



Frank O'Bannon
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August 19, 2002

Mr. Richard E. Bond
Vice President
Monaco Coach Corporation
1205 East Lincoln Street
Nappanee, Indiana 46550

Re: 039-15678-00087
First Minor Source Modification to:
Part 70 permit No.: T039-6116-00087

Dear Mr. Bond:

Monaco Coach Corporation was issued Part 70 operating permit T039-6116-00087 on June 26, 2002 for a wood furniture and fiberglass panel manufacturing plant. An application to modify the source was received on May 30, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

Woodworking operations controlled by:

- (a) One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.
- (b) One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.

The following construction conditions are applicable to the proposed project:

- 1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction and operation when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Ms. Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/AB

cc: File - Elkhart County
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Monaco Coach Corporation
1205 East Lincoln Street
Nappanee, Indiana 46550**

(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 in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-6116-00087	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 26, 2002 Expiration Date: June 26, 2005

First Minor Source Modification No.: T039-15678-00087	Pages Affected: p.2 - 6
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 19, 2002

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 through A.3 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 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary recreational vehicle manufacturing plant, that operates woodworking, surface coating, and fiberglass processes.

Responsible Official: Vice President
Source Address: 1205 East Lincoln Street, Nappanee, Indiana, 46550
Mailing Address: P.O. Box 465, Wakarusa, Indiana, 46573
SIC Codes: 2434, 2431, 2511, 3083, 3716, 3792
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) Surface Coating:

- (1) Five (5) paint booths, located in Plant 48, identified as B48-1 through B48-5, constructed in 1984, equipped with five (5) HVLP spray guns for wood furniture and cabinet coating, with a maximum capacity at each spray booth of five (5) gallons per hour of coating, using dry filters for overspray control, and exhausting at stacks SV48-01 for booth B48-1, SV48-02 for B48-2, SV48-03 for B48-3, SV48-04 for B48-4, and SV48-05 for B48-5.
- (2) One (1) wood finishing paint line, located in Plant 48, consisting of the following equipment:
 - (A) One (1) wood prep and clean-up area with a total maximum raw material throughput of 120 units per hour per booth; and
 - (B) Three (3) paint booths, identified as B48-6 through B48-8, constructed in 1999, equipped with three (3) HVLP guns for stain, topcoat and sealer applications, with a total maximum raw material throughput of 120 units per hour per booth, using dry filters for overspray control, and exhausting at stacks SV48-6, SV48-7 and SV48-8, respectively.
- (3) One (1) lamination spray adhesive booth, located in Plant 42, identified as lam42, using one (1) HVLP spray gun, with a maximum capacity of 14 gallons per day of adhesive, using dry filters for overspray control, and exhausting at GV42.

(b) Woodworking Operations controlled by:

- (1) One (1) baghouse for particulate control, located in Plant 48, identified as D48-01, with a maximum capacity of 10000 pounds per hour, and exhausting at stack D48-01.
 - (2) One (1) cyclone for particulate control, located in Plant 48, identified as D48-02, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D48-02.
 - (3) One (1) cyclone for particulate control, located in Plant 42, identified as D42-01, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D42-01.
 - (4) One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.
 - (5) One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.
- (c) Fiberglass Operations:
- (1) One (1) fiberglass motor home parts manufacturing line, consisting of one (1) air assisted airless gel coat application system, one (1) air assisted airless resin application system and one (1) flow coat resin application system, with dry filters for overspray and exhausting to stack GV42.
 - (2) One (1) fiberglass prep and clean-up area, exhausting to stack GV42.
 - (3) One (1) sander, with dry filters for PM control, exhausting to stack GV42.
 - (4) Two (2) routers, each with dry filters for PM control, and both exhausting to stack GV42.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment, identified as W43 and T43, located in Plant 43, related to manufacturing activities not resulting in the emissions of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Degreasing operations, located in Plant 43, identified as DG43, using mineral spirits as solvent, with a maximum throughput of 0.3 gallons per day, and exhausting at stack GV43.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (b) Woodworking Operations controlled by:
- (1) One (1) baghouse for particulate control, located in Plant 48, identified as D48-01, with a maximum capacity of 10000 pounds per hour, and exhausting at stack D48-01.
 - (2) One (1) cyclone for particulate control, located in Plant 48, identified as D48-02, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D48-02.
 - (3) One (1) cyclone for particulate control, located in Plant 42, identified as D42-01, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D42-01.
 - (4) One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.
 - (5) One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate emissions from the woodworking facilities shall not exceed the pounds per hour emission rates shown in the following table:

Stack	Process Weight (Pounds/Hour)	PM Emission Rate (lbs/hour)
D48-01	10,000	12.05
D48-02	2,000	4.10
D42-01	2,000	4.10
D42-02	3,000	5.40
D48-05	13,000	13.4

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

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Particulate Matter (PM and PM₁₀) [326 IAC 2-2]

- (a) Baghouse D42-02 shall have an outlet grain loading of 0.01 grains/acf and an air flow rate of 12,500 acfm, which is equivalent to PM/PM₁₀ emissions of 4.7 tons per year.
- (b) Baghouse D48-05 shall have an outlet grain loading of 0.01 grains/acf and an air flow rate of 22,000 acfm, which is equivalent to PM/PM₁₀ emissions of 8.7 tons per year.

Compliance with this Condition makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.5 Particulate Matter (PM)

- (a) Pursuant to PC (20) 1730, issued on February 21, 1989;
 - (1) The baghouse and cyclone, D48-01 and D48-02, for PM control shall be in operation at all times when the woodworking facilities are in operation; and
 - (2) The visible emissions from the baghouse and cyclone, D48-01 and D48-02, for PM control shall not exceed 10% opacity.
- (b) Cyclone D42-01 and the baghouses D42-02 and D48-05 used for PM control, shall be in operation at all times when the woodworking facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

- (a) Daily visible emission notations of baghouse and cyclone stack exhausts (D48-01, D48-02, D48-05, D42-01 and D42-02) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -

Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.7 Particulate Control Equipment Inspections

- (a) An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (b) An inspection shall be performed each calendar quarter of the cyclones controlling the woodworking operation when venting to the atmosphere. Cyclone inspections shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors.

D.2.8 Broken or Failed Bag Detection or Cyclone Failure Detection

- (a) In the event that bag failure has been observed for the baghouse when venting to the atmosphere:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of daily visible emission notations of the woodworking stacks' exhaust when venting to the atmosphere. When equipment is venting into the building, no monitoring records will be required.

- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Source Modification and Part 70 Minor Permit Modification

Source Background and Description

Source Name:	Monaco Coach Corporation
Source Location:	1205 East Lincoln Street, Nappanee, Indiana 46550
County:	Elkhart
SIC Code:	2431
Operation Permit No.:	039-6116-00087
Operation Permit Issuance Date:	June 26, 2002
Minor Source Modification No.:	039-15678-00087
Minor Permit Modification No.:	039-16199-00087
Permit Reviewer:	ERG/AB

The Office of Air Quality (OAQ) has reviewed a modification application from Monaco Coach Corporation relating to the construction of the following emission units and pollution control devices:

Woodworking operations controlled by:

- (a) One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.
- (b) One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.

History

On May 30, 2002, Monaco Coach Corporation (Monaco) submitted an application to IDEM, OAQ requesting permission to relocate some of their existing woodworking equipment and add additional woodworking equipment controlled by two new baghouses (identified as D48-05 and D42-02) at their existing plant in Nappanee, Indiana. Monaco plans to install the following new equipment in Plant 42: a Straitline Rip saw, shaper sander, table saw, and radial arm saw. Monaco also plans to relocate the following woodworking equipment from Plant 48 to Plant 42: a molder, triple head, and single spindle shaper. The particulate matter emissions from the new and relocated woodworking equipment will be controlled using the existing cyclone (identified as DC42-01) and the new baghouse (identified as D42-02). In Plant 48, Monaco plans to install the following new equipment: a top and bottom sander, a sharper sander, a panel and rail shaper and two whirl wind saws. The emissions from this new equipment will be controlled using the new baghouse (identified as D48-05) and some existing baghouses. The addition of the new woodworking equipment and the relocation of the existing woodworking equipment will not increase the maximum production capacity of the plant.

A Title V permit (T039-6116-00087) was issued for this source on June 26, 2002.

Existing Approvals

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

- (a) Exemption, issued on March 4, 1987;
- (b) PC(20) 1730, issued on February 21, 1989;
- (c) CP 039-1996-00087, issued on July 19, 1991;
- (d) CP 039-10299-00087, issued on February 5, 1999;
- (e) CP 039-10442-00087, issued on April 21, 1999;
- (f) Minor Source Modification 039-15249-00087, issued on May 9, 2002; and
- (g) T039-6116-00087, issued June 26, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
D48-05	Woodworking-Plant	30	2.5	22,000	Ambient
D42-02	Woodworking-Plant	30	2.5	12,500	Ambient

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification 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 May 30, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, page 1).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1,295
PM-10	1,295
SO ₂	0.00
VOC	0.00
CO	0.00
NO _x	0.00

[Note: There are no HAP emissions from this modification.]

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(9), because this modification consists of installing additional woodworking equipment which is of the same type as the existing permitted woodworking equipment and which will comply with the same applicable requirements and permit terms and conditions as the existing woodworking equipment. The PM and PM-10 emissions from the woodworking equipment will be controlled using baghouses and cyclones, such that the PM and PM-10 emissions after controls are less than 13 tons per year. The source will be required to operate the control equipment at all times the associated woodworking equipment are in operation. Therefore, this modification is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

The permit modification is being performed through a Minor Permit Modification pursuant to 326 IAC 2-7-12(b) because they do not violate any applicable requirements and do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the Part 70 Permit.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	<250
PM-10	<250
SO ₂	<100
VOC	<250
CO	<100
NO _x	<100

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and is not one of the 28 listed source categories.
- (b) These emissions are based upon the Title V permit (No. T039-6116-00087), which was issued on June 26, 2002.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)					
	PM	PM-10	SO ₂	VOC	CO	NO _x
DC 48-05	8.3	8.3	0.00	0.00	0.00	0.00
DC 42-02	4.7	4.7	0.00	0.00	0.00	0.00
Total Emissions for Modification	13.0	13.0	0.00	0.00	0.00	0.00
Total Emissions from Entire Source After Controls	57.3	57.3	<100	<250	<100	<100
PSD Significance Levels	250	250	250	250	250	250

This modification to an existing major stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

In a previous permit (PC(20) 1730, issued February 21, 1989), the VOC emissions from this source were limited so that the source could remain a minor source under 326 IAC 2-2 (PSD). The potential PM/PM-10 emissions from this modification, after controls, is 13 tons per year. The PM/PM10 emissions from the entire source after controls are 57.3 tons per year. This proposed permit requires the source to use the control devices at all times the woodworking operations are in operation. Baghouse D42-02 has an outlet grain loading of 0.01 grains/acf and an air flow rate of 12,500 acfm, which is equivalent to 4.7 tons/year. Baghouse D48-05 has an outlet grain loading of 0.01 grains/acf and an air flow rate of 22,000 acfm, which is equivalent to 8.3 tons/year. After this modification, the source will remain a minor source under PSD because the PM and PM₁₀ emissions after controls will be less than 250 tons per year. Compliance with this requirement will make the provisions of 326 IAC 2-2 not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County and has potential to emit VOC greater than 10 tons of VOC per year. Pursuant to this rule the Permittee must submit an annual emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The emission statement should cover the period defined in 326 IAC 2-6-2(8) for emission statement operating year.

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:

- (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 6-3-2 (Process Operations)

The particulate matter (PM) from from the woodworking operations shall be limited by the following:

Unit	Process Weight (tons/hr)	Allowable Emission Limit (lbs/hr)
D42-02	1.5	5.4
D48-05	6.5	13.4

The emission limits were calculated using the following equation:

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and } P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times the woodworking operations are in operation, in order to comply with these limits.

Note: The new and relocated woodworking equipment will not meet the definitions of insignificant woodworking activities (as defined in 326 IAC 2-7-1(21)(G)(xxix) and (xxx)) because the source will use existing cyclones as well as the new baghouses to control emissions of particulate matter from woodworking facilities in Plants 42 and 48.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

1. The woodworking operations have applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emission notations of the woodworking facilities stack exhausts (D42-02 and D48-05) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
 - (b) An inspection shall be performed each calendar quarter of all bags controlling the woodworking operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - (c) In the event that bag failure has been observed:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an

emergency and the Permittee satisfies the emergency provisions. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.

- (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions.

These monitoring conditions are necessary because the baghouses (D42-02 and D48-05) must operate properly to ensure the woodworking operations are in compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 (PSD), and 326 IAC 2-7 (Part 70 Permit Program).

Testing

Testing is not required for these woodworking facilities and their control devices because each new facility accounts for less than 40% of the PM/PM₁₀ PTE before controls.

Proposed Changes

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (b) Woodworking Operations controlled by:
 - (1) One (1) baghouse for particulate control, located in Plant 48, identified as D48-01, with a maximum capacity of 10000 pounds per hour, and exhausting at stack D48-01.
 - (2) One (1) cyclone for particulate control, located in Plant 48, identified as D48-02, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D48-02.
 - (3) One (1) cyclone for particulate control, located in Plant 42, identified as D42-01, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D42-01.
 - (4) **One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.**
 - (5) **One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.**

Facility Description [326 IAC 2-7-5(15)]:

- (b) Woodworking Operations controlled by:
- (a1) One (1) baghouse for particulate control, located in Plant 48, identified as D48-01, with a maximum capacity of 10000 pounds per hour, and exhausting at stack D48-01.
 - (b2) One (1) cyclone for particulate control, located in Plant 48, identified as D48-02, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D48-02.
 - (e3) One (1) cyclone for particulate control, located in Plant 42, identified as D42-01, with a maximum capacity of 2000 pounds per hour, and exhausting at stack D42-01.
 - (4) **One (1) baghouse for particulate control, located in Plant 42, identified as D42-02, controlling emissions from woodworking equipment with a maximum throughput capacity of 3,000 pounds per hour, and exhausting at stack D42-02.**
 - (5) **One (1) baghouse for particulate control, located in Plant 48, identified as D48-05, controlling emissions from woodworking equipment with a maximum throughput capacity of 13,000 pounds per hour, and exhausting at stack D48-05.**

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

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable ~~particulate~~**PM** emissions rate from the woodworking facilities shall not exceed **the pounds per hour emission rates shown in the following table:** 12.05 pounds per hour for D48-01, and 4.10 pounds per hour each for D48-02 and D42-01, when operating at a process weight rate of 10,000 pounds per hour for D48-01, and 2000 pounds per hour for D48-02 and D42-01, respectively.

Stack	Process Weight (Pounds/Hour)	PM Emission Rate (lbs/hour)
D48-01	10,000	12.05
D48-02	2,000	4.10
D42-01	2,000	4.10
D42-02	3,000	5.40
D48-05	13,000	13.4

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

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
 P = process weight rate in tons per hour

D.2.2 Particulate Matter (PM and PM₁₀) [326 IAC 2-2]

-
- (a) **Baghouse D42-02 shall have an outlet grain loading of 0.01 grains/acf and an air flow rate of 12,500 acfm, which is equivalent to PM/PM₁₀ emissions of 4.7 tons per year.**
- (b) **Baghouse D48-05 shall have an outlet grain loading of 0.01 grains/acf and an air flow rate of 22,000 acfm, which is equivalent to PM/PM₁₀ emissions of 8.7 tons per year.**

Compliance with this Condition makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

D.2.34 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.45 Particulate Matter (PM)

- (a) Pursuant to PC (20) 1730, issued on February 21, 1989;
- (1) The baghouse and cyclone, D48-01 and D48-02, for PM control shall be in operation at all times when the woodworking facilities are in operation; and
- (2) The visible emissions from the baghouse and cyclone, D48-01 and D48-02, for PM control shall not exceed 10% opacity.
- (b) Cyclone D42-01 and the baghouses D42-02 and D48-05 used for PM control, shall be in operation at all times when the woodworking facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.56 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse and cyclone stack exhausts (D48-01 and 02, D48-02, D48-05, D42-02, and D42-01) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.67 Particulate Control Equipment Inspections

- (a) An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (b) An inspection shall be performed each calendar quarter of the cyclones controlling the woodworking operation when venting to the atmosphere. Cyclone inspections shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors.

D.2.78 Broken or Failed Bag Detection or Cyclone Failure Detection

- (a) In the event that bag failure has been observed for the baghouse when venting to the atmosphere:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.89 Record Keeping Requirements

- (a) To document compliance with Condition D.2.56, the Permittee shall maintain records of daily visible emission notations of the woodworking stacks' exhaust when venting to the atmosphere. **When equipment is venting into the building, no monitoring records will be required.**

- (b) To document compliance with Condition D.2.67, the Permittee shall maintain records of the results of the inspections required under Condition D.2.67 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 039-15678-00087. The operation of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Permit Modification No. 039-16199-00087.

Appendix A: Emissions Calculations

**Particulate Emissions
From Woodworking Operations
Controlled by Baghouses CD42-02 and CD48-05**
Company Name: Monaco Coach Company
Address City IN Zip: 1205 East Lincoln Street, Nappanee, IN 46550
Permit : 039-15678-00087
Reviewer: ERG/AB
Date: June 10, 2002

Woodworking Operations Controlled by Baghouse CD42-02 Located in Plant 42 :

PM Control Equipment: Baghouse
Grain Loading: 0.01 grains/acf
Air Flow Rate: 12500 acf/m
Control Efficiency: 99%

Emissions After the Baghouse:

Hourly PM Emissions = 0.01 (gr/acf) x 12500 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) = **1.071 lbs/hr**
Annual PM emissions = 1.071 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) = **4.693 tons/yr**

Emissions Before the Baghouse:

Potential PM emissions = 4.693 tons/yr / (1-99%) = **469.29 tons/yr**

Woodworking Operations Controlled by Baghouse CD48-05 Located in Plant 48 :

PM Control Equipment: Baghouse
Grain Loading: 0.01 grains/acf
Air Flow Rate: 22000 acf/m
Control Efficiency: 99%

Emissions After the Baghouse:

Hourly PM Emissions = 0.01 (gr/acf) x 22000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) = **1.886 lbs/hr**
Annual PM emissions = 1.886 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) = **8.259 tons/yr**

Emissions Before the Baghouse:

Potential PM emissions = 8.259 tons/yr / (1-99%) = **825.94 tons/yr**

Total Emissions Before Controls = 1295.23 tons/year
Total Emissions After Controls = 12.952 tons/year