



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

TO: Interested Parties / Applicant

DATE: February 17, 2009

RE: Forest River, Inc. --- Elkhart Coach Division / 039-27269-00686

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

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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
FN-REGIS.dot 1/2/08



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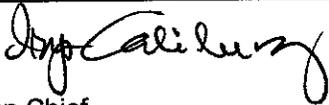
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REGISTRATION OFFICE OF AIR QUALITY

Forest River, Inc. - Elkhart Coach Division
52807 County Road 7
Elkhart, Indiana 46514

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 039-27269-00686	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 17, 2009

SECTION A

SOURCE SUMMARY

This registration 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 Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary transit and shuttle bus manufacturing source.

Source Address:	52807 County Road 7, Elkhart, Indiana 46514
Mailing Address:	P.O. Box 3030, Elkhart, Indiana 46514
General Source Phone Number:	(574) 534-6913
SIC Code:	3711
County Location:	Elkhart County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

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) frame welding operation, identified as EU1, constructed in 2006, with a maximum wire usage rate of 8.28 pounds per hour of gas metal arc welding wire (GMAW E70S), and exhausting to the indoors.
- (b) One (1) finished wall lamination process, identified as EU2, constructed in 2006, using a moisture cure urethane adhesive, with a maximum manufacturing capacity of 4 vehicles per day, and exhausting to the indoors.
- (c) One (1) production and post production operation, identified as EU3, constructed in 2006, applying various coatings, sealants, adhesives, and cleaners, using spray guns, extrusion and hand wiping techniques, with a maximum manufacturing capacity of 4 vehicles per day, and exhausting to the indoors.
- (d) Nine (9) natural gas-fired space heaters, identified as EU4, constructed in 2006, with a maximum combined heat input capacity of 1.7 MMBtu/hr, and exhausting to stacks ST-2 through ST-10.
- (e) One (1) wood milling operation, consisting of tables saws and hand held routers, identified as EU5, constructed in 2006, with a maximum capacity of 175 pounds of plywood per hour, using a portable dust collector for particulate matter control, and exhausting to the indoors.
- (f) One (1) prime booth, identified as EU6, constructed in 2008, equipped with a high volume low pressure (HVLP) spray gun, with a maximum manufacturing capacity of 4 vehicles per day and less than five (5) gallons of coatings per day, using a dry filter for particulate control, and exhausting to stack ST-1.

SECTION B

GENERAL CONDITIONS

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

Terms in this registration 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 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration 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.

B.3 Registration Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. 039-27269-00686 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 registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (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 registration.
- (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 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.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 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 registration:

- (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.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant 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).

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (c) One (1) production and post production operation, identified as EU3, constructed in 2006, applying various coatings, sealants, adhesives, and cleaners, using spray guns, extrusion and hand wiping techniques, with a maximum manufacturing capacity of 4 vehicles per day, and exhausting to the indoors.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

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

Pursuant to 326 IAC 8-2-9, 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, delivered to the applicator for air dried or forced warm air dried coatings.

D.1.2 Volatile Organic Compounds (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

D.1.3 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the production and post production operation shall be controlled by dry particulate filters, waterwash, or an equivalent control device when using surface coating application methods not specified in 326 IAC 6-3-2(b), and the Permittee shall operate each control device in accordance with manufacturer's specifications.
- (b) 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.
- (c) 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.

Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

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

- (a) Compliance with the VOC 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.
- (b) The daily volume weighted average of VOC content shall be calculated using the following methodology:

Where:

$$A = \frac{\sum (C \times U)}{\sum U}$$

A = Daily volume weighted average in pounds VOC per gallon, as applied

C = As applied VOC content of coating in pounds VOC per gallon

U = Usage rate of coating in gallons per day

Record Keeping and Reporting Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The VOC content of each coating material and solvent used less water;
- (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and VOC content;
- (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents; and
- (2) The volume weighted VOC content less water of the non-compliant coatings used for each day.
- The volume weighted VOC content does not have to be calculated or recorded on those days when only compliant coatings are used.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

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

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Forest River, Inc. - Elkhart Coach Division
Address:	52807 County Road 7
City:	Elkhart, Indiana 46514
Phone Number:	(574) 534-6913
Registration No.:	039-27269-00686

I hereby certify that Forest River, Inc. - Elkhart Coach Division is :

still in operation.

I hereby certify that Forest River, Inc. - Elkhart Coach Division is :

no longer in operation.

in compliance with the requirements of Registration No. 039-27269-00686.

not in compliance with the requirements of Registration No. 039-27269-00686.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
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:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Description and Location
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Source Name:	Forest River, Inc. - Elkhart Coach Division
Source Location:	52807 County Road 7, Elkhart, Indiana 46514
County:	Elkhart County
SIC Code:	3711
Registration No.:	039-27269-00686
Permit Reviewer:	Brian Williams

On December 17, 2008, the Office of Air Quality (OAQ) received an application from Forest River, Inc. - Elkhart Coach Division related to the construction and operation of a new stationary transit and shuttle bus manufacturing source.

Existing Approvals

There have been no previous approvals issued to this source.

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	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
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. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. 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_{2.5}**
 Elkhart County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions, and the effective date of these rules was July 15th, 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 PM₁₀ emissions as a surrogate for

PM2.5 emissions until 326 IAC 2-2 is revised.

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

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Forest River, Inc. - Elkhart Coach Division on December 17, 2008, relating to the construction and operation of a new stationary transit and shuttle bus manufacturing source. IDEM has determined that Forest River, Inc. - Elkhart Coach Division is not collocated with any existing Forest River, Inc. sources.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission unit(s):

- (a) One (1) frame welding operation, identified as EU1, constructed in 2006, with a maximum wire usage rate of 8.28 pounds per hour of gas metal arc welding wire (GMAW E70S), and exhausting to the indoors.
- (b) One (1) finished wall lamination process, identified as EU2, constructed in 2006, using a moisture cure urethane adhesive, with a maximum manufacturing capacity of 4 vehicles per day, and exhausting to the indoors.
- (c) One (1) production and post production operation, identified as EU3, constructed in 2006, applying various coatings, sealants, adhesives, and cleaners, using spray guns, extrusion and hand wiping techniques, with a maximum manufacturing capacity of 4 vehicles per day, and exhausting to the indoors.
- (d) Nine (9) natural gas-fired space heaters, identified as EU4, constructed in 2006, with a maximum combined heat input capacity of 1.7 MMBtu/hr, and exhausting to stacks ST-2 through ST-10.
- (e) One (1) wood milling operation, consisting of tables saws and hand held routers, identified as EU5, constructed in 2006, with a maximum capacity of 175 pounds of plywood per hour, using a portable dust collector for particulate matter control, and exhausting to the indoors.
- (f) One (1) prime booth, identified as EU6, constructed in 2008, equipped with a high volume low pressure (HVLP) spray gun, with a maximum manufacturing capacity of 4 vehicles per day and using less than five (5) gallons of coating per day, using a dry filter for particulate control, and exhausting to stack ST-1.

Enforcement Issues

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

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Registration

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Frame Welding (EU1)	0.19	0.19	0.19	0	0	0	0	0.12	0.12 Manganese
Lamination (EU2)	0	0	0	0	0	negl.	0	negl.	negl.
Production and Post Production (EU3)	7.72	7.72	7.72	0	0	21.04	0	10.58	4.20 Toluene
Space Heaters (EU4)	0.06	0.06	0.06	0.004	0.74	0.04	0.63	0.014	0.013 Hexane
Wood Milling** (EU5)	0.013	0.013	0.013	0	0	0	0	0	0
Prime Booth (EU6)	2.39	2.39	2.39	0	0	1.39	0	0	0
Total PTE of Entire Source	10.37	10.37	10.37	0.004	0.71	22.47	0.63	10.71	4.20 Toluene
Registration Levels	25	25	25	25	25	25	100	25	10

negl. = negligible
 * 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), not particulate matter (PM), is considered as a "regulated air pollutant".
 ** 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, potential emissions for particulate matter were calculated after consideration of the controls.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, PM2.5, and VOC are within the ranges listed in 326 IAC 2-5.1-2(a)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.1-2(a)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2 (Registrations). A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (326 IAC 12), are not included in the permit, since this source does not coat metal furniture.
- (b) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM (326 IAC 12), are not included in the permit, since this source does not coat automobiles or light duty trucks.
- (c) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) 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, Subpart HHHHHH are not included in the permit, since this source does not perform any Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes. The source does have miscellaneous surface coating operations, however, the source does not use any coatings that contain compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (f) 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

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.1-2 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (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.
- (f) 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.

Frame Welding (EU1)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(9), the frame welding operation is exempt from the requirements of 326 IAC 6-3-2 because it consumes less than 625 pounds of rod or wire per day.

Lamination (EU2)

- (a) 326 IAC 8 (Volatile Organic Compound Rules)
These facilities are not subject to the requirements of 326 IAC 8, because the uncontrolled potential emissions of VOC from these facilities are less than 15 pound per day.

Production and Post Production Operation (EU3)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
- (1) Pursuant to 326 IAC 6-3-2(b)(6), (7), and (8) the production and post production operation is exempt from the requirements of 326 IAC 6-3-2 when applying coatings using roll, flow, or brush application methods.
 - (2) Pursuant to 326 IAC 6-3-2(d), particulate from the production and post production operation shall be controlled by dry particulate filters, waterwash, or equivalent control device when using surface coating application methods not specified in 326 IAC 6-3-2(b) and the Permittee shall operate the control device in accordance with manufacturer(s) specifications.
 - (i) 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:
 - (ii) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (iii) Operate equipment so that no overspray is visibly detectable at the exhaust or

accumulates on the ground.

- (iv) 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 8-2-2 (Automobile and Light Duty Truck Coating Operations)
The production and post production operation at the source do not include the coating of passenger cars or passenger car derivatives. Therefore, the production and post production operation is not subject to the requirements of 326 IAC 8-2-2.
- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The production and post production operation was constructed after July 1, 1990, is located in Elkhart County, has actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls, and coats metal parts or products under the Standard Industrial Classification Code of major group #37.
- (1) Pursuant to 326 IAC 8-2-9(d)(4), the volatile organic compound (VOC) content of the coating utilized in the production and post production operation, shall be limited to three and five tenths (3.5) pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.
 - (i) 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.
 - (ii) The daily volume weighted average of VOC content shall be calculated using the following methodology:

Where:

$$A = \frac{[\sum (C \times U)]}{\sum U}$$

A = Daily volume weighted average in pounds VOC per gallon, as applied
C = As applied VOC content of coating in pounds VOC per gallon
U = Usage rate of coating in gallons per day
 - (2) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Natural Gas-Fired Space Heaters (EU4)

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

Wood Milling (EU5)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The wood milling operation is exempt from the requirements of 326 IAC 6-3-2, because the potential particulate emissions from the wood milling operation are less than five hundred fifty one thousandths (0.551) pound per hour.

Prime Booth (EU6)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The Prime Booth uses less than five (5) gallons of coatings per day. Therefore, pursuant to 326 IAC 6-3-1(b)(15), the prime booth is exempt from the requirements of 326 IAC 6-3-2.
- (b) 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)
The prime booth at the source does not include coating passenger cars or passenger car derivatives. Therefore, the prime booth is not subject to the requirements of 326 IAC 8-2-2.
- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The prime booth was constructed after July 1, 1990 and is located in Elkhart County. However, the prime booth has actual VOC emissions less than fifteen (15) pounds per day before add-on controls. Therefore, the prime booth is not subject to the requirements of 326 IAC 8-2-9.

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 December 17, 2008.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. 039-27286-00686. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Williams 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) (234-5375) or toll free at 1-800-451-6027 extension (4-5375).
- (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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Attachment A: Emission Calculations
Welding Emissions**

**Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Reviewer: Brian Williams**

Process (MIG WELDING)	Number of Stations	Max. Electrode Consumption (lbs/hr)	*Emission Factors (lb pollutant/lb electrode)				Potential To Emit (tons/yr)			
			PM/PM10/PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr
E70S Welding Wire	1	8.28	5.2E-03	3.2E-03	1.0E-05	1.0E-05	0.19	0.12	3.63E-04	3.63E-04

METHODOLOGY

*Emission factors are from AP-42, Chapter 12.19, Tables 12.19-1, and 12.19-2 SCC 3-09-050

PM, PM10, and PM 2.5 emissions are assumed equal.

PTE (lbs/hour) = No. of Stations * Max. Electrode Consumption (lbs/hour) * Emission Factor (lbs pollutant/lbs electrode)

PTE (tons/year) = No. of Stations * Max. Electrode Consumption (lbs/hour) * Emission Factor (lbs pollutant/lbs electrode) * 8760 (hours/year) * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
VOC and Particulate
From Production and Post Production Operations (EU3)**

Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Reviewer: Brian Williams

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
NATIONAL OAK DIST *, S50, SPRAYWAY GLASS CLEANER	7.99	20.00%	0.0%	20.0%	0.0%	0.00%	0.11	4.0	1.60	1.60	0.03	0.70	0.13	0.00	100%
DAP, 4000, LOW VOC SUBFLOOR ADHESIVE	11.01	10.00%	0.0%	10.0%	0.0%	0.00%	0.22	4.0	1.10	1.10	0.04	0.97	0.18	0.00	100%
SIKA CORPORATION, 221, SIKA FLEX 221	9.92	4.40%	0.0%	4.4%	0.0%	0.00%	0.32	4.0	0.44	0.44	0.02	0.56	0.10	0.00	100%
ROLLIE WILLIAMS PAINT SPOT, 4PLT, PURE GRADE LACQUER THINNER	7.07	100.00%	0.0%	100.0%	0.0%	0.00%	0.81	4.0	7.07	7.07	0.95	22.91	4.18	0.00	100%
BONDAFLEX, SIL 100, SILICONE SEALANT	8.60	3.50%	0.0%	3.5%	0.0%	0.00%	0.09	4.0	0.30	0.30	0.00	0.11	0.02	0.00	100%
SIKA CORPORATION, 226, Sika Cleaner	6.70	98.50%	0.0%	98.5%	0.0%	0.00%	0.02	4.0	6.60	6.60	0.02	0.53	0.10	0.00	100%
BENDER'S WHOLESALE, 604, Bender's 604 High Temperature Flex Foam Adhesive	10.42	38.40%	0.0%	38.4%	0.0%	0.00%	0.48	4.0	4.00	4.00	0.32	7.68	1.40	0.79	65%
BENDER'S WHOLESALE, 617, Bender's 617 Sprayable Contact Cement	6.63	65.00%	0.0%	65.0%	0.0%	0.00%	1.49	4.0	4.31	4.31	1.07	25.68	4.69	0.88	65%
CAMIE CAMPBELL, L-7590, CITRUS CLEANER	6.60	96.00%	0.0%	96.0%	0.0%	0.00%	1.49	4.0	6.33	6.33	1.57	37.74	6.89	0.00	100%
FOAM ENTERPRISES, JC-158, LDM	9.70	0.00%	0.0%	0.0%	0.0%	0.00%	0.36	4.0	0.00	0.00	0.00	0.00	0.00	0.00	100%
FOAM ENTERPRISES, JC-800A, ISOCYANATE	10.18	0.00%	0.0%	0.0%	0.0%	0.00%	0.34	4.0	0.00	0.00	0.00	0.00	0.00	0.00	100%
DAUBERT, CG127, TECTYL CG127 ALUMINUM	7.84	40.80%	0.0%	40.8%	0.0%	0.00%	0.77	4.0	3.20	3.20	0.41	9.85	1.80	0.91	65%
MANUS PRODUCTS, 76-AM, MANUS-BOND SELF-LEVELING ADHESIVE SEALANT	13.76	0.00%	0.0%	0.0%	0.0%	0.00%	0.02	4.0	0.00	0.00	0.00	0.00	0.00	0.00	100%
NANOCHEM TECHNOLOGIES, T-1371, WB GRAY PRIMER	10.24	16.90%	0.0%	16.9%	0.0%	0.00%	1.10	4.0	1.73	1.73	0.32	7.61	1.39	2.39	65%
BASF, 300,310, DEGACOAT UNDERCOATING	9.50	2.10%	0.0%	2.10%	0.0%	0.00%	1.16	4.0	0.20	0.20	0.04	0.92	0.17	2.74	65%

State Potential Emissions

4.80 115.27 21.04 7.72

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)

**Appendix A: Emission Calculations
Production and Post Production HAPs Emissions (EU3)**

Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Permit Reviewer: Brian Williams

Material	Density	Gallons of Material	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Xylene Emissions	Toluene Emissions	Methylene Chloride Emissions	MDI Emissions	Hexane Emissions	PCE Emissions	TCE Emissions	Methanol Emissions
	(Lb/Gal)	(gal/unit)	(unit/day)	Xylene	Toluene	Methylene Chloride	Methylene Bisphenyl Isocyanate (MDI)**	Hexane	Tetrachloroethylene (PCE)	Trichloroethylene (TCE)	Methanol	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
SIKA CORPORATION, 226, Sika Cleaner	9.92	0.32	4.0	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROLLIE WILLIAMS PAINT SPOT, 4PLT, PURE GRADE LACQUER THINNER	7.07	0.81	4.0	6.0%	66.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.25	2.76	0.00	0.00	0.00	0.00	0.00	0.39
BENDER'S WHOLESALE, 604, Bender's 604 High Temperature Flex Foam Adhesive	10.42	0.48	4.0	0.0%	0.0%	45.0%	0.0%	0.0%	10.0%	10.0%	0.0%	0.00	0.00	1.64	0.00	0.00	0.37	0.37	0.00
BENDER'S WHOLESALE, 617, Bender's 617 Sprayable Contact Cement	6.63	1.49	4.0	0.0%	20.0%	0.0%	0.0%	45.0%	0.0%	0.0%	0.0%	0.00	1.44	0.00	0.00	3.25	0.00	0.00	0.00
*FOAM ENTERPRISES, JC-800A, ISOCYANATE	10.18	0.34	4.0	0.0%	0.0%	0.0%	38.0%	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	negl.	0.00	0.00	0.00	0.00
Total												0.37	4.20	1.64	negl.	3.25	0.37	0.37	0.39

Total HAPs (tons/yr) = 10.58

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

* Volatile HAP from this product (MDI) polymerizes rapidly when product is cured, so it produces negligible emissions. Prior to that product is totally isolated and can produce no emissions

**Attachment A: Emission Calculations
Natural Gas Combustion In Space Heaters**

Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Reviewer: Brian Williams

Heat Input Capacity
MMBtu/hr

1.7

Potential Throughput
MMCF/yr

14.9

Pollutant

	PM*	PM10*	SO2	NO _x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.01	0.06	4.47E-03	0.74	0.04	0.63

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

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

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.564E-05	8.935E-06	5.585E-04	1.340E-02	2.532E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.723E-06	8.191E-06	1.042E-05	2.829E-06	1.564E-05

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Attachment A: Emission Calculations
Wood Milling (EU5)**

Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Reviewer: Brian Williams

Emission Unit	¹ Dust Collected Per Line (lbs/hour)	Number of Lines	PTE of PM/PM10/PM2.5 ^{2,3}	
			(lbs/hour)	(tons/year)
Woodworking	0.30	1	0.003	0.013
Total Controlled Emissions =				0.013

METHODOLOGY

Potential emissions for particulate matter (PTE) were calculated after consideration of the controls.

¹ PTE calculated using amount of dust collected.

- > The source collects 12.5 pounds of dust per week (41.65 hours per week) per line.
- > Control devices include; three dust collectors, one per line, with 99 % efficiency, each.

² PM, PM10, and PM 2.5 emissions are assumed equal.

PTE PM/PM10 (lbs/hour) = [(Dust collected 12.5 (lbs/week)/ 41.65 (hours/week) / (control efficiency))] x (1- control efficiency)

PTE PM/PM10 (tons/year) = (PTE PM/PM10 (lbs/hour))*8760/2000

³ 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, potential emissions for particulate matter were calculated after consideration of the controls.

**Attachment A: Emission Calculations
Summary of Emissions**

Company Name: Forest River, Inc. - Elkhart Coach Division
Address City IN Zip: 52807 County Road 7, Elkhart, Indiana 46514
Permit Number: 039-27269-00686
Reviewer: Brian Williams

Uncontrolled Potential to Emit (tons/yr)								
Emission Unit	PM	PM10	SO ₂	NOx	VOC	CO	Total HAPs	Single HAP
Frame Welding (EU1)	0.19	0.19	0	0	0	0	0.12	0.12 Manganese
Lamination (EU2)	0	0	0	0	negligible	0	negligible	negligible
Production and Post Production (EU3)	7.72	7.72	0	0	21.04	0	10.58	4.20 Toluene
Space Heaters (EU4)	0.01	0.06	0.004	0.74	0.04	0.63	0.014	0.013 Hexane
Wood Milling (EU5)	0.013	0.013	0	0	0	0	0	0
Prime Booth (EU6)	2.39	2.39	0	0	1.39	0	0	0
Total	10.33	10.37	0.00	0.74	22.47	0.63	10.71	4.20 Toluene