



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

August 30, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: R.O.R. Group, Inc. / 157-19438-00094

FROM: Paul Dubenetzky  
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, Room 1049, 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 9/16/03



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Joseph E. Kernan  
Governor

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Commissioner

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Darl Stetzel  
R.O.R. Group, Inc.  
400 North Taylor Road  
Garrett, Indiana 46738

August 30, 2004

Re: Registered Construction and Operation Status,  
157-19438-00094

Dear Mr. Stetzel:

The application from R.O.R. Group, Inc. received on June 7, 2004, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the proposed following emission units of a non-cured rubber mixing plant, located at 3400 Union Street, Lafayette, Indiana 47904, are classified as registered:

- (a) Two (2) Banbury mixers, identified as BB1 and BB2, constructed in 2004, with a maximum capacity of 2,500 and 2,000 pounds of rubber per hour, both controlled by one (1) baghouse, identified as CE01.
- (b) Two (2) natural gas-fired space heaters, each with a maximum heat input capacity of 0.075 MMBtu/hr.
- (c) Three (3) natural gas-fired space heaters, to be constructed in 2004, each with a maximum heat input capacity of 0.4 MMBtu/hr.
- (d) Ten (10) raw material storage silos, equipped with three (3) dust collectors. The PM emissions from these units are negligible.
- (e) Six (6) process oil tanks. The process oil is used for rubber mixing process to control the hardness of the products.
- (f) Ancillary equipment.

The following conditions shall be applicable:

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:
  - (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 15 minutes (60 readings) in a 6-hour period 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.

2. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the mixers BB1 and BB2 shall not exceed the pound per hour limit listed in the table below:

Unit ID	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
BB1	2,500	4.76
BB2	2,000	4.10

The pounds per hour limitations were calculated using the following equation:

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

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

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

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.

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. Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. 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, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

ERG/YC

cc: File – Tippecanoe County  
Tippecanoe County Health Department  
Air Compliance – Wanda Stanfield  
Permit Tracking – Sara Cloe  
Compliance Data Section

<b>Registration Annual Notification</b>
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This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	<b>R.O.R. Group, Inc.</b>
<b>Address:</b>	<b>3400 Union Street</b>
<b>City:</b>	<b>Lafayette, Indiana 47904</b>
<b>Authorized individual:</b>	<b>Darl Stetzel</b>
<b>Phone #:</b>	<b>(260) 357-3125</b>
<b>Registration #:</b>	<b>157-19438-00094</b>

I hereby certify that R.O.R. Group, Inc., is still in operation and is in compliance with the requirements of Registration No. 157-19438-00094.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a New Source Construction and Registration

### Source Background and Description

Source Name: R.O.R. Group, Inc.  
Initial Location: 3400 Union Street, Lafayette, Indiana 47904  
County: Tippecanoe  
SIC Code: 2822  
Registration No.: 157-19438-00094  
Permit Reviewer: ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from R.O.R. Group, Inc. relating to the construction and operation of a plant which produces mixed non-cured rubber stock.

### History

In April 2004, R.O.R. Group, Inc. (Plant ID #157-00094) purchased the rubber mixing process from Copperfield, LLC (Plant ID #157-00034), which was permitted in MSOP #157-14304-00034, issued on March 20, 2002. R.O.R. Group, Inc. is leasing a portion of the building from Copperfield, LLC at the same location. IDEM, OAQ has determined that R.O.R. Group, Inc. and Copperfield, LLC are considered two (2) separate sources (see the discussion in the section for "Source Definition" below).

### Source Definition

There are two (2) plants located at the same location (3400 Union Street, Lafayette, Indiana 47903):

- (a) Copperfield, LLC (Plant ID #157-00034), a wire and cable manufacturing plant (SIC Code: 3357), and
- (b) R.O.R. Group, Inc. (Plant ID #157-00094), a non-cured rubber mixing plant (SIC Code: 2822).

Since the two (2) plants are owned by two (2) different companies, have different SIC codes, and do not have a supporting relationship (none of their products goes to the other plant), IDEM, OAQ has determined that these two (2) plants are considered two (2) separate sources.

### Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units at this source during this review process.

### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

### **New Emission Units and Pollution Control Equipment**

The application includes information relating to the construction and operation of the following equipment:

- (a) Two (2) Banbury mixers, identified as BB1 and BB2, constructed in 2004, with a maximum capacity of 2,500 and 2,000 pounds of rubber per hour, both controlled by one (1) baghouse, identified at CE01.
- (b) Two (2) natural gas-fired space heaters, each with a maximum heat input capacity of 0.075 MMBtu/hr.
- (c) Three (3) natural gas-fired space heaters, to be constructed in 2004, each with a maximum heat input capacity of 0.4 MMBtu/hr.
- (d) Ten (10) raw material storage silos, equipped with three (3) dust collectors. The PM emissions from these units are negligible.
- (e) Six (6) process oil tanks. The process oil is used for rubber mixing process to control the hardness of the products.
- (f) Ancillary equipment.

### **Existing Approvals**

There are no existing air approvals issued to this source.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Commissioner that the construction and operation 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 June 7, 2004. Additional information was received on July 20, 2004 and July 26, 2004.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 and 2). The PTE of the storage silos is negligible because the rubber beads have a diameter greater than 100 micrometers.

### **Potential to Emit of Revision Before Controls**

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

Pollutant	Potential to Emit (tons/year)
PM	8.91
PM10	8.91
SO <sub>2</sub>	Negligible
VOC	4.52
CO	0.50
NO <sub>x</sub>	0.59

HAPs	Potential to Emit (tons/yr)
Total	1.10

**Potential to Emit of the Source Before Controls**

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

Pollutant	Potential to Emit (tons/year)
PM	8.91
PM10	8.91
SO <sub>2</sub>	Negligible
VOC	4.52
CO	0.50
NO <sub>x</sub>	0.59

HAPs	Potential to Emit (tons/yr)
Total	1.10

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1(MSOP).
- (d) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM10 is each greater than 5.0 ton/yr. Therefore, the source is not subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (e) Fugitive Emissions  
 Since this type of operation is not in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset.

### County Attainment Status

The source is located in Tippecanoe County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
8-Hour Ozone	Attainment
1-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Tippecanoe County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Tippecanoe County has been classified as attainment 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.
- (c) Fugitive Emissions  
 Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units before controls.

Process/Emission Unit	Potential To Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Mixers BB1 and BB2	8.87	8.87	-	4.49	-	-	1.10 for total HAPs
Storage Silos	Negligible	Negligible	--	--	--	--	--
NG Fired Space Heaters	0.04	0.04	Negligible	0.03	0.50	0.59	Negligible
Total PTE of the Entire Source	8.91	8.91	Negligible	4.52	0.50	0.59	1.10 for total HAPs
Registration Thresholds	25	25	25	25	100	25	10 for a single HAP and 25 for total HAPs

Note: "--" pollutant not emitted by the facility.

### Source Status

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

Pollutant	Emissions (tons/year)
PM	8.91
PM10	8.91
SO <sub>2</sub>	Negligible
VOC	4.52
CO	0.50
NO <sub>x</sub>	0.59
Combination HAPs	1.10

- (a) This existing source is not a PSD major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, the PSD requirements of attainment new source review do not apply.
- (b) These emissions are based on the potential to emit of this source (see Appendix A).

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

### State Rule Applicability – Entire Source

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

The new source is not in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and the potential to emit of PM and all criteria pollutants before controls is less than 250 tons per year. Therefore, the source is a minor source under 326 IAC 2-2 (PSD).

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

The potential to emit HAPs from this new source is less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable.

**326 IAC 5-1-2 (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:

- (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.

**State Rule Applicability – Mixers BB1 and BB2**

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

The potential VOC emissions from each of the mixers BB1 and BB2 are less than 25 tons/yr. Therefore, these mixers are not subject to the requirements of 326 IAC 8-1-6 (BACT).

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

Pursuant to 326 IAC 6-3-2, particulate emissions from each of the mixers BB1 and BB2 shall not exceed the pound per hour limit listed in the table below:

Unit ID	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
BB1	2,500	4.76
BB2	2,000	4.10

The pounds per hour limitations were calculated using the following equation:

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

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

According to the emission calculations in Appendix A, the potential to emit PM of each mixer is less than the emission limit above. Therefore, these mixers are in compliance with the requirements of 326 IAC 6-3-2.

**State Rule Applicability – Other Emission Units**

There are no specifically applicable requirements for other emission units.

**Conclusion**

The construction and operation of this non-cured rubber mixing plant shall be subject to the conditions of the Registration No.: 157-19438-00094.

**Appendix A: Emission Calculations  
PM, PM10, VOC and HAP Emissions  
From Banbury Mixers BB1 and BB2**

**Company Name: R.O.R. Group, Inc.  
Address: 3400 Union Street, Lafayette, IN 47904  
Registration: 157-19438-00094  
Reviewer: ERG/YC  
Date: July 23, 2004**

Max. Capacity  
lbs/hr

**4,500** (2 units combined)

	Pollutants			
	PM	PM10	VOC	Total HAP
*Emission Factor in lbs/lbs	4.50E-04	4.50E-04	2.28E-04	5.56E-05
<b>Potential to Emit (lbs/hr)</b>	<b>2.03</b>	<b>2.03</b>	<b>1.03</b>	<b>0.25</b>
<b>Potential to Emit (tons/yr)</b>	<b>8.87</b>	<b>8.87</b>	<b>4.49</b>	<b>1.10</b>

\*Emission factors are from AP-42, Chapter 4.12 (12/97) and the TSD for MSOP #157-14304-00034, issued on 03/20/02. These emission factors are the worst case scenario among different type of compounds.

**Methodology**

Potential to Emit (lbs/hr) = Max. Capacity (lbs/hr) x Emission Factor (lbs/lbs)

Potential to Emit (tons/yr) = Max. Capacity (lbs/hr) x Emission Factor (lbs/lbs) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations  
Natural Gas Combustion  
(MMBtu/hr < 100)  
From Natural Gas Fired Space Heaters**

**Company Name: R.O.R. Group, Inc.  
Address: 3400 Union Street, Lafayette, IN 47904  
Registration: 157-19438-00094  
Reviewer: ERG/YC  
Date: July 23, 2004**

Heat Input Capacity  
MMBtu/hr  
**1.35** (5 units total)

Potential Throughput  
MMCF/yr  
11.8

	Pollutant					
Emission Factor in lbs/MMCF	PM*	PM10*	SO <sub>2</sub>	**NO <sub>x</sub>	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
<b>Potential to Emit in tons/yr</b>	<b>0.04</b>	<b>0.04</b>	<b>3.55E-03</b>	<b>0.59</b>	<b>0.03</b>	<b>0.50</b>

\*PM and PM10 emission factors are condensable and filterable PM10 combined.

\*\*Emission factors for NO<sub>x</sub>: Uncontrolled = 100 lbs/MMCF.

Emission factors are 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)

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

Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs