



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: November 18, 2009

RE: Forest River Housing, Inc / 039-28343-00611

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

## Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

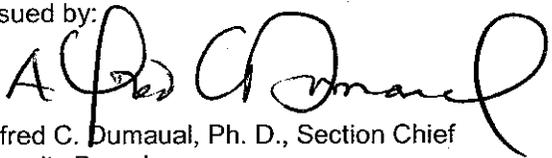
## Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Forest River Housing, Inc**  
**66700 SR 19,**  
**Wakarusa, Indiana 46573**

(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.: M039-28343-00611	
Issued by:  Alfred C. Dumaul, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: November 18, 2009  Expiration Date: November 18, 2019

## TABLE OF CONTENTS

<b>A. SOURCE SUMMARY.....</b>	<b>4</b>
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
<b>B. GENERAL CONDITIONS .....</b>	<b>5</b>
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
<b>C. SOURCE OPERATION CONDITIONS .....</b>	<b>10</b>
<b>Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]</b>	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Permit Revocation [326 IAC 2-1.1-9]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
<b>Testing Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.8 Performance Testing [326 IAC 3-6]	
<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
<b>Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.12 Instrument Specifications [326 IAC 2-1.1-11]	
<b>Corrective Actions and Response Steps</b>	
C.13 Response to Excursions or Exceedances	
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test	

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

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]  
[IC 13-14-1-13]

**D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 16**

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

- D.1.1 Particulate [326 IAC 6-3-2]
- D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

- D.1.3 Record Keeping Requirement

**D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 18**

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

- D.2.1 Particulate [326 IAC 6-3-2]
- D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

Certification ..... 19  
Annual Notification ..... 20  
Malfunction Report ..... 21

## 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 modular/mobile home manufacturing facility.

Source Address:	66700 SR 19, Wakarusa, Indiana 46573
Mailing Address:	P.O. Box 3030, Elkhart, Indiana 46515-3030
General Source Phone Number:	(574) 533-5934
SIC Code:	2451
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

---

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

- (a) One (1) floor assembly area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, and spray and with emissions exhausting inside the building.
- (b) One (1) roof assembly and shell finishing area, constructed in 1995, with a maximum capacity of 1.0 shells/hour, with materials applied by trowel, brush, extrusion, and air assisted spray and with emissions exhausting inside the building.
- (c) One (1) final finish area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, air assist spray, and airless spray can and with emissions exhausting inside the building.
- (d) One (1) woodworking operation, constructed in 1995, consisting of cross cutting with a chop table, hand saws, and routers, with a maximum wood processing rate of 7000 pounds per hour and with emissions exhausting inside the building.
- (e) Thirty-one (31) natural gas fired space heaters and two (2) air make-up units, constructed in 1995, with a maximum total heat capacity of 7.17 MMBtu/hour and with emissions exhausting inside the building.

## 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, M039-28343-00611, 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.8 Certification**

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

---

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

---

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

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

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

---

- (a) All terms and conditions of permits established prior to M039-28343-00611 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

---

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least 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.13 Permit Renewal [326 IAC 2-6.1-7]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

---

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

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

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

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

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

**B.15 Source Modification Requirement**

---

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

**B.16 Inspection and Entry**

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

---

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

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

Indiana Department of Environmental Management  
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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**B.18 Annual Fee Payment [326 IAC 2-1.1-7]**

---

- (a) The Permittee shall pay annual fees due within 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.19 Credible Evidence [326 IAC 1-1-6]**

---

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.3 Opacity [326 IAC 5-1]**

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

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

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

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

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

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

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

---

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

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

---

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

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

---

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

## **Corrective Actions and Response Steps**

### **C.13 Response to Excursions or Exceedances**

---

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; 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 maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test**

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

---

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

- (a) A record of all malfunctions, 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.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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) floor assembly area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, and spray and with emissions exhausting inside the building.
- (b) One (1) roof assembly and shell finishing area, constructed in 1995, with a maximum capacity of 1.0 shells/hour, with materials applied by trowel, brush, extrusion, and air assisted spray and with emissions exhausting inside the building.
- (c) One (1) final finish area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, air assist spray, and airless spray can and with emissions exhausting inside the building.

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

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

#### D.1.1 Particulate [326 IAC 6-3-2(d)]

Pursuant to Minor Source Operating Permit (MSOP) M039-20196-00611, issued March 24, 2005, IDEM made a case-by-case determination that the use of a permanent total enclosure in conjunction with the work practices outlined above constitutes and "equivalent control device" and satisfies 326 IAC 6-3-2(d).

- (a) Particulate from the surface coating in the roof assembly/shell finishing area and the final finishing area shall be controlled by a permanent total enclosure, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) 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 visible detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

#### D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and their control devices.

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

### **D.1.3 Record Keeping Requirement**

---

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain a log of those inspections prescribed by the Preventive Maintenance Plan.
  
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (d) One (1) woodworking operation, constructed in 1995, consisting of cross cutting with a chop table, hand saws, and routers, with a maximum wood processing rate of 7000 pounds per hour and with emissions exhausting inside the building.

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

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

#### D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 9.49 pounds per hour when operating at a process weight rate of 7000 pounds per hour.

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

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

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

#### D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT (MSOP)  
CERTIFICATION**

Source Name: Forest River Housing, Inc  
Source Address: 66700 SR 19, Wakarusa, Indiana 46573  
Mailing Address: P.O. Box 3030, Elkhart, Indiana 46515-3030  
MSOP No.: M039-28343-00611

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)\_\_\_\_\_
- Report (specify)\_\_\_\_\_
- Notification (specify)\_\_\_\_\_
- Affidavit (specify)\_\_\_\_\_
- Other (specify)\_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

**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).

<b>Company Name:</b>	Forest River Housing, Inc
<b>Address:</b>	66700 SR 19,
<b>City:</b>	Wakarusa, Indiana 46573
<b>Phone #:</b>	(574) 533-5934
<b>MSOP #:</b>	M039-28343-00611

I hereby certify that Forest River Housing, Inc is :

still in operation.

no longer in operation.

I hereby certify that Forest River Housing, Inc is :

in compliance with the requirements of MSOP M039-28343-00611.

not in compliance with the requirements of MSOP M039-28343-00611.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

### MALFUNCTION REPORT

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER: (317) 233-6865

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

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_, 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**

Addendum to the Technical Support Document (ATSD) for a  
Minor Source Operating Permit Renewal

**Source Background and Description**

**Source Name:** Forest River Housing, Inc  
**Source Location:** 66700 SR 19, Wakarusa, Indiana 46573  
**County:** Elkhart  
**SIC Code:** 2451  
**Operation Permit No.:** F039-28343-00611  
**Permit Reviewer:** Marcia Earl

On October 8, 2009, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Forest River Housing, Inc had applied for a Minor Source Operating Permit (MSOP) Renewal to continue the operation of a modular/mobile home manufacturing facility. The notice also stated that the OAQ proposed to issue a Minor Source Operating Permit (MSOP) Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

**Comments and Responses**

No comments were received during the public notice period.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**, and this ASTD serves as a note to what needs to be changed.

A typographical error was discovered in the heading of page 3, Appendix A calculation sheet.

...

**Appendix A: Emission Calculations  
Particulate Emissions from the Surface Coating Operations**

Page 3 of 6 TSD Appendix A

**Company Name:** Forest River Housing, Inc  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-~~20196~~ **28343**-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

...

**IDEM Contact**

(a) Questions regarding this proposed Minor Source Operation Permit (MSOP) Renewal can be

directed to Marcia Earl at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0863 or toll free at 1-800-451-6027 extension 3-0863.

- (b) A copy of the permit 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's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

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

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

**Source Background and Description**

<b>Source Name:</b>	Forest River Housing, Inc
<b>Source Location:</b>	66700 SR 19, Wakarusa, Indiana 46573
<b>County:</b>	Elkhart
<b>SIC Code:</b>	2451
<b>Permit Renewal No.:</b>	M039-28343-00611
<b>Permit Reviewer:</b>	Marcia Earl

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Forest River Housing, Inc relating to the operation of a modular/mobile home manufacturing facility.

**History**

On August 13, 2009, Forest River Housing, Inc submitted an application to the OAQ requesting to renew its operating permit. Forest River Housing, Inc was issued a Minor Source Operating Permit (MSOP) M039-20196-00611 on March 24, 2005.

**Permitted Emission Units and Pollution Control Equipment**

- (a) One (1) floor assembly area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, and spray and with emissions exhausting inside the building.
- (b) One (1) roof assembly and shell finishing area, constructed in 1995, with a maximum capacity of 1.0 shells/hour, with materials applied by trowel, brush, extrusion, and air assisted spray and with emissions exhausting inside the building.
- (c) One (1) final finish area, constructed in 1995, with a maximum capacity of 1.0 floors/hour, with materials applied by extrusion, trowel, wipe, brush, air assist spray, and airless spray can and with emissions exhausting inside the building.
- (d) One (1) woodworking operation, constructed in 1995, consisting of cross cutting with a chop table, hand saws, and routers, with a maximum wood processing rate of 7000 pounds per hour and with emissions exhausting inside the building.
- (e) Thirty-one (31) natural gas fired space heaters and two (2) air make-up units, constructed in 1995, with a maximum total heat capacity of 7.17 MMBtu/hour and with emissions exhausting inside the building.

**Existing Approvals**

Since the issuance of the MSOP M039-20196-00611 on March 24, 2005, the source has been operating under the following approvals as well:

- (a) Minor Permit Revision, 039-25448-00611, issued on November 16, 2007.

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

### Enforcement Issue

There are no enforcement actions pending.

### Emission Calculations

See Appendix A, pages 1 through 6 of this document for detailed emission calculations.

### County Attainment Status

The source is located in Elkhart County

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>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.  
Unclassifiable or attainment effective April 5, 2005, for PM<sub>2.5</sub>.

- (a) Ozone Standards
- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
  - (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
  - (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
  - (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) PM<sub>2.5</sub>  
Elkhart County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include

those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.

- (c) **Other Criteria Pollutants**  
 Elkhart County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) **Fugitive Emissions**  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

<b>Pollutant</b>	<b>tons/year</b>
PM	75.94
PM <sub>10</sub>	76.12
PM <sub>2.5</sub>	76.12
SO <sub>2</sub>	0.02
VOC	30.69
CO	2.62
NO <sub>x</sub>	3.12

<b>HAPs</b>	<b>tons/year</b>
Hexane	0.09
Xylene	0.16
Toluene	0.86
Benzene	negligible
Dichlorobenzene	negligible
Formaldehyde	negligible
Lead	negligible
Cadimum	negligible
Chromium	negligible
Manganese	negligible
Nickel	negligible
<b>Total</b>	1.11

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) 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(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

### Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit (tons/year)							
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Surface Coating	53.98	53.98	53.98	0.00	30.52	0.00	0.00	0.86
Space Heaters	0.06	0.24	0.24	0.02	0.17	2.62	3.12	6.76E-05
Woodworking	21.90	21.90	21.90	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>75.94</b>	<b>76.12</b>	<b>76.12</b>	<b>0.02</b>	<b>30.69</b>	<b>2.62</b>	<b>3.12</b>	<b>1.11</b>
Title V Major Source Threshold	N/A*	100	100	100	100	100	100	10/25
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA

\*Not applicable

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

### Federal Rule Applicability

#### New Source Performance Standards (NSPSs)

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

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

- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ (63.800 - 63.808) (326 IAC 20-14) are not included in the permit since the source is not a major source of HAPs as defined in 40 CFR 63.2.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Plastic Parts and Products, 40 CFR 63, Subpart MMMM (63.3880 - 63.3981) (326 IAC 20-80) are not included in the permit for the surface coating units. These units do not coat miscellaneous metal parts or products.
- (d) The requirements for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Printing, Coating and Dyeing of Fabrics and Other Textiles, 40 CFR 63, Subpart OOOO (63.4280 - 63.4371) (326 IAC 20-77), are not included in this permit, since this source is not a major source of HAPs as defined in 60 CFR 63.2 and does not perform print, coating and dyeing of fabrics and other textiles.
- (e) The requirements for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products 40 CFR 63, Subpart PPPP

- (63.4480 - 63.4581) (326 IAC 20-81), are not included in this permit, since this source is not a major source of HAPs as defined in 60 CFR 63.2 and only coats materials during the manufacturing of prefabricated homes.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ (63.4680 - 63.4781) (326 IAC 20-79) are not included in this permit for the surface coating units. These units coat materials during the manufacturing of prefabricated homes.
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area sources, 40 CFR 63, Subpart HHHHHH, (40 CFR Part 63.11169 – 63.11180), are not included in this permit, since this area source does not perform paint stripping using chemical strippers that contain methylene chloride for the removal of dried paint, does not perform spray application of coatings to motor vehicles or mobile equipment, and does not perform spray application of coatings that contain chromium, lead, manganese, nickel, or cadmium to a plastic and/or metal substrates.
- (h) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

#### **State Rule Applicability - Entire Source**

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

This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than two hundred fifty (250) tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

##### **326 IAC 2-6 (Emission Reporting)**

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, 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.

##### **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 Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

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

##### **326 IAC 6-4 (Fugitive Dust Emissions 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

**State Rule Applicability – Surface Coating Operations**

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The surface coating operations (floor assembly area, the roof assembly and shell finishing area, and the final finish area) will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

Pursuant to Minor Source Operating Permit, M039-20196-00611, issued March 24, 2005, IDEM made a case-by-case determination that the use of a permanent total enclosure in conjunction with the work practices outlined above constitutes and "equivalent control device" and satisfies 326 IAC 6-3-2(d).

- (a) Particulate from the surface coating in the roof assembly/shell finishing area and the final finishing area shall be controlled by a permanent total enclosure, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) 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 visible detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) The surface coating operation in the floor assembly area is exempt from 326 IAC 6-3 because it uses less than 5 gallons of coating per day (326 IAC 6-3-1(b)(15)).

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and are not otherwise regulated by other provision of Article 8. No other Article 8 rules apply to the product assembly coating operations. The uncontrolled potential to emit (PTE) of the three surface coating operations is each less than 25 tons. Therefore, the requirements for 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) are not applicable to the coating facilities at this source.

326 IAC 8-2-10 (Flat Wood Panels; manufacturing operations)

The three product assembly coating operations (floor assembly area, roof assembly and shell finishing area and the final finish area) are not subject to 326 IAC 8-2-10 (Flat Wood Panels; manufacturing operations) because the source does not manufacture flat wood panels.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The three product assembly coating operations (floor assembly area, roof assembly and shell finishing area and the final finish area) are not subject to 326 IAC 8-2-9 because the source does not coat metal parts. The source coats wood materials during the manufacturing of prefabricated homes.

326 IAC 8-11 (Wood Furniture Coatings)

The three product assembly coating operations (floor assembly area, roof assembly and shell finishing area and the final finish area) are not subject to 326 IAC 8-11 because this rule pertains to wood furniture coating in Lake, Porter, Clark and Floyd Counties. This source is in Elkhart County.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

This source is located in Elkhart County and consists of surface coating facilities that were constructed prior to July 1, 1990. The requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) are not applicable, because the source does not construct wood furniture or cabinets, rather purchases and uses prefabricated, pre-finished, wood cabinets in the construction of mobile homes. The source has confirmed that no adhesives are used during cabinet assembly. The source does, however, use touch-up coating for product finishing, but in amounts below 15 pounds of VOC per day and well below the exempted ten (10) gallons of coating per day, as cited at 326 IAC 8-2-12(b). Therefore, the requirement of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) do not apply.

### State Rule Applicability – Woodworking Operation

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking operation shall not exceed 9.49 pounds per hour when operating at a process weight rate of 7,000 pounds per hour.

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

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

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

The woodworking operation can comply with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) without the use of a control device as demonstrated in the calculations in appendix A.

### Natural Gas-fired Heaters

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The thirty-one (31) natural gas fired space heaters and two (2) air make-up units are not subject to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) because the heaters are direct fired heaters and not indirect fired heaters.

## **Recommendation**

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

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

An application for the purposes of this review was received on August 13, 2009.

## **Conclusion**

The operation of this modular/mobile home manufacturing facility shall be subject to the conditions of the attached MSOP Renewal No. **M039-28343-00611**.

**Appendix A: Emission Calculations  
Summary**

**Company Name:** Forest River Housing, Inc  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-28343-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

**POTENTIAL TO EMIT IN TONS PER YEAR (NO CONTROL DEVICES)**

Process	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Worst Case HAPs
Surface Coating	53.98	53.98	53.98	0.00	0.00	30.52	0.00	1.11	0.86 Toluene
Space Heaters and Air Make-up Units	0.06	0.24	0.24	0.02	3.12	0.17	2.62	6.76E-05	1.89E-06 Hexane
Woodworking	21.90	21.90	21.90	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>75.94</b>	<b>76.12</b>	<b>76.12</b>	<b>0.02</b>	<b>3.12</b>	<b>30.69</b>	<b>2.62</b>	<b>1.11</b>	<b>0.86</b> Toluene

**Appendix A: Summary**  
**VOC and HAP Emissions from the Surface Coating Operations**

**Company Name:** Forest River Housing, Inc  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-28343-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

Material	Material Usage (gal/hr)	Density (lbs/gal)	Weight % VOC in Material	PTE VOC (tons/yr)	Weight % Hexane in Material	PTE Hexane (tons/yr)	Weight % Xylene in Material	PTE Xylene (tons/yr)	Weight% Toluene in Material	PTE Toluene (tons/yr)	Weight% Ethyl Benzene in Material	PTE Ethyl Benzene (tons/yr)	Total HAPs (tons/yr)
<b>Assembly Area</b>													
Dap Spray N Go Enamel	0.01	6.66	75.00%	0.18	0.04%	9.33E-05	5.00%	0.012	32.0%	0.07			8.64E-02
Oatey Pipe Dope 30915 ABS Cement	0.06	7.41	67.60%	1.32	0.30%	0.01							0.01
Oatey Great White Pipe Joint w/Teflon	0.01	12.5	0.00%	0.00	0.00%	0.00							
Armstrong Residential Sheet Floor 254	0.23	9.33	0.45%	0.04	0.01%	0.02							0.02
Specialty 1400MR Floor Sealer	0.28	8.60	0.40%	0.04	0.01%	1.02E-03							1.02E-03
Geocel 0405 Painter's Acryl Latex Caulk	0.38	14.2	0.00%	0.00	0.00%	0.00							
Geocel Stainmatch Siding and Trim Sealant	0.03	13.3	2.00%	0.03	0.01%	1.39E-04							1.39E-04
Geocell RP400	0.20	8.26	30.30%	2.19	0.50%	0.04							0.04
NuFlex 136 NonCombust Caulk-Firestop	0.02	15.9	3.10%	0.04	0.01%	1.39E-04							1.39E-04
Enerfoam 42	0.01	10.3	0.00%	0.00									
#41 Green Floor Sealer	0.27	8.60	0.00%	0.00									
Alpha 5100P Adhesive	1.50	9.33	0.00%	0.00									
Sun Adhesive #99 White Glue	1.55	9.16	0.00%	0.00									
<b>Roof and Shell Area</b>													
USG Durabond 20	2.05	21.7	0.00%	0.00									
Topping Compound	21.3	13.3	0.13%	1.61									
Alpha Seal Adhesive 5200 (as applied)	3.39	9.22	1.41%	1.93									
ACT Vapor Barrier Paint	3.00	10.0	0.50%	0.66									
<b>Final Finish</b>													
Dap Spray N Go Enamel	0.08	6.66	75.20%	1.75			5.00%	0.12	32.00%	0.75			0.86
Geocel 0405 Painter's Acryl Latex Caulk	0.03	14.2	0.00%	0.00									
Geocel Stainmatch Siding and Trim Sealant	0.02	13.3	2.00%	0.02									
Silaprene Solid Bond 300 ml	0.01	9.75	3.50%	0.01			3.50%	0.01					0.01
Bostik CC-916 Poly Adhesive	0.01	11.4	6.30%	0.02			7.00%	0.02			1.50%	3.74E-03	2.12E-02
Cyclo C-31 Glass Clean	0.11	8.33	12.00%	0.48									
Enerfoam 42	0.18	10.3	0.00%	0.00									
Enerbond 45	0.18	10.3	0.00%	0.00									
Miracle SFA66 Construction Adhesive	0.01	9.02	36.60%	0.12	7.00%	0.02			13.00%	0.04			0.06
SW NR4000 Br White Latex Caulk	0.06	13.5	1.49%	0.05									
Cyclo C192 Max Clean	0.08	8.33	10.00%	0.29									
Shine Up	0.15	7.30	24.40%	1.17									
Color Putty	0.06	17.5	0.00%	0.00									
USG Easy Sand DW Mu8d	11.5	21.7	0.00%	0.00									
Magnum Tuf Set DW Mud	9.38	13.3	0.00%	0.00									
Builder Craft Letex Paint B30WF6000	8.00	11.1	4.77%	18.55									
<b>Total PTE (tons/yr)</b>				<b>30.52</b>		<b>0.09</b>		<b>0.16</b>		<b>0.86</b>		<b>3.74E-03</b>	<b>1.11</b>

**Methodology:**

PTE VOC (tons/yr)= Material Usage (gal/hr) x Density (lb/gal) x Weight % VOC x 8760 (hrs/yr) x 1ton/2000 lbs

PTE HAP (tons/yr)= Material Usage (gal/hr) x Density (lb/gal) x Weight % HAP x 8760 (hrs/yr) x 1ton/2000 lbs

**Note:** Production rate: 1.00 units/hr

**Appendix A: Emission Calculations**  
**Particulate Emissions from the Surface Coating Operations**

**Company Name:** Forest River Housing, Inc  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-20196-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

Material	Material Usage (gal/hr)	Density (lbs/gal)	Weight % VOC	Weight % Solids	Application Method	Transfer Efficiency (%)	PTE PM/PM <sub>10</sub> /PM <sub>2.5</sub> Before & After Controls (tons/yr)
<b>Assembly Area</b>							
Dap Spray N Go Enamel	0.01	6.66	75.17%	24.83%	Airless Spray	75%	0.01
Oatey Pipe Dope 30915 ABS Cement	0.06	7.41	67.60%	32.40%	Manual	100%	0.00
Oatey Great White Pipe Joint w/Teflon	0.01	12.5	0.00%	100.00%	Manual	100%	0.00
Armstrong Residential Sheet Floor 254	0.23	9.33	0.45%	52.55%	Manual	100%	0.00
Specialty 1400MR Floor Sealer	0.28	8.60	0.04%	30.00%	Manual	100%	0.00
Geocel 0405 Painter's Acryl Latex Caulk	0.38	14.2	0.00%	99.00%	Manual	100%	0.00
Geocel Stainmatch Siding and Trim Sealant	0.03	13.3	2.00%	96.24%	Manual	100%	0.00
Geocell RP400	0.20	8.26	30.30%	69.70%	Manual	100%	0.00
NuFlex 136 NonCombust Caulk-Firestop	0.02	15.9	3.10%	96.90%	Manual	100%	0.00
Enerfoam 42	0.01	10.3	0.00%	0.00%	Manual	100%	0.00
#41 Green Floor Sealer	0.27	8.60	0.00%	21.00%	Manual	100%	0.00
Alpha 5100P Adhesive	1.50	9.33	0.00%	0.00%	Manual	100%	0.00
Sun Adhesive #99 White Glue	1.55	9.16	0.00%	40.00%	Manual	100%	0.00
<b>Roof and Shell Area</b>							
USG Durabond 20	2.05	21.7	0.00%	100.00%	Manual	100%	0.00
Topping Compound	21.3	13.3	0.13%	50.00%	Manual	100%	0.00
Alpha Seal Adhesive 5200 (as applied)	3.39	9.22	1.41%	98.59%	Manual	100%	0.00
ACT Vapor Barrier Paint	3.00	10.0	0.50%	28.00%	Airless Spray	75%	9.20
<b>Final Finish</b>							
Dap Spray N Go Enamel	0.08	6.66	75.17%	24.83%	Airless Spray	100%	0.00
Geocel 0405 Painter's Acryl Latex Caulk	0.03	14.2	0.00%	99.00%	Manual	100%	0.00
Geocel Stainmatch Siding and Trim Sealant	0.02	13.3	2.00%	96.24%	Manual	100%	0.00
Silaprene Solid Bond 300 ml	0.01	9.75	3.50%	96.50%	Manual	100%	0.00
Bostik CC-916 Poly Adhesive	0.01	11.4	6.30%	93.20%	Manual	100%	0.00
Cyclo C-31 Glass Clean	0.11	8.33	12.00%	0.10%	Airless Spray	75%	0.00
Enerfoam 42	0.18	10.3	0.00%	0.00%	Manual	100%	0.00
Enerbond 45	0.18	10.3	0.00%	0.00%	Manual	100%	0.00
Miracle SFA66 Construction Adhesive	0.01	9.02	36.60%	63.40%	Manual	100%	0.00
SW NR4000 Br White Latex Caulk	0.06	13.5	1.49%	83.50%	Manual	100%	0.00
Cyclo C192 Max Clean	0.08	8.33	10.00%	2.00%	Airless Spray	75%	0.01
Shine Up	0.15	7.30	24.40%	2.00%	Airless Spray	75%	0.02
Color Putty	0.06	17.5	0.00%	100.00%	Manual	100%	0.00
USG Easy Sand DW Mu8d	11.5	21.7	0.00%	100.00%	Manual	100%	0.00
Magnum Tuf Set DW Mud	9.38	13.3	0.00%	100.00%	Manual	100%	0.00
Builder Craft Latex Paint B30WF6000	8.00	11.1	4.77%	46.00%	Air Assisted	75%	44.73
<b>Total</b>							<b>53.98</b>

\* Manual application methods include wiping, brush, trowel or extrusion. Transfer efficiency = 100 %

**Notes:**

Production rate: 1.00 units/hr

The Builder Craft Latex Paint is applied by an air assisted method. The other listed materials are applied by airless methods.

All coating materials not included in these particulate calculations were wiped, extruded, or trowl/brush applied. As homes present a flat target, AP-40 lists a transfer efficiency of 100%. Thus, no particulate emissions are possible for those materials wiped, extruded, or trowl/brush applied.

**Methodology:**

PTE of PM/PM<sub>10</sub> (tons/yr)= Maximum Usage (gal/hour) \* Density (lb/gal) \* (%Solids) \* (1-Transfer efficiency) \*8760 hrs/yr \*1 ton/2000 lbs

**Appendix A: Emission Calculations**  
**Particulate Emissions from Woodworking**

**Company Name:** Forest River Housing, Inc  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-28343-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

Emissions Unit	Maximum Throughput (lbs/hr)	Maximum Throughput (tons/hr)	Maximum Dust Collected (lbs/hr)	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (tons/yr)
Woodworking	7000	3.50	5.00	21.90

**Note:**

Assume all PM emissions are equal to PM<sub>10</sub>/PM<sub>2.5</sub>

This operation has no particulate control device.

Most lumber comes in precut. The only cutting comes from odd sized floors and from making small cuts in units.

Therefore, there are very small amounts of sawdust generated. The amount of dust collected was calculated by collecting the dust with a portable vacuum.

**Methodology**

Maximum Dust Collected (lb/hr) = Dust collected (lbs/hr) x Actual hrs of operation/yr x 1 yr/8760 hrs

PTE Before Controls (tons/yr) = (Max. Dust Collected (lbs/hr) x 8760 hrs/yr/2000 lbs/ton)

**Compliance with 326 IAC 6-3-2(e) - Particulate Matter Emissions Limitations**

$$\text{Maximum Allowable Emissions} = E = 4.10 * P^{0.67}$$

Where:

P = Process Rate in tons per hour

E = Rate of Emissions in pounds per hour

Maximum Allowable Emissions =

**9.49**

Emission Unit	Allowable Emissions (lbs/hr)	Calculated Emissions (lbs/hr)
Woodworking	9.49	5.00

Thus, this woodworking operation is in compliance with 326 IAC 6-3-2 without the use of a control device.

**Appendix A: Emission Calculations**  
**Combustion Emissions - Gas-Fired Space Heaters and Air Make-up Units**

**Company Name:** Forest River Housing, Inc.  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-28343-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

**Natural Gas-Fired Space Heaters and Air Make-up Units**

Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMCF/yr

7.13    62.46

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM <sub>10</sub> *	PM <sub>2.5</sub> *	SO <sub>2</sub>	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.06	0.24	0.24	0.02	3.12	0.17	2.62

\*PM emission factor is filterable PM only. PM<sub>10</sub>/PM<sub>2.5</sub> emission factors are filterable and condensable 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/1,000 MMBtu

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

**Appendix A: Emission Calculations**  
**Combustion Emissions - Gas-Fired Space Heaters and Air Make-up Units HAPs**

**Company Name:** Forest River Housing, Inc.  
**Address:** 66700 SR 19, Wakarusa, Indiana, 46573  
**Permit Number:** M039-28343-00611  
**Reviewer:** Marcia Earl  
**Date:** August 2009

**Natural Gas-Fired Space Heaters and Air Make-up Units**

	HAPs - Organics				
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.56E-05	1.26E-09	7.88E-08	1.89E-06	3.57E-09

	HAPs - Metals				
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.25E-10	1.16E-09	1.47E-09	3.99E-10	2.21E-09

**TOTAL HAPs** 6.76E-05

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

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

**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/1,000 MMBtu

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



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** William Conway  
Forest River Housing, Inc  
P.O. Box 3030  
Elkhart, IN 46515

**DATE:** November 18, 2009

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
MSOP - Renewal  
039-28343-00611

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Bill MacDonald (DECA Environmental & Associates, Inc)  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

November 18, 2009

TO: Wakarusa-Olive & Harrison Twp. Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Forest River Housing, Inc**  
**Permit Number: 039-28343-00611**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures  
Final Library.dot 11/30/07

# Mail Code 61-53

IDEM Staff	MIDENNEY 11/18/2009 Forest River Housing, Inc 039-28343-00611 (final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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	Remarks
1		William G Conway Forest River Housing, Inc PO Box 3030 Elkhart IN 46515-3030 (Source CAATS) via confirmed delivery										
2		Elkhart County Health Department Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)										
3		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
4		Wakarusa Town Council and Town Manager P.O. Box 474 Wakarusa IN 46573 (Local Official)										
5		Wakarusa-Olive and Harrison Township 124 N Elkhart St. Box 485 Wakarusa IN 46573-0485 (Library)										
6		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)										
7		Mr. Bill MacDonald DECA Environmental & Associates, Inc. 410 1st Avenue NE Carmel IN 46032 (Consultant)										
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender  <b>6</b>	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 <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--