 pounds per hour (lb/hr), utilizing Jet Vac dust collectors as particulate control, and exhausting within the building.

(e) One (1) Welding Operation, identified as MW1, constructed in 1998, consisting of fifteen (15) metal inert gas (MIG) welding stations nominally rated for a maximum capacity of 0.18 pounds RE 70S electrode per hour each.

(f) Nine (9) natural gas-fired space heaters, identified as NG1 through NG9, with a combined nominal capacity of 8.50 million British thermal units per hour (mmBtu/hr), each exhausting through separate stacks.

(g) Paved roads.

## 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, M039-40360-00510, 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 M039-40360-00510 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:**

(a) One (1) Trailer Assembly Operation, identified as EU1, constructed in 1998, with various coatings applied using aerosol cans, manual tube extrusion guns, and other methods for the coating of metal surfaces of cargo trailers with a maximum capacity of manufacturing 3.350 trailers per hour; uncontrolled, and exhausting within the building.

(b) One (1) Paint Booth, identified as EU2, constructed in 1998, using two (2) high volume low pressure (HVLP) guns for the coating of metal surfaces of cargo trailers with a maximum capacity of 3.350 trailers per hour, utilizing fabric filters for particulate control; exhausting through a stack.

(c) One (1) Plywood Painting Operation, identified as EU3, constructed in 1998, using an air assisted airless spray application to coat plywood decking, with a maximum throughput of 3.350 units per hour, using no control and exhausting into the building.

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

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

D.1.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations), for the trailer assembly operation, EU1, when coating metal, the Permittee shall not allow the discharge into the atmosphere VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

(b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations), for the paint booth, EU2, when coating metal, the Permittee shall not allow the discharge into the atmosphere VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating excluding water, as delivered to the applicator.

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

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 be limited to, the following:

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

(b) 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.

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

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

(e) Minimize VOC emissions from the cleaning of 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 Particulate Emission Limitations [326 IAC 6-3-2(d)]

(a) Pursuant to 326 IAC 6-3-2(d), particulate from the paint booth, EU2, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

(b) Pursuant to 326 IAC 6-3-2(d), particulate from the plywood painting operation, EU3, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The Permittee shall use the following work practices as equivalent control for the plywood painting operations:

Operator Training

(1) The Permittee shall train all new and existing personnel, including contract personnel, who are involved in aerosol can spraying and airless applications that could result in excess emissions if performed improperly according to the following schedule:
  (A) All personnel hired shall be trained within thirty (30) days of hiring.
  (B) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.

(2) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
  (A) Appropriate application techniques.
  (B) Appropriate equipment cleaning procedures.
  (C) Appropriate equipment setup and adjustment to minimize material usage and overspray.

(3) The owner or operator shall maintain the following training records on site and make them available for inspection and review:
  (A) A copy of the current training program.
  (B) A list of the following:
    (i) All current personnel, by name, that are required to be trained.
    (ii) The date the person was trained or date of most recent refresher training, whichever is later.

(4) Records of prior training programs and former personnel are not required to be maintained.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.5 Volatile Organic Compounds [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC content and usage 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)(7) 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.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

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

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

Where:

A = Daily volume weighted average in pounds VOC per gallon, less water, as applied
C = As-applied VOC content of coating in pounds VOC per gallon, less water
U = Usage rate of coating in gallons per day

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

D.1.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.1(a).

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

(2) The amount of each 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 VOC content of each coating less water as applied.

(4) The volume weighted average VOC content less water of the coatings used for each day.

(b) To document the compliance status with Condition D.1.1(b), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.1(b).

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

(2) The amount of each 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 VOC content of each coating less water as applied.

(4) The volume weighted average VOC content less water of the coatings used for each day.

(c) To document the compliance status with Condition D.1.3(a), the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

(d) To document the compliance status with Condition D.1.3(b), the Permittee shall maintain:

(1) A copy of the current training program;

(2) A list of the following:

(A) All current personnel, by name, that are required to be trained.
(B) The date the person was trained or date of most recent refresher training, whichever is later; and

(3) Records of prior training programs and former personnel are not required to be maintained.

(e) 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

**Emission Unit Description:**

(d) One (1) Woodworking Operation, identified as WW1, constructed in 1998, consisting of five (5) table saws and five (5) radial arm saws, with a combined maximum capacity of 2,600 pounds per hour (lb/hr), utilizing Jet Vac dust collectors as particulate control, and exhausting within the building.

(The information describing the process contained in this facility 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 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.2 Particulate Control

In order to assure that the woodworking station is exempt from the requirements of 326 IAC 6-3-2, the integral dust collectors shall be in operation and control particulate emissions from the woodworking process at all times that the woodworking process units are in operation.

**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. Plant 16 |
| **Address:** | 3731 California Road |
| **City:** | Elkhart, Indiana 46514 |
| **Phone #:** | (574) 534-6913 |
| **MSOP #:** | M039-40360-00510 |

I hereby certify that Forest River, Inc. Plant 16 is :
- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that Forest River, Inc. Plant 16 is :
- ☐ in compliance with the requirements of MSOP M039-40360-00510.
- ☐ not in compliance with the requirements of MSOP M039-40360-00510.

| |
|---|
| **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 New Source Review and a Minor Source Operating Permit (MSOP) Renewal

**Source Description and Location**

| | |
|---|---|
| **Source Name:** | **Forest River, Inc. Plant 16** |
| **Source Location:** | **3731 California Road, Elkhart, Indiana 46514** |
| **County:** | **Elkhart** |
| **SIC Code:** | **3799 (Transportation Equipment)** |
| **Permit Renewal No.:** | **M039-40360-00510** |
| **Permit Reviewer:** | **Alexandrea Neuzerling** |

On August 22, 2018, Forest River, Inc. Plant 16 submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit as well as update the permit to reflect an increase in production. OAQ has reviewed the operating permit renewal application from Forest River, Inc. Plant 16, a stationary towable cargo trailer manufacturing plant. Forest River, Inc. Plant 16 was issued its first MSOP Renewal (M039-27057-00510) on December 22, 2008.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units:

(a) One (1) Trailer Assembly Operation, identified as EU1, constructed in 1998, with various coatings applied using aerosol cans, manual tube extrusion guns, and other methods for the coating of metal surfaces of cargo trailers with a maximum capacity of manufacturing 3.350 trailers per hour; uncontrolled, and exhausting within the building.

(b) One (1) Paint Booth, identified as EU2, constructed in 1998, using two (2) high volume low pressure (HVLP) guns for the coating of metal surfaces of cargo trailers with a maximum capacity of 3.350 trailers per hour, utilizing fabric filters for particulate control; exhausting through a stack.

(c) One (1) Plywood Painting Operation, identified as EU3, constructed in 1998, using an air assisted airless spray application to coat plywood decking, with a maximum throughput of 3.350 units per hour, using no control and exhausting into the building.

(d) One (1) Woodworking Operation, identified as WW1, constructed in 1998, consisting of five (5) table saws and five (5) radial arm saws, with a combined maximum capacity of 2,600 pounds per hour (lb/hr), utilizing Jet Vac dust collectors as particulate control, and exhausting within the building.

(e) One (1) Welding Operation, identified as MW1, constructed in 1998, consisting of fifteen (15) metal inert gas (MIG) welding stations nominally rated for a maximum capacity of 0.18 pounds RE 70S electrode per hour each.

(f) Nine (9) natural gas-fired space heaters, identified as NG1 through NG9, with a combined nominal capacity of 8.50 million British thermal units per hour (mmBtu/hr), each exhausting through separate stacks.

(g) Paved roads.

## Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) MSOP Renewal No. M039-27057-00510, issued on December 22, 2008.

(b) MSOP Administrative Amendment No. 039-35742-00510, issued on June 1, 2015.

## "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 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

## Enforcement Issue

IDEM is aware that equipment has been operated prior to receipt of the proper permit. Forest River, Inc. Plant 16 had an increase in production since the previously issued permit that increased emissions of PM, PM10, PM2.5 and VOC by more than 25 tons per year, each. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the operation permit rules.

## Emission Calculations

See Appendix A of this TSD 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 15, 2015, for the 2012 annual $PM_{2.5}$ standard. |
| $PM_{2.5}$ | Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour $PM_{2.5}$ standard. |
| $PM_{10}$ | Unclassifiable effective November 15, 1990. |
| $NO_2$ | Unclassifiable or attainment effective January 29, 2012, for the 2010 $NO_2$ standard. |
| Pb | Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard. |

[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**

(a) 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.

(b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard 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**

This table reflects the unrestricted potential emissions of the source.

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 66.57 |
| PM10[(1)] | 63.70 |
| PM2.5 | 63.25 |
| $SO_2$ | 0.02 |
| $NO_x$ | 3.65 |
| VOC | 80.23 |
| CO | 3.07 |

[(1)] Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10) and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5), not particulate matter (PM), are each considered as a "regulated air pollutant".

| HAPs | Potential To Emit (tons/year) |
|---|---|
| Tetrachloroethylene | 5.63 |
| **TOTAL HAPs** | **11.58** |

(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, PM, PM10, PM2.5, and 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.

**Description of Proposed Revision at an Existing Source**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Forest River, Inc. Plant 16 on August 22, 2018, relating to a plant-wide increase in production that resulted in the potential emissions of particulate matter and volatile organic compounds increasing by more than twenty-five (25) tons per year.

**Permit Level Determination – MSOP Significant Permit Revision**

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

| | **PTE Increase of the Modified Emission Units/Processes (ton/year)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Process / Emission Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$[1]** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** | **Single HAP[2]** | **Total HAPs** |
| PTE Before Modification (EU1) | 2.51 | 2.51 | 2.51 | - | - | 11.74 | - | 0.22 (Toluene) | 0.92 |
| PTE After Modification (EU1) | 3.34 | 3.34 | 3.34 | - | - | 16.20 | - | 5.63 (Tetrachloroethylene) | 11.51 |
| *PTE Increase (EU1)* | *0.83* | *0.83* | *0.83* | - | - | *4.46* | - | - | *10.59* |
| PTE Before Modification (EU2) | 13.58 | 13.58 | 13.58 | - | - | 24.16 | - | 9.42 (Toluene) | 14.91 |
| PTE After Modification (EU2) | 57.35 | 57.35 | 57.35 | - | - | 63.00 | - | Negl. | Negl. |
| *PTE Increase (EU2)* | *43.77* | *43.77* | *43.77* | - | - | *38.84* | - | - | *0.00* |
| PTE Before Modification (EU3) | 1.48 | 1.48 | 1.48 | - | - | 4.23 | - | - | - |
| PTE After Modification (EU3 | 1.92 | 1.92 | 1.92 | - | - | 0.83 | - | - | - |
| *PTE Increase (EU3)* | *0.44* | *0.44* | *0.44* | - | - | *0.00* | - | - | - |
| PTE Before Modification (WW1) | 0.75 | 0.14 | 0.14 | - | - | - | - | - | - |
| PTE After Modification (WW1) | 0.85 | 0.16 | 0.16 | - | - | - | - | - | - |
| *PTE Increase (WW1)* | *0.10* | *0.02* | *0.02* | - | - | - | - | - | - |
| PTE Before Modification (MW1) | 0.03 | 0.03 | 0.03 | - | - | - | - | - | - |
| PTE After Modification (MW1) | 0.07 | 0.07 | 0.07 | - | - | - | - | 0.01 (Manganese) | 0.01 |
| *PTE Increase (MW1)* | *0.04* | *0.04* | *0.04* | - | - | - | - | - | *0.01* |
| PTE Before Modification (NG1-NG9) | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 (Hexane) | 0.07 |
| PTE After Modification (NG1-NG9) | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 (Hexane) | 0.07 |
| *PTE Increase (NG1-NG9)* | - | - | - | - | - | - | - | - | - |
| Paved Roads | 2.98 | 0.60 | 0.15 | - | - | - | - | - | - |
| **Total PTE Increase of the Modified Emission Units/Processes** | **48.15** | **45.68** | **45.23** | **-** | **-** | **43.30** | **-** | **-** | **10.59** |

[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.
[2]Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the proposed revision.

Pursuant to 326 IAC 2-6.1-6(i)(1)(E), this MSOP is revised through a Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit Revision and the proposed revision involves a change in the method of operation where there is an increase in potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants: PM, PM10, or direct PM2.5, VOCs.

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ (326 IAC 20-14), are still not included in the permit, since, while items coated at this source could be considered wood furniture components, this source does not manufacture furniture and it is not a major source of HAP as defined in 40 CFR Part 63, Subpart A (40 CFR 63.2).

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Plywood and Composite Wood Products, 40 CFR 63, Subpart DDDD, are still not included in the permit, since this source does not manufacture plywood or composite wood products.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM (326 IAC 20-80), are still not included in the permit because the source is not a major source of HAPs as defined in 40 CFR 63.2.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ (326 IAC 20-79), are still not included in the permit, since the items coated at this source are not used in the construction of residential, commercial, or institutional buildings.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH (326 IAC 20-80), are still not included in the permit because the source does not use paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), does not do any spray application of coatings to motor vehicles or motor vehicle equipment, and spray application of coatings to metal substrates do not contain target HAPs.

(f) 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.

Compliance Assurance Monitoring (CAM)

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

**State Rule Applicability Determination - Entire Source**

The following state rules are applicable to the source:

(a) 326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

(b) 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.

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

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

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

(e) 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.

**State Rule Applicability - Individual Facilities**

Assembly Operations

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(12), the assembly operation, EU1, is exempt from the requirements of IAC 326 6-3-2, because the aerosol coating products applied are used for touch-up. The coatings that are not aerosol are applied by extrusion, roll coating, brushing, or wiping, and are, therefore, exempt pursuant to 326 IAC 6-3-1(5) through (8). 3M Hi-Tack Spray Adhesive 76, EverStrong ES20 Contact Adhesive - Aerosol and Canister, Q-320 High Strength Fast Tack Adhesive, and BTS Brake Parts & Metal Cleaner do not meet the definition of "surface coating" under 326 IAC 6-3-1.5 and the potential particulate emissions are less than five hundred fifty-one thousandths (0.551) pounds per hour, so, pursuant to 326 IAC 6-3-1(b)(14), these materials are also exempt from the requirements of 326 IAC 6-3-2.

(b) 326 IAC 8-2-9 (Volatile Organic Compounds)
Pursuant to 326 IAC 8-2-1(a)(4), the assembly operation, EU1, is subject to the requirements of 326 IAC 8-2-9 because the actual VOC emissions are greater than 15 lbs/day, and the facility was constructed after 1990.

(1) Pursuant to 326 IAC 8-2-9(c)(2), when coating metal, the Permittee shall not allow the discharge into the atmosphere of VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

(A) Compliance with the VOC usage limitations shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a)(7) 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) The daily volume weighted average of VOC content shall be calculated using the following methodology:

Where:

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

A = Daily volume weighted average in pounds VOC per gallon, less water, as applied
C = As-applied VOC content of coating in pounds VOC per gallon, less water
U = Usage rate of coating in gallons per day

Based on calculations, Forest River, Inc. Plant 16 is able to comply with the VOC usage limitations.

(2) 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 be limited to, the following:

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

(B) 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.

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

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

(E) Minimize VOC emissions from the cleaning of 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.

Paint Booth

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d), particulate from the paint booth shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

(b) 326 IAC 8-2-9 (Volatile Organic Compounds)
Pursuant to 326 IAC 8-2-1(a)(4), the paint booth, EU2, is subject to the requirements of 326 IAC 8-2-9 because the actual VOC emissions are greater than 15 lbs/day and the facility was constructed after 1990.

(1) Pursuant to 326 IAC 8-2-9(c)(2), when coating metal, the Permittee shall not allow the discharge into the atmosphere of VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

(A) Compliance with the VOC usage limitations shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a)(7) 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 procudures specified in 326 IAC 8-1-4.

(B) The daily volume weighted average of VOC content shall be calculated usiing the following methodology:

Where:

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

A = Daily volume weighted average in pounds VOC per gallon, less water, as applied
C = As-applied VOC content of coating in pounds VOC per gallon less water
U = Usage rate of coating in gallons per day

Based on calculations, Forest River, Inc. Plant 16 is able to comply with the VOC usage limitations.

(2) 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 be limited to, the following:

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

(B) 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.

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

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

(E) Minimize VOC emissions from the cleaning of 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.

Plywood Painting Operations

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d), particulate from the plywood painting operations shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

This unit is not equipped with a dry particulate filter or waterwash system. Therefore, the Permittee shall use the following work practices as equivalent control for the plywood painting operations:

Operator Training

(A) The Permittee shall train all new and existing personnel, including contract personnel, who are involved in aerosol can spraying and airless applications that could result in excess emissions if performed improperly according to the following schedule:
(i) All personnel hired shall be trained within thirty (30) days of hiring.
(ii) To ensure training goals listed in subsection (B) are maintained, all personnel shall be given refresher training annually.

(B) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
(i) Appropriate application techniques.
(ii) Appropriate equipment cleaning procudures.
(iii) Appropriate equipment setup and adjustments to minimize material usage and overspray.

(C) The owner or operator shall maintain the following training records on site and make them available for inspection and review:
(i) A copy of the current training program.
(ii) A list of the following:
(a) All current personnel, by name, that are required to be trained.
(b) The date the person was trained or date of most recent refresher training, whichever is later.

(D) Records of prior training programs and former personnel are not required to be maintained.

(b) 326 IAC 8-1-6 (VOC Rules: New Facilities; General Reduction Requirements)
Pursuant to 326 IAC 8-1-1(b), the requirements of 326 IAC 8-1-6 are not applicable to the plywood painting process, since the actual emission before controls are less than fifteen (15) pounds of VOC per day.

(c) 326 IAC 8-2-10 (Volatile Organic Compounds)
Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-10 are not applicable to the plywood painting process, since the actual emission are less than fifteen (15) pounds of VOC per day.

Woodworking Operations

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 are not applicable to the woodworking process, since the potential to emit particulate emissions after integral woodworking controls is less than five hundred fifty-one thousandths (0.551) pounds per hour.

In order to assure that the woodworking operation is exempt from the requirements of 326 IAC 6-3-2, the integral dust collectors shall be in operation and control particulate emissions from the woodworking process at all times that the woodworking process units are in operation.

Welding Operations

(a) 326 IAC 6-3 (Particulate Emission Limitations, Work Practices, and Control Technologies)
Pursuant to 326 IAC 6-3-1(b)(9) the metal inert gas welding station, identified as MW1, is exempt from the requirements of 326 IAC 6-3, because less than six hundred twenty-five (625) pounds of welding wire is consumed per day.

Natural Gas Heaters

(a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The natural gas-fired heaters are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, these emission units do not meet the definition of an indirect heating unit.

(b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The natural gas-fired combustion units are exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

(c) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, the natural gas-fired heaters are not subject to the requirements of 7-1.1 and 7-2, since the total unlimited PTE of these units is less than twenty-five (25) tons per year.

(d) 326 IAC 8-1-1 (VOC General Provisions)
Pursuant to 326 IAC 8-1-1(b), the natural gas-fired heaters are not subject to the requirements of 8-1-2, since the total unlimited PTE of these units is less than fifteen (15) pounds per day.

(e) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)
Pursuant to 326 IAC 9-1-1(a), the natural gas-fired heaters are not subject to the requirements of 9-1-2, since there is not an emission limit established in 9-1-2.

(f) 326 IAC 10-3-1 (Nitrogen Oxide Reduction Program for Specific Source Categories)
Pursuant to 326 IAC 10-3-1(a), the natural gas-fired heaters are not subject to the requirements of 10-3-3, since the units do not fall under the listed specific source categories in 10-3-1(a).

## Compliance Determination, Monitoring and Testing Requirements

(a) There are no compliance determination or monitoring requirements applicable to this source.

(b) There are no testing requirements applicable to this source.

## Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on August 22, 2018.

The operation of this source shall be subject to the conditions of the attached proposed New Source Review and MSOP No. M039-40360-00510. The staff recommends to the Commissioner that this New Source Review and MSOP be approved.

## IDEM Contact

(a) If you have any questions regarding this permit, please contact Alexandrea Neuzerling, 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) 232-6634 or (800) 451-6027, and ask for Alexandrea Neuzerling or (317) 232-6634.

(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**
**Emissions Summary**

**Source Name:** Forest River Inc., Plant 16
**Source Location:** 3731 California Road, Elkhart, IN 46514
**Permit Number:** M039-40360-00510
**Permit Reviewer:** Alexandrea Neuzerling

Uncontrolled Emissions (tons/yr)

| Process/Emission Units | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_X$ | VOC | CO | Combined HAPs | Single Worst HAP | |
|---|---|---|---|---|---|---|---|---|---|---|
| Trailer Assembly Operation (EU1) | 3.34 | 3.34 | 3.34 | - | - | 16.20 | - | 11.51 | 5.63 | Tetrachloroethylene |
| Paint Booth (EU2) | 57.35 | 57.35 | 57.35 | - | - | 63.00 | - | 0.00 | 0.00 | Tetrachloroethylene |
| Plywood Paint Operation (EU3) | 1.92 | 1.92 | 1.92 | - | - | 0.83 | - | - | - | - |
| Woodworking Operation (WW1) | 0.85 | 0.16 | 0.16 | - | - | - | - | - | - | - |
| Welding Operation (MW1) | 0.07 | 0.07 | 0.07 | - | - | - | - | 0.01 | 0.01 | Manganese |
| Natural Gas Combustion (NG1-NG9) | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 | 0.07 | Hexane |
| Paved Roads | 2.98 | 0.60 | 0.15 | - | - | - | - | - | - | - |
| **TOTALS** | **66.57** | **63.70** | **63.25** | **0.02** | **3.65** | **80.23** | **3.07** | **11.58** | **5.63** | **Tetrachloroethylene** |

Controlled Emissions (tons/yr)

| Process/Emission Units | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_X$ | VOC | CO | Combined HAPs | Single Worst HAP | |
|---|---|---|---|---|---|---|---|---|---|---|
| Trailer Assembly Operation (EU1) | 3.34 | 3.34 | 3.34 | - | - | 16.20 | - | 11.51 | 5.63 | Tetrachloroethylene |
| Paint Booth (EU2) | 2.87 | 2.87 | 2.87 | - | - | 63.00 | - | 0.00 | 0.00 | Tetrachloroethylene |
| Plywood Paint Operation (EU3) | 1.92 | 1.92 | 1.92 | - | - | 0.83 | - | - | - | - |
| Woodworking Operation (WW1) | 0.85 | 0.16 | 0.16 | - | - | - | - | - | - | - |
| Welding Operation (MW1) | 0.07 | 0.07 | 0.07 | - | - | - | - | 0.01 | 0.01 | Manganese |
| Natural Gas Combustion (NG1-NG9) | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 | 0.07 | Hexane |
| Paved Roads | 2.98 | 0.60 | 0.15 | - | - | - | - | - | - | - |
| **TOTALS** | **12.09** | **9.22** | **8.77** | **0.02** | **3.65** | **80.23** | **3.07** | **11.58** | **5.63** | **Tetrachloroethylene** |

**Appendix A: Emission Calculations**
**Emissions Increase Summary**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

**Previous Permit Uncontrolled Emissions (tons/yr)**

| Process/Emission Units | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_x$ | VOC | CO | Combined HAPs | Single Worst HAP | HAP |
|---|---|---|---|---|---|---|---|---|---|---|
| Metal Assembly Operations | 2.51 | 2.51 | 2.51 | - | - | 11.74 | - | 0.92 | 0.22 | Toluene |
| Metal Painting Operations | 13.58 | 13.58 | 13.58 | - | - | 24.16 | - | 14.91 | 9.42 | Toluene |
| Wood Painting Operation | 1.48 | 1.48 | 1.48 | - | - | 4.23 | - | - | - | - |
| Wood Woodworking Operation* | 0.75 | 0.14 | 0.14 | - | - | - | - | - | - | - |
| Welding | 0.03 | 0.03 | 0.03 | - | - | - | - | - | - | - |
| Natural Gas Combustion | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 | 0.07 | Hexane |
| **TOTALS** | **18.42** | **18.02** | **18.02** | **0.02** | **3.65** | **40.33** | **3.07** | **15.90** | **9.71** | **Toluene** |

**Current Uncontrolled Emissions (tons/yr)**

| Process/Emission Units | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_x$ | VOC | CO | Combined HAPs | Single Worst HAP | |
|---|---|---|---|---|---|---|---|---|---|---|
| Trailer Assembly Operation (EU1) | 3.34 | 3.34 | 3.34 | - | - | 16.20 | - | 11.51 | 5.63 | Tetrachloroethylene |
| Paint Booth (EU2) | 57.35 | 57.35 | 57.35 | - | - | 63.00 | - | 0.00 | 0.00 | Tetrachloroethylene |
| Plywood Paint Operation (EU3) | 1.92 | 1.92 | 1.92 | - | - | 0.83 | - | - | - | - |
| Woodworking Operation (WW1) | 0.85 | 0.16 | 0.16 | - | - | - | - | - | - | - |
| Welding Operation (MW1) | 0.07 | 0.07 | 0.07 | - | - | - | - | 0.01 | 0.01 | Manganese |
| Natural Gas Combustion (NG1-NG9) | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 | 0.07 | 0.07 | Hexane |
| Paved Roads | 2.98 | 0.60 | 0.15 | - | - | - | - | - | - | - |
| **TOTALS** | **66.57** | **63.70** | **63.25** | **0.02** | **3.65** | **80.23** | **3.07** | **11.58** | **5.63** | **Tetrachloroethylene** |

**Increase of Emissions* (tons/yr)**

| Process/Emission Units | PM | PM10 | PM2.5 | SO2 | NOX | VOC | CO | Combined HAPs |
|---|---|---|---|---|---|---|---|---|
| Trailer Assembly Operation (EU1) | 0.83 | 0.83 | 0.83 | - | - | 4.46 | - | 10.59 |
| Paint Booth (EU2) | 43.77 | 43.77 | 43.77 | - | - | 38.84 | - | 0.00 |
| Plywood Paint Operation (EU3) | 0.44 | 0.44 | 0.44 | - | - | 0.00 | - | - |
| Woodworking Operation (WW1) | 0.10 | 0.02 | 0.02 | - | - | - | - | - |
| Welding Operation (MW1) | 0.04 | 0.04 | 0.04 | - | - | - | - | 0.01 |
| Natural Gas Combustion (NG1-NG9) | - | - | - | - | - | - | - | - |
| Paved Roads | 2.98 | 0.60 | 0.15 | - | - | - | - | - |
| **TOTAL INCREASE** | **48.15** | **45.68** | **45.23** | **-** | **-** | **43.30** | **-** | **10.59** |

*A decrease of emissions is indicated with a zero

**Appendix A: Emission Calculations**
**VOC and Particulate**
**From Trailer Assembly Operation**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water and Exempts | Weight % Organics | Volume % Water and Exempts | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less exempts | 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 | Substrate | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Surface Coating Material* | | | | | | | | | | | | | | | | | | | |
| 11061 Gloss Black | 102705 | 6.76 | 81.00% | 21.22% | 59.78% | 21.22% | 19.00% | 0.0019 | 3.350 | 5.13 | 4.04 | 0.03 | 0.61 | 0.11 | 0.02 | 21.27 | Aerosol | M | 50% |
| Plastic Wood Solvent Wood Filler | 102691 | 8.93 | 52.50% | 25.00% | 27.50% | 25.00% | 47.50% | 0.0059 | 3.350 | 3.27 | 2.46 | 0.05 | 1.16 | 0.21 | 0.00 | 5.17 | Manual | M | 100% |
| KRYLON WEEKEND Spray Paint All Purpose Grey Primer | 102701 | 6.84 | 47.96% | 0.00% | 47.96% | 0.00% | 52.04% | 0.0024 | 3.350 | 3.28 | 3.28 | 0.03 | 0.62 | 0.11 | 0.06 | 6.30 | Aerosol | M | 50% |
| Industrial WORK DAY Enamel Spray Paint Gloss Black | 100037 | 5.76 | 90.62% | 28.70% | 61.92% | 28.70% | 9.38% | 0.0151 | 3.350 | 5.00 | 3.57 | 0.18 | 4.32 | 0.79 | 0.06 | 38.02 | Aerosol | M | 50% |
| Tytan Professional Fill All Insulating Foam Sealant Pro | 100056 | 8.10 | 16.57% | 0.00% | 16.57% | 0.00% | 83.43% | 0.0103 | 3.350 | 1.34 | 1.34 | 0.05 | 1.11 | 0.20 | 0.00 | 1.61 | Expanding Foam | M | 100% |
| TREMPRO 644 RTV CLEAR | 102681 | 8.48 | 0.10% | 0.00% | 0.10% | 0.00% | 99.90% | 0.0323 | 3.350 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01 | Caulk | M | 100% |
| 3M Hi-Tack Spray Adhesive 76 | 100026 | 6.53 | 92.90% | 38.20% | 54.70% | 38.20% | 7.10% | 0.0129 | 3.350 | 5.78 | 3.57 | 0.15 | 3.71 | 0.68 | 0.04 | 50.31 | Aerosol | M | 50% |
| Adhesion Products AP-102 | 102487 | 8.41 | 2.88% | 0.00% | 2.88% | 0.00% | 97.13% | 0.0269 | 3.350 | 0.24 | 0.24 | 0.02 | 0.52 | 0.10 | 0.00 | 0.25 | Caulk | M | 100% |
| Silicone Spray | 100260 | 5.34 | 60.00% | 0.00% | 60.00% | 0.00% | 40.00% | 0.0043 | 3.350 | 3.20 | 3.20 | 0.05 | 1.11 | 0.20 | 0.07 | 8.01 | Aerosol | M | 50% |
| KRYLON WEEKEND Spray Paint Chrome Aluminum | 101214 | 6.26 | 80.00% | 10.00% | 70.00% | 10.00% | 20.00% | 0.0012 | 3.350 | 4.87 | 4.38 | 0.02 | 0.42 | 0.08 | 0.01 | 21.91 | Aerosol | M | 50% |
| Nanochem Interior Latex Flat Black | 100667 | 9.14 | 58.40% | 53.91% | 4.49% | 53.91% | 41.60% | 0.1377 | 3.350 | 0.89 | 0.41 | 0.19 | 4.54 | 0.83 | 0.00 | 0.99 | Brush | M | 100% |
| LS100 | 100757 | 8.10 | 2.98% | 0.00% | 2.98% | 0.00% | 97.02% | 0.1225 | 3.350 | 0.24 | 0.24 | 0.10 | 2.38 | 0.43 | 0.00 | 0.25 | Caulk | M | 100% |
| Manus Bond 76-AM Self Leveling | 101418 | 13.36 | 0.62% | 0.00% | 0.62% | 0.00% | 99.38% | 0.8594 | 3.350 | 0.08 | 0.08 | 0.24 | 5.76 | 1.05 | 0.00 | 0.08 | Caulk | M | 100% |
| MANUS-BOND FLEX WELD PART A and PART B | 101896 | 10.02 | 1.00% | 0.00% | 1.00% | 0.00% | 99.00% | 0.2893 | 3.350 | 0.10 | 0.10 | 0.10 | 2.33 | 0.43 | 0.00 | 0.10 | Caulk | M | 100% |
| EverStrong ES20 Contact Adhesive - Aerosol and Canister | 101403 | 6.18 | 65.00% | 10.00% | 55.00% | 10.00% | 35.00% | 0.0130 | 3.350 | 3.78 | 3.40 | 0.15 | 3.55 | 0.65 | 0.21 | 9.71 | Aerosol | M | 50% |
| Q-320 HIGH STRENGTH FAST TACK ADHESIVE | 100550 | 5.62 | 84.24% | 5.00% | 79.24% | 5.00% | 15.76% | 0.0123 | 3.350 | 4.69 | 4.45 | 0.18 | 4.39 | 0.80 | 0.08 | 28.26 | Aerosol | M | 50% |
| Sikaflex-232 US | 102569 | 10.60 | 2.12% | 0.00% | 2.12% | 0.00% | 97.88% | 0.0735 | 3.350 | 0.22 | 0.22 | 0.06 | 1.33 | 0.24 | 0.00 | 0.23 | Caulk | M | 100% |
| Source 601 | 102756 | 9.94 | 31.00% | 31.00% | 0.00% | 31.00% | 69.00% | 0.0620 | 3.350 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Caulk | M | 100% |
| DUPLI-COLOR Undercoat (Paintable Rubberized) | 102573 | 8.18 | 29.30% | 0.00% | 29.30% | 0.00% | 70.70% | 0.0654 | 3.350 | 2.40 | 2.40 | 0.53 | 12.61 | 2.30 | 2.78 | 3.39 | Aerosol | M | 50% |
| UP0820, UP0821, UP0822, UP0823 RAPTOR LINER | 102800 | 8.77 | 33.38% | 10.00% | 23.38% | 10.00% | 66.62% | 0.0005 | 3.350 | 2.28 | 2.05 | 0.00 | 0.09 | 0.02 | 0.01 | 3.08 | HVLP | M | 75% |
| | | | | | | | | | | | **Total:** | **2.11** | **50.60** | **9.23** | **3.34** | | | | |
| *Clean-up Solvents* | | | | | | | | | | | | | | | | | | | |
| ISOPROPYL ALCOHOL | 100961 | 6.60 | 100.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.0517 | 3.350 | 6.60 | 6.60 | 1.14 | 27.43 | 5.01 | 0.00 | #DIV/0! | Wipe | M | 100% |
| ACETONE | 100959 | 6.60 | 100.00% | 100.00% | 0.00% | 100.00% | 0.00% | 0.0345 | 3.350 | #DIV/0! | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | #DIV/0! | Wipe | M | 100% |
| Max Clean | 100654 | 8.27 | 6.00% | 0.00% | 6.00% | 0.00% | 94.00% | 0.0010 | 3.350 | 0.50 | 0.50 | 0.00 | 0.04 | 0.01 | 0.00 | 0.53 | Foam Spray | M | 100% |
| Citrusolv 40 | 102755 | 7.73 | 50.00% | 0.00% | 50.00% | 0.00% | 50.00% | 0.0046 | 3.350 | 3.87 | 3.87 | 0.06 | 1.43 | 0.26 | 0.00 | 7.73 | Wipe | M | 100% |
| BTS BRAKE PARTS & METAL CLEANER | 101994 | 13.44 | 15.00% | 0.00% | 15.00% | 0.00% | 0.00% | 0.0571 | 3.350 | 2.02 | 2.02 | 0.39 | 9.26 | 1.69 | 0.00 | #DIV/0! | Aerosol | M | 50% |
| | | | | | | | | | | | **Total:** | **1.59** | **38.15** | **6.96** | **0.00** | | | | |

Substrate: M=Metal P=Plastic W=Wood G=Glass R=Rubber

**Total PTE for Trailer Assembly Operation:** **3.70** **88.75** **16.20** **3.34**

**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

**Appendix A: Emission Calculations**
**HAP Emissions**
**From Trailer Assembly Operations**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Weight % Ethylbenzene 100-41-4 | Weight % Toluene 108-88-3 | Weight % Xylene 1330-20-7 | Weight % Dibutyl Phthalate 84-74-2 | Weight % Cumene 98-82-8 | Weight % Tetrachloroethylene 127-18-4 | Weight % Methylene chloride 75-09-2 | Weight % 1,1,2-Trichloroethylene 79-01-6 | Weight % Methanol 67-56-1 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Surface Coating Material* | | | | | | | | | | |
| 11061 Gloss Black | 102705 | | 16.00% | 1.99% | | | | | | |
| Plastic Wood Solvent Wood Filler | 102691 | | | | | | | | | |
| KRYLON WEEKEND Spray Paint All Purpose Grey Primer | 102701 | | 5.12% | | 0.16% | | | | | |
| Industrial WORK DAY Enamel Spray Paint Gloss Black | 100037 | | 14.50% | | | 0.20% | | | | |
| Tytan Professional Fill All Insulating Foam Sealant Pro | 100056 | | | | | | | | | |
| TREMPRO 644 RTV CLEAR | 102681 | | | | | | | | | |
| 3M Hi-Tack Spray Adhesive 76 | 100026 | | | | | | | | | |
| Adhesion Products AP-102 | 102487 | | | | | | | | | |
| Silicone Spray | 100260 | | | | | | | | | |
| KRYLON WEEKEND Spray Paint Chrome Aluminum | 101214 | 0.40% | 33.70% | 2.10% | | | | | | |
| Nanochem Interior Latex Flat Black | 100667 | | | | | | | | | |
| LS100 | 100757 | | | | | | | | | |
| Manus Bond 76-AM Self Leveling | 101418 | | | | | | | | | |
| MANUS-BOND FLEX WELD PART A and PART B | 101896 | | | | | | | | | |
| EverStrong ES20 Contact Adhesive - Aerosol and Canister | 101403 | | | | | | | | | |
| Q-320 HIGH STRENGTH FAST TACK ADHESIVE | 100550 | | | | | | | | | |
| Sikaflex-232 US | 102569 | 1.00% | | 2.00% | | | | | | |
| Source 601 | 102756 | | | | | | | | | |
| DUPLI-COLOR Undercoat (Paintable Rubberized) | 102573 | | | | | | | | | 2.30% |
| UP0820, UP0821, UP0822, UP0823 RAPTOR LINER | 102800 | | | 10.00% | | | | | | |
| *Clean-Up Solvents* | | | | | | | | | | |
| ISOPROPYL ALCOHOL | 100961 | | | | | | | | | |
| ACETONE | 100959 | | | | | | | | | |
| Max Clean | 100654 | | | | | | | | | |
| Citrusolv 40 | 102755 | | | | | | | | | |
| BTS BRAKE PARTS & METAL CLEANER | 101994 | | | | | | 50.00% | 30.00% | 15.00% | |

**Appendix A: Emissions Calculations**
**VOC and Particulate**
**From Surface Coating Operations**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Usage (lbs/hr) | Ethylbenzene Emissions 100-41-4 | Toluene Emissions 108-88-3 | Xylene Emissions 1330-20-7 | Dibutyl Phthalate Emissions 84-74-2 | Cumene Emissions 98-82-8 | Tetrachloroethylene Emissions 127-18-4 | Methylene chloride Emissions 75-09-2 | 1,1,2-Trichloroethylene Emissions 79-01-6 | Methanol Emissions 67-56-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Surface Coating Material* | | | | | | | | | | | |
| 11061 Gloss Black | 102705 | 0.043 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Plastic Wood Solvent Wood Filler | 102691 | 0.176 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| KRYLON WEEKEND Spray Paint All Purpose Grey Primer | 102701 | 0.054 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Industrial WORK DAY Enamel Spray Paint Gloss Black | 100037 | 0.291 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tytan Professional Fill All Insulating Foam Sealant Pro | 100056 | 0.280 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TREMPRO 644 RTV CLEAR | 102681 | 0.917 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3M Hi-Tack Spray Adhesive 76 | 100026 | 0.282 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Adhesion Products AP-102 | 102487 | 0.758 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Silicone Spray | 100260 | 0.077 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| KRYLON WEEKEND Spray Paint Chrome Aluminum | 101214 | 0.025 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nanochem Interior Latex Flat Black | 100667 | 4.217 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LS100 | 100757 | 3.324 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Manus Bond 76-AM Self Leveling | 101418 | 38.461 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MANUS-BOND FLEX WELD PART A and PART B | 101896 | 9.710 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EverStrong ES20 Contact Adhesive - Aerosol and Canister | 101403 | 0.269 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Q-320 HIGH STRENGTH FAST TACK ADHESIVE | 100550 | 0.231 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sikaflex-232 US | 102569 | 2.611 | 0.11 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Source 601 | 102756 | 2.065 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DUPLI-COLOR Undercoat (Paintable Rubberized) | 102573 | 1.793 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 |
| UP0820, UP0821, UP0822, UP0823 RAPTOR LINER | 102800 | 0.016 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Clean-Up Solvents* | | | | | | | | | | | |
| ISOPROPYL ALCOHOL | 100961 | 1.143 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ACETONE | 100959 | 0.762 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Max Clean | 100654 | 0.027 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Citrusolv 40 | 102755 | 0.119 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| BTS BRAKE PARTS & METAL CLEANER | 101994 | 2.573 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.63 | 3.38 | 1.69 | 0.00 |
| | | **Total** | **0.11** | **0.26** | **0.24** | **0.00** | **0.00** | **5.63** | **3.38** | **1.69** | **0.18** |

Highest Single HAP Emissions: 5.63 Tetrachloroethylene
Total HAPs: 11.51

**Appendix A: Emission Calculations**
**VOC and Particulate**
**From Paint Booth**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water and Exempts | Weight % Organics | Volume % Water and Exempts | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less exempts | 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 | Substrate | Transfer Efficiency | Particulate Control Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z Guard 20060B-2 UT Black | | 11.60 | 17.20% | 4.10% | 13.10% | 4.10% | 82.80% | 1.2635 | 3.350 | 1.58 | 1.52 | 6.43 | 154.37 | 28.17 | 44.52 | 1.84 | HVLP | M | 75% | 95.00% |
| Z Shield 7134 | 101897 | 9.01 | 42.81% | 4.00% | 38.81% | 4.00% | 57.19% | 0.6788 | 3.350 | 3.64 | 3.50 | 7.95 | 190.84 | 34.83 | 12.83 | 6.11 | HVLP | M | 75% | 95.00% |

Substrate: M=Metal P=Plastic W=Wood G=Glass R=Rubber

**Add worst case coating to all solvents**

| | | | | |
|---|---|---|---|---|
| **Uncontrolled Potential Emissions:** | **14.38** | **345.21** | **63.00** | **57.35** |
| **Controlled Potential Emissions:** | **14.38** | **345.21** | **63.00** | **2.87** |

**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

**Appendix A: Emission Calculations**
**HAP Emissions**
**From Paint Booth**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Weight % Ethylbenzene 100-41-4 | Weight % Toluene 108-88-3 | Weight % Xylene 1330-20-7 | Weight % Dibutyl Phthalate 84-74-2 | Weight % Cumene 98-82-8 | Weight % Tetrachloroethylene 127-18-4 | Weight % Methylene chloride 75-09-2 | Weight % 1,1,2-Trichloroethylene 79-01-6 | Weight % Methanol 67-56-1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Z Guard 20060B-2 UT Black | | | | | | | | | | |
| Z Shield 7134 | 101897 | | | | | | | | | |

| Material | SDS ID | Ethylbenzene Emissions 100-41-4 | Toluene Emissions 108-88-3 | Xylene Emissions 1330-20-7 | Dibutyl Phthalate Emissions 84-74-2 | Cumene Emissions 98-82-8 | Tetrachloroethylene Emissions 127-18-4 | Methylene chloride Emissions 75-09-2 | 1,1,2-Trichloroethylene Emissions 79-01-6 | Methanol Emissions 67-56-1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Z Guard 20060B-2 UT Black | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Z Shield 7134 | 101897 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

Highest Single HAP Emissions: 0.00 Tetrachloroethylene
Total HAPs: 0.00

**Appendix A: Emission Calculations**
**VOC and Particulate**
**From Plywood Coating**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Material | SDS ID | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water and Exempts | Weight % Organics | Volume % Water and Exempts | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less exempts | 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 | Subtrate | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nanochem Interior Latex Flat Black | 100667 | 9.14 | 58.40% | 53.91% | 4.49% | 53.91% | 41.60% | 0.1377 | 3.350 | 0.89 | 0.41 | 0.19 | 4.54 | 0.83 | 1.92 | 0.99 | HVLP | W | 75% |
| | | | | | | | | | | | **Total:** | **0.19** | **4.54** | **0.83** | **1.92** | | | | |

Substrate: M=Metal P=Plastic W=Wood G=Glass R=Rubber

**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

**Appendix A: Emission Calculations**
**From Woodworking Operations**

**Source Name:** Forest River Inc., Plant 16
**Source Location:** 3731 California Road, Elkhart, IN 46514
**Permit Number:** M039-40360-00510
**Permit Reviewer:** Alexandrea Neuzerling

| Process | Max. Capacity (lbs/hr) | Control Efficiency | Emission Rate (lbs/hr) | | Uncontrolled PTE (tons/yr) | | Controlled PTE (tons/yr) | |
|---|---|---|---|---|---|---|---|---|
| | | | PM | $PM_{10}$ | PM | $PM_{10}$ | PM | $PM_{10}$ |
| Woodworking | 2,600 | 95.00% | 3.9 | 0.715 | 17.08 | 3.13 | 0.85 | 0.16 |

**Note:**
Weight Percent (%) of Sawdust in the plywood and PM/PM10 wieght percentages in the saw dusts have been provided by the applicant for use in calculations for Permit No. M003-18051-00510.

In October of 1993 a Final Order Granting Summary Judgment was signed by an Administrative Law Judge ("ALJ") resolving an appeal of an IDEM permit related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls were necessary for the facility, and therefore, potential emissions were to be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after consideration of the controls.

| Weight Percent | |
|---|---|
| Sawdust (%) | 0.025 |
| PM (%) | 0.06 |
| PM10 (%) | 0.011 |

**Methodology:**
Emission Factor (lbs/trailer) = Max. Capacity (lbs/trailer)* Sawdust (%) * PM/PM10 (%).
Emisison Rate (lbs/hour) = Max. Capacity (lbs/trailer) * No. of Unit (Trailers/hr) * Emission Factor
Uncontrolled Potential Emissions (tons/year) = Emisison Rate (lbs./hour) * 8,760 hrs / 2,000 lbs
Controlled Potential Emissions (tons/yr) = Uncontrolled Potential Emissions * (1- Control Efficiency)

**Appendix A: Emission Calculations**
**Welding and Thermal Cutting**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| PROCESS | Number of Stations | Max. electrode consumption per station (lbs/hr) | | EMISSION FACTORS* (lb pollutant/lb electrode) | | | | EMISSIONS (lbs/hr) | | | | HAPS (lbs/hr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WELDING | | | | PM = PM10 | Mn | Ni | Cr | PM = PM10 | Mn | Ni | Cr | |
| | | | | | | | | | | | | |
| Metal Inert Gas (MIG)(carbon steel) | 15 | 0.18 | | 0.0055 | 0.0005 | | | 0.015 | 0.001 | 0.000 | 0 | 0.001 |
| | | | | | | | | | | | | |
| EMISSION TOTALS | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Potential Emissions lbs/hr | | | | | | | | 0.01 | 1.35E-03 | | | 0.00 |
| | | | | | | | | | | | | |
| Potential Emissions lbs/day | | | | | | | | 0.36 | 3.24E-02 | | | 0.03 |
| | | | | | | | | | | | | |
| Potential Emissions tons/year | | | | | | | | 0.07 | 0.01 | | | 0.01 |

**Methodology:**
*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations**
**Natural Gas Combustion Only**
**MM BTU/HR <100**

**Source Name: Forest River Inc., Plant 16**
**Source Location: 3731 California Road, Elkhart, IN 46514**
**Permit Number: M039-40360-00510**
**Permit Reviewer: Alexandrea Neuzerling**

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 8.5 | 1020 | 73.0 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.07 | 0.28 | 0.28 | 0.02 | 3.65 | 0.20 | 3.07 |

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

**Methodology**
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**HAPS 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 | 7.665E-05 | 4.380E-05 | 2.738E-03 | 6.570E-02 | 1.241E-04 | **6.868E-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 | 1.825E-05 | 4.015E-05 | 5.110E-05 | 1.387E-05 | 7.665E-05 | **2.000E-04** |

| | |
|---|---|
| **Total HAPs** | **0.069** |
| **Worst HAP** | **0.066** |

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

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

**Source Name:** Forest River Inc., Plant 16
**Source Location:** 3731 California Road, Elkhart, IN 46514
**Permit Number:** M039-40360-00510
**Permit Reviewer:** Alexandrea Neuzerling

**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) | 22.0 | 1.0 | 22.0 | 35.0 | 770.0 | 600 | 0.114 | 2.5 | 912.5 |
| Semi Trailer (leaving plant) (one-way trip) | 22.0 | 1.0 | 22.0 | 13.0 | 286.0 | 1200 | 0.227 | 5.0 | 1825.0 |
| Pick-up Trucks (entering plant) (one-way trip) | 15.0 | 1.0 | 15.0 | 2.5 | 37.5 | 600 | 0.114 | 1.7 | 622.2 |
| Pick-up Trucks (leaving plant) (one-way trip) | 15.0 | 1.0 | 15.0 | 3.2 | 48.0 | 1200 | 0.227 | 3.4 | 1244.3 |
| | | **Totals** | **74.0** | | **1141.5** | | | **12.6** | **4604.0** |

Average Vehicle Weight Per Trip = 15.4 tons/trip
Average Miles Per Trip = 0.17 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 = | 15.4 | 15.4 | 15.4 | 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 = | 1.417 | 0.283 | 0.0696 | lb/mile |
| Mitigated Emission Factor, Eext = | 1.296 | 0.259 | 0.0636 | lb/mile |

| Process | Mitigated PTE of PM (tons/yr) | Mitigated PTE of PM10 (tons/yr) | Mitigated PTE of PM2.5 (tons/yr) |
|---|---|---|---|
| Semi Trailer (entering plant) (one-way trip) | 0.59 | 0.12 | 0.03 |
| Semi Trailer (leaving plant) (one-way trip) | 1.18 | 0.24 | 0.06 |
| Pick-up Trucks (entering plant) (one-way trip) | 0.40 | 0.08 | 0.02 |
| Pick-up Trucks (leaving plant) (one-way trip) | 0.81 | 0.16 | 0.04 |
| **Totals** | **2.98** | **0.60** | **0.15** |

**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 (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**
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**Eric J. Holcomb**
*Governor*

**Bruno L. Pigott**
*Commissioner*

December 6, 2018

William Conway
Forest River, Inc. Plant 16
PO Box 3030
Elkhart, IN 46515

Re: Public Notice
Forest River, Inc. Plant 16
Permit Level: MSOP Renewal / Sig NSR (Minor PSD/EO) (120)

Permit Number: 039-40360-00510

Dear William Conway:

Enclosed is a copy of your draft MSOP Renewal / Sig NSR (Minor PSD/EO) (120), 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, Indiana publish the abbreviated version of the public notice no later than December 12, 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 Elkhart Public Library, 300 S 2nd St in Elkhart 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 Alexandrea Neuzerling, 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 2-6634 or dial (317) 232-6634.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017

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**Bruno Pigott**
*Commissioner*

**ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

December 6, 2018

Elkhart Truth
Attn: Classifieds
P.O. Box 487
Elkhart, Indiana 46515

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Forest River, Inc. Plant 16, 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 December 12, 2018.

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

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

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: MSOP Renewal / Sig NSR (Minor PSD/EO) (120)
Permit Number: 039-40360-00510

Enclosure

PN Newspaper.dot 1/9/2017

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*Commissioner*

December 6, 2018

To: Elkhart Public Library 300 S 2nd St Elkhart IN

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. Plant 16**
**Permit Number: 039-40360-00510**

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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*Commissioner*

Notice of Public Comment

**December 6, 2018**
**Forest River, Inc. Plant 16**
**039-40360-00510**

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 | LPOGOST 12/6/2018<br>FOREST RIVER INC CARGO MATE CONTINENTAL 039-40360-00510 (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 CARGO MATE CONTINENTAL CARGO D PO Box 3030 Elkhart IN 465153030 (Source CAATS) | | | | | | | | | |
| 2 | | Elkhart City Council and Mayors Office 229 South Second Street Elkhart IN 46516 *(Local Official)* | | | | | | | | | |
| 3 | | Elkhart Public Library 300 S 2nd St Elkhart IN 46516-3184 *(Library)* | | | | | | | | | |
| 4 | | Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 *(Health Department)* | | | | | | | | | |
| 5 | | Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 *(Local Official)* | | | | | | | | | |
| 6 | | Jeri Seely The Mail-Journal PO Box 188 Milford IN 46542 *(Affected Party)* | | | | | | | | | |
| 7 | | Mr. Roger Schneider The Goshen News 114 S. Main St Goshen IN 46526 *(Affected Party)* | | | | | | | | | |
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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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