



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: October 3, 2012

RE: RBC Manufacturing Corporation/063-32306-00066

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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REGISTRATION OFFICE OF AIR QUALITY

RBC Manufacturing Corporation
9899 E County Rd. 200 S
Avon, IN 46168

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. R063-32306-00066

Issued by:

Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

Issuance Date: October 3, 2012

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 surface coating operation at a warehouse facility.

Source Address:	9899 E County Road 200 S, Avon, IN 46168
General Source Phone Number:	317-830-4912
SIC Code:	4255 (General Warehouse and Storage)
County Location:	Hendricks County
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

This stationary surface coating facility consists of the following emission units and pollution control devices:

- (a) One (1) paint spray booth, identified as PSB1, approved for construction in 2012, with a maximum capacity of 7 units per hour, using a high volume low pressure (HVLP) sprayer, using dry filters as particulate control, and exhausting to stack PSBS1.
- (b) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning paint sprayers and paint spray nozzles, equipped with a remote reservoir, using 60 gallons of solvent a year.
- (c) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning parts, equipped with a remote reservoir, using 30 gallons of solvent a year.
- (d) Six (6) natural gas-fired heaters, approved for construction in 2012, each with a maximum heat input capacity of 0.8 MMBtu per hour.
- (e) Nine (9) natural gas-fired heaters, approved for construction in 2012, each with a maximum heat input capacity of 0.18 MMBtu per hour.

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. R063-32306-00066 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.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.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant notifies:

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

The Registrant shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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).

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)]

C.3 General Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)]

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

C.4 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-5.1-3(e)(2)] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this registration shall be submitted to:

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

- (b) Unless otherwise specified in this registration, any notice, report, or other submission required by this registration shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt,

is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) The first report shall cover the period commencing on the date of issuance of this registration or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this registration. For the purpose of this registration, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

OPERATION CONDITIONS

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

- (a) One (1) paint spray booth, identified as PSB1, approved for construction in 2012, with a maximum capacity of 7 units per hour, using a high volume low pressure (HVLP) sprayer, using dry filters as particulate control, and exhausting to stack PSBS1.

(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 VOC Limit [326 IAC 8-2-9]

In order to render the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) not applicable, the VOC input to paint spray booth (PSB1), including coatings, dilution solvents, and cleaning solvents, shall be less than fifteen (15) pounds per day, with compliance determined at the end of each day.

Compliance with this limit shall render the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate from the paint spray booth (PSB1) shall be controlled by dry particulate filters and the Registrant shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the dry particulate filters 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 source shall maintain a record of the action taken as a result of the inspection, any repairs of the of the control device, or change in the operations, so that the overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for the paint spray booth (PSB1) and any control devices. Section B – Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with Condition D.1.2, the dry particulate filters shall be in operation at all times the paint spray booth is in operation,

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

Compliance with the VOC limitation 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) 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.

Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1, the Registrant shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.1.
- (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent used on a daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (3) The total VOC input for each day and each compliance period.
- (b) To document the compliance status with Condition D.1.2(c), the Registrant shall maintain a record of any actions taken if overspray is visibly detected.
- (c) Section C - General Record Keeping Requirements of this registration contains the Registrant's obligations with regard to the records required by this condition.

D.1.7 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1 shall be submitted using the reporting form located at the end of this registration, or its equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Registrant's obligation with regard to the reporting required by this condition.

SECTION D.2

OPERATION CONDITIONS

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

- (b) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning paint sprayers and paint spray nozzles, equipped with a remote reservoir, using 60 gallons of solvent a year.
- (c) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning parts, equipped with a remote reservoir, using 30 gallons of solvent a year.

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), the Registrant shall adhere to the following requirements for the operation of the two (2) cold cleaner degreasers:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements;
- (f) store waste solvent only in containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT 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:	RBC Manufacturing Corporation
Address:	9899 E County Road 200 S
City:	Avon, Indiana 46168
Phone Number:	317-830-4912
Registration No.:	R063-32306-00066

- I hereby certify that RBC Manufacturing Corporation is : still in operation.
 no longer in operation.
- I hereby certify that RBC Manufacturing Corporation is : in compliance with the requirements of Registration No. R063-32306-00066.
 not in compliance with the requirements of Registration No. R063-32306-00066.

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
COMPLIANCE AND ENFORCEMENT BRANCH**

**Registration Quarterly Report
(Submit one form for each month in the quarter)**

Source Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Registration No.: R063-32306-00066
Facility: One (1) paint spray booth (PSB1)
Parameter: VOC Input
Limit: The VOC input to paint spray booth (PSB1), including coatings, dilution solvents, and cleaning solvents, shall be less than fifteen (15) pounds per day, with compliance determined at the end of each day.

Month: _____ Year: _____

Day	VOC Input (lb/day)	Day	VOC Input (lb/day)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

- No deviation occurred in this month.
 Deviation/s occurred in this month.
Deviation has been reported on _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Description and Location

Source Name: RBC Manufacturing Corporation
Source Location: 9899 E County Road 200 S, Avon, IN 46168
County: Hendricks County
SIC Code: 4255 (General Warehouse and Storage)
Registration (or Exemption) No.: R063-32306-00066
Permit Reviewer: Brian Wright

On September 12, 2012, the Office of Air Quality (OAQ) received an application from RBC Manufacturing Corporation related to the construction and operation of a new stationary surface coating operation at their warehouse facility.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Hendricks County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 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 Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally 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. Hendricks 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}**
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Hendricks County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂

emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Hendricks County has been classified as attainment or unclassifiable in Indiana for 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, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-1.1-3 (Registrations) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by RBC Manufacturing Corporation on September 12, 2012 relating to the construction and operation of a surface coating operation to be used for customization of electric motors and generators stored at their warehouse before shipping to customers.

The following is a list of the new emission units and pollution control devices:

- (a) One (1) paint spray booth, identified as PSB1, approved for construction in 2012, with a maximum capacity of 7 units per hour, using a high volume low pressure (HVLP) sprayer, using dry filters as particulate control, and exhausting to stack PSBS1.
- (b) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning paint sprayers and paint spray nozzles, equipped with a remote reservoir, using 60 gallons of solvent a year.
- (c) One (1) cold cleaner degreaser, approved for construction in 2012, used for cleaning parts, equipped with a remote reservoir, using 30 gallons of solvent a year.
- (d) Six (6) natural gas-fired heaters, approved for construction in 2012, each with a maximum heat input capacity of 0.8 MMBtu per hour.
- (e) Nine (9) natural gas-fired heaters, approved for construction in 2012, each with a maximum heat input capacity of 0.18 MMBtu per hour.

Enforcement Issues

There are no pending enforcement actions related to this source.

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	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Paint Spray Booth	2.77	2.77	2.77	0.00	0.00	7.04	0.00	0	3.96	3.96 Ethylene Glycol
Parts Washers	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0	0.06	0.06 Toluene
Natural Gas Heaters	0.05	0.21	0.21	0.02	2.76	0.15	2.32	3,328	0.05	0.05 Hexane
Unpaved Roads Fugitive Emissions	6.35	1.27	0.31	0	0	0	0	0	0	0
Total PTE of Entire Source	9.17	4.25	3.29	0.02	2.76	7.41	2.32	3,328	4.07	3.96 Ethylene Glycol
Exemptions Levels**	5	5	5	10	10	5	25	100,000	25	10
Registration Levels**	25	25	25	25	25	25	100	100,000	25	10

*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".
 **The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of PM and VOC are each 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) 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.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is 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 (60.310 through 60.316) (326 IAC 12), are not included in the permit, since the painting operation at this source does not perform surface coating of metal furniture. This source performs surface coating of electrical motors and generators.
- (b) The requirements of the New Source Performance Standard for Automobile and Light Truck Surface Coating Operations, 40 CFR Part 60, Subpart MM (326 IAC 12), are not included in the permit, because the parts coated by the source do not meet the definition of automobile and light truck under 40 CFR 60.391.

- (c) The requirements of the New Source Performance Standard (NSPS) for Industrial Surface Coating: Large Appliances, 40 CFR 60, Subpart SS (60.450 through 60.456) (326 IAC 12), are not included in the permit, since the painting operation at this source does not perform surface coating of large appliance products or parts (as defined by 40 CFR 60.451). This source performs surface coating of electric motors and generators.
- (d) The requirements of the New Source Performance Standard (NSPS) for Metal Coil Surface Coating, 40 CFR 60, Subpart TT (60.460 through 60.466) (326 IAC 12), are not included in the permit, since the painting operation at this source does not perform surface coating of metal coils (as defined by 40 CFR 60.461). This source performs surface coating of electric motors and generators.
- (e) The requirements of the New Source Performance Standard (NSPS) for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines, 40 CFR 60, Subpart TTT (60.720 through 60.726) (326 IAC 12), are not included in the permit, since the painting operation at this source does not perform surface coating of plastic parts for business machines (as defined by 40 CFR 60.721). This source performs surface coating of electric motors and generators.
- (f) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning 40 CFR 63, Subpart T (63.460 through 63.470) (326 IAC 20-6), are not included in the permit, because this operation does not use a degreasing solvent that contains any of the halogenated compounds listed in 40 CFR 63.460(a).
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR Part 63, Subpart IIII (326 IAC 20-85), are not included in the permit, because the source does not coat automobiles. This source performs surface coating of electric motors and generators.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Cans, 40 CFR 63, Subpart KKKK (326 IAC 20-86), are not included in the permit, because the source does not coat metal cans. This source performs surface coating of electric motors and generators.
- (j) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63, Subpart MMMM (326 IAC 20-80) are not included in the permit, because this source is not a major source of HAPs.
- (k) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Large Appliances, 40 CFR 63, Subpart NNNN (326 IAC 20-63), are not included in the permit, because the source does not coat large appliances. This source performs surface coating of electric motors and generators.
- (l) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Plastic Parts and Products, 40 CFR 63, Subpart PPPP (63.4480 through 63.4581) (326 IAC 20-81), are not included in the permit for the painting operation, because this source is not a major source of HAPs.
- (m) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Furniture, 40 CFR 63, Subpart RRRR (326 IAC 20-78), are not included in the permit, since this source does not coat metal furniture.

- (n) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Coil, 40 CFR 63, Subpart SSSS (326 IAC 20-64), are not included in the permit, since this source does not coat metal coil.
- (o) The requirements of 40 CFR Part 63, Subpart HHHHHH (National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources), are not included in this permit because this source does not perform paint stripping using chemical strippers that contain methylene chloride in the removal of dried paint, does not perform spray application of coatings to motor vehicles or mobile equipment, and does not perform spray application of coating that contains chromium, lead, manganese, nickel, or cadmium to a plastic and/or metal substrates.
- (p) 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)

- (q) 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.
- (g) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (h) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (i) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Surface Coating Operation

- (j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(15), the paint spray booth, identified as PSB1, is subject to the requirements of 326 IAC 6-3, since the booth has the potential to use equal to or greater than five (5) gallons per day of surface coatings. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate from the paint spray booth, identified as PSB1, shall be controlled by dry particulate filters and the Permittee shall operate the control device in accordance with manufacturer's specifications.

The dry particulate filters shall be in operation at all times the paint booth is in operation, in order to comply with this rule.

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

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

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

- (k) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating)
Pursuant to 326 IAC 8-2-1, the provisions of 326 IAC 8-2-9 apply to miscellaneous metal coating operations constructed after July 1, 1990, located in any county, and which have actual emissions of greater than fifteen (15) pounds per day before add-on controls. The potential to emit of the paint spray booth is greater than fifteen (15) pounds per day, but the source has opted to limit the VOC input to less than fifteen (15) pounds per day in order to render the requirements of 326 IAC 8-2-9 not applicable.

Cold Cleaners

- (l) 326 IAC 8-3-2 (Cold Cleaner Operation)
Pursuant to 326 IAC 8-3-1(a)(2), the two (2) cold cleaner degreasers are subject to the requirements of 326 IAC 8-3-2 because they are organic solvent degreasing operations located in Hendricks County that were constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2, the Permittee shall adhere to the following requirements for the operation of the two (2) cold cleaner degreasers:
- (a) equip the cleaner with a cover;
 - (b) equip the cleaner with a facility for draining cleaned parts;
 - (c) close the degreaser cover whenever parts are not being handled in the cleaner;
 - (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (e) provide a permanent, conspicuous label summarizing the operating requirements;
 - (f) store waste solvent only in containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (m) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)
The two (2) cold cleaner degreasers are equipped with remote solvent reservoirs. Therefore, the requirements of 326 IAC 8-3-5 do not apply.

Natural Gas-Fired Heaters

- (n) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The fifteen (15) natural gas-fired heaters are not subject to 326 IAC 6-2 because they are not sources of indirect heat.
- (o) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The fifteen (15) natural gas-fired heaters are not subject to the requirements of 326 IAC 6-3, since they are not a "manufacturing process" as defined by 326 IAC 6-3-1.5.
- (p) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, fifteen (15) natural gas-fired heaters are not subject to the requirements of 326 IAC 7-1, since each has unlimited sulfur dioxide (SO₂) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour, respectively.

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 September 12, 2012.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. R063-32306-00066. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Wright 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) 234-6544 or toll free at 1-800-451-6027 extension 4-6544.

- (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.in.gov/idem

**Appendix A: Emissions Calculations
Emission Summary**

**Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012**

Uncontrolled/Unlimited Potential to Emit (PTE)

Emission Units	PM	PM₁₀	PM_{2.5}	SO₂	NOx	VOC	CO	GHGs as CO₂e	Total HAPs	Worst Case Sinle HAP	
Surface Coating	2.77	2.77	2.77	0.00	0.00	7.04	0.00	0	3.96	3.96	Ethylene Glycol
Parts Washers	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0	0.06	0.06	Toluene
Natural Gas Heaters	0.05	0.21	0.21	0.02	2.76	0.15	2.32	3,328	0.05	0.05	Hexane
Unpaved Roads Fugitive Emissions*	6.35	1.27	0.31	0	0	0	0	0	0	0	---
Total	9.17	4.25	3.29	0.02	2.76	7.41	2.32	3,328	4.07	3.96	Ethylene Glycol

Limited Potential to Emit (PTE)

Emission Units	PM	PM₁₀	PM_{2.5}	SO₂	NOx	VOC	CO	GHGs as CO₂e	Total HAPs	Worst Case Sinle HAP	
Surface Coating**	2.77	2.77	2.77	0.00	0.00	2.74	0.00	0	3.96	3.96	Ethylene Glycol
Parts Washers	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0	0.06	0.06	Toluene
Natural Gas Heaters	0.05	0.21	0.21	0.02	2.76	0.15	2.32	3,328	0.05	0.05	Hexane
Unpaved Roads Fugitive Emissions*	6.35	1.27	0.31	0	0	0	0	0	0	0	---
Total	9.17	4.25	3.29	0.02	2.76	3.11	2.32	3,328	4.07	3.96	Ethylene Glycol

* Fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Fugitive emissions are counted toward the determination of 326 IAC 2-1.1-3 (Registrations) applicability.

**The source has opted to limit the VOC input to less than fifteen (15) pounds per day in order to render the requirements of 326 IAC 8-2-9 not applicable.

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

**Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012**

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/hour)	Maximum (gal/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)	lb VOC/gal solids	Transfer Efficiency
KEM Aqua 70P	10.67	65.00%	52.82%	12.18%	47.9%	36.88%	0.044	7.0	7.39	2.49	1.30	0.40	9.61	1.75	1.76	3.52	65%
305002.13 Black	6.29	85.18%	36.50%	48.68%	36.0%	3.15%	0.075	7.0	12.60	4.78	3.06	1.61	38.57	7.04	0.75	97.18	65%
F-102 Black	6.36	78.40%	40.98%	37.42%	40.0%	13.23%	0.074	7.0	12.43	3.96	2.38	1.23	29.56	5.40	1.09	17.98	65%
ME Gray Primer	6.51	80.80%	37.00%	43.80%	36.0%	9.25%	0.072	7.0	12.10	4.46	2.85	1.44	34.51	6.30	0.97	30.84	65%
Blue Enamel	6.44	82.11%	34.50%	47.61%	34.0%	6.49%	0.073	7.0	12.26	4.64	3.07	1.57	37.59	6.86	0.90	47.25	65%
Blue Aqua Topcoat	9.45	55.10%	46.86%	8.24%	53.2%	36.22%	0.050	7.0	8.40	1.66	0.78	0.27	6.54	1.19	2.28	2.15	65%
White Aqua Topcoat	10.99	45.33%	38.87%	6.46%	51.3%	40.63%	0.043	7.0	7.22	1.46	0.71	0.21	5.13	0.94	2.77	1.75	65%
Aqua Epoxy Topcoat	8.67	58.48%	30.80%	27.68%	32.0%	33.38%	0.054	7.0	9.07	3.53	2.40	0.91	21.77	3.97	2.09	7.19	65%
Gray 50 Gloss	8.66	67.00%	58.10%	8.90%	57.5%	25.01%	0.054	7.0	9.07	1.81	0.77	0.29	6.99	1.28	1.66	3.08	65%

Potential to Emit (worst case coating) 1.61 38.57 7.04 2.77

**Limited Potential to Emit 14.99 2.74
lbs/day tons/year**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

**Appendix A: Emission Calculations
HAP Emission Calculations**

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

Material	Density (lb/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Glycol Ethers	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Total HAPs (tons/yr)
KEM Aqua 70P	10.67	0.044	7.0	0.00%	0.00%	0.00%	12.00%	0.00	0.00	0.00	1.73	1.73
305002.13 Black	6.29	0.075	7.0	0.80%	6.10%	0.00%	0.00%	0.12	0.88	0.00	0.00	1.00
F-102 Black	6.36	0.074	7.0	5.00%	0.00%	1.00%	0.00%	0.72	0.00	0.14	0.00	0.87
ME Gray Primer	6.51	0.072	7.0	9.00%	0.00%	2.10%	0.00%	1.29	0.00	0.30	0.00	1.60
Blue Enamel	6.44	0.073	7.0	5.00%	3.00%	1.00%	0.00%	0.00	0.43	0.14	0.00	0.58
Blue Aqua Topcoat	9.45	0.050	7.0	0.00%	0.00%	0.00%	5.10%	0.00	0.00	0.00	0.74	0.74
White Aqua Topcoat	10.99	0.043	7.0	0.00%	0.00%	0.00%	3.77%	0.00	0.00	0.00	0.55	0.55
Aqua Epoxy Topcoat	8.67	0.054	7.0	0.00%	0.00%	0.00%	27.60%	0.00	0.00	0.00	3.96	3.96
Gray 50 Gloss	8.66	0.054	7.0	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Maximum								1.29	0.88	0.30	3.96	

PTE of Total HAP (worst case coating) (tons/yr)	3.96	
PTE of Worst Single HAP (worst case coating) (tons/yr)	3.96	Glycol Ethers

METHODOLOGY

Worst case coating used for individual and total HAP

Total State Potential Emissions

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

**Appendix A: Emission Calculations
VOC Emission Calculations
Parts Washers**

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

Degreasing Operations	Solvent Used	Maximum Usage (gallons/year)	Volume (lbs/gallon)	Weight % VOC	Weight % HAP (Toluene)	VOC Emissions (ton/yr)	Toluene Emissions (tons/yr)
Paint sprayer cleaner	Super 16	60	6.95	100%	29%	0.21	0.06
Parts washer	Mirachem 500	30.00	6.95	9.60%	0.00%	0.01	0.00
Total Potential Emissions						0.22	0.06

METHODOLOGY

VOC emission rate (tpy) = Material Usage (gallons/yr) * Volume (lbs/gallon) * Weight % VOC * 8760 hrs/yr *1 ton/2000 lbs

HAP emission rate (tpy) = Material Usage (gallons/yr) * Volume (lbs/gallon) * Weight % HAP * 8760 hrs/yr *1 ton/2000 lbs

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

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

Number of units	Heat Input Capacity (MMBtu/hr)	Total Heat Input Capacity (MMBtu/hr)
6	0.8	4.8
9	0.18	1.62
Total		6.42

HHV
mmBtu
mmscf
1020

Potential Throughput
55.1

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.05	0.21	0.21	0.02	2.76	0.15	2.32

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

PM2.5 emission factor is filterable and condensable PM2.5 combined.

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

See page 2 for HAPs emissions calculations.

updated 7/11

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

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.79E-05	3.31E-05	2.07E-03	4.96E-02	9.37E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.38E-05	3.03E-05	3.86E-05	1.05E-05	5.79E-05

Total HAP 5.20E-02

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.
 See Page 3 for Greenhouse Gas calculations.

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

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	3,308	0.06	0.06
Summed Potential Emissions in tons/yr	3,308		
CO2e Total in tons/yr	3,328		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 $Emission (tons/yr) = Throughput (MMCF/yr) \times Emission Factor (lb/MMCF) / 2,000 lb/ton$
 $CO2e (tons/yr) = CO2 Potential Emission ton/yr \times CO2 GWP (1) + CH4 Potential Emission ton/yr \times CH4 GWP (21) + N2O Potential Emission ton/yr \times N2O GWP (310).$

updated 7/11

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

Company Name: RBC Manufacturing Corporation
Source Address: 9899 E County Road 200 S, Avon, IN 46168
Permit Number: R063-32306-00066
Reviewer: Brian Wright
Date: September 17, 2012

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	30.0	1.0	30.0	88.0	2640.0	400	0.076	2.3	829.5
Vehicle (leaving plant) (one-way trip)	30.0	1.0	30.0	88.0	2640.0	400	0.076	2.3	829.5
Totals			60.0		5280.0			4.5	1659.1

Average Vehicle Weight Per Trip = 88.0 tons/trip
 Average Miles Per Trip = 0.08 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	88.0	88.0	88.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
 where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	8.370	1.674	0.4109	lb/mile
Mitigated Emission Factor, Eext =	7.653	1.531	0.3757	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	3.47	0.69	0.17	3.17	0.63	0.16
Vehicle (leaving plant) (one-way trip)	3.47	0.69	0.17	3.17	0.63	0.16
Totals	6.94	1.39	0.34	6.35	1.27	0.31

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particle Matter (<2.5 um)
 PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Thomas W. Easterly
Commissioner

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

TO: Patrick Robinson
RBC Manufacturing Corporation
2100 Washington Street
Grafton, WI 53024

DATE: October 3, 2012

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

SUBJECT: Final Decision
Registration
063-32306-00066

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Dave B Hansen, Responsible Official
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	PWAY 10/3/2012 RBC Manufacturing Corporation 063-32306-00066 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Patrick Robinson RBC Manufacturing Corporation 2100 Washington St Grafton WI 53024 (Source CAATS)										
2		Dave B Hansen NA Regioal Warehouse Mgr RBC Manufacturing Corporation 6450 W Hanna Ave Indianapolis IN 46241 (RO CAATS)										
3		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)										
4		Hendricks County Commissioners 355 S Washington Danville IN 46122 (Local Official)										
5		Betty Bartley P.O. Box 149 Danville IN 46122 (Affected Party)										
6		Avon Town Council and Town Manager 6570 E. U.S. Hwy 36 Avon IN 46123 (Local Official)										
7		Plainfield Town Council and Town Manager P.O. Box 65 Plainfield IN 46168 (Local Official)										
8		Hendricks County Health Department 355 S Washington Street, Suite 210 Danville IN 46122-1759 (Health Department)										
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