



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: April 30, 2009

RE: Rexnord Industries / 097 - 28057 - 00025

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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**Minor Source Operating Permit Renewal
INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT
OFFICE OF AIR QUALITY**

**Rexnord Industries, LLC.
7601 Rockville Road
Indianapolis, Indiana 46206**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

| | |
|--|--|
| Operation Permit No.: M097-28057-00025 | |
| Issued by:  Iryn Callung Section Chief Permits Branch | Issuance Date: April 30, 2009 Expiration Date: April 30, 2019 |

TABLE OF CONTENTS

| | | |
|--------------------|---|-----------|
| SECTION A | SOURCE SUMMARY | 4 |
| A.1 | General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)] | |
| A.2 | Emission Units and Pollution Control Equipment Summary | |
| SECTION B | GENERAL CONDITIONS | 5 |
| B.1 | Definitions [326 IAC 2-1.1-1] | |
| B.2 | Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)] | |
| B.3 | Term of Conditions [326 IAC 2-1.1-9.5] | |
| B.4 | Enforceability | |
| B.5 | Severability | |
| B.6 | Property Rights or Exclusive Privilege | |
| B.7 | Duty to Provide Information | |
| B.8 | Certification | |
| B.9 | Annual Notification [326 IAC 2-6.1-5(a)(5)] | |
| B.10 | Preventive Maintenance Plan [326 IAC 1-6-3] | |
| B.11 | Prior Permits Superseded [326 IAC 2-1.1-9.5] | |
| B.12 | Termination of Right to Operate [326 IAC 2-6.1-7(a)] | |
| B.13 | Permit Renewal [326 IAC 2-6.1-7] | |
| B.14 | Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6] | |
| B.15 | Source Modification Requirement | |
| B.16 | Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1] | |
| B.17 | Transfer of Ownership or Operational Control [326 IAC 2-6.1-6] | |
| B.18 | Annual Fee Payment [326 IAC 2-1.1-7] | |
| B.19 | Credible Evidence [326 IAC 1-1-6] | |
| SECTION C | SOURCE OPERATION CONDITIONS..... | 10 |
| | Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] | |
| C.1 | Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2] | |
| C.3 | Opacity [326 IAC 5-1] | |
| C.4 | Open Burning [326 IAC 4-1] [IC 13-17-9] | |
| C.5 | Incineration [326 IAC 4-2] [326 IAC 9-1-2] | |
| C.6 | Fugitive Dust Emissions [326 IAC 6-4] | |
| C.7 | Stack Height [326 IAC 1-7] | |
| C.8 | Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M] | |
| C.9 | Performance Testing [326 IAC 3-6] | |
| C.10 | Compliance Requirements [326 IAC 2-1.1-11] | |
| C.11 | Compliance Monitoring [326 IAC 2-1.1-11] | |
| C.12 | Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63] | |
| C.13 | Instrument Specifications [326 IAC 2-1.1-11] | |
| | Corrective Actions and Response Steps | |
| C.14 | Response to Excursions or Exceedances | |
| C.15 | Actions Related to Noncompliance Demonstrated by a Stack Test | |
| | Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)] | |
| C.16 | Malfunctions Report [326 IAC 1-6-2] | |
| C.17 | General Record Keeping Requirements [326 IAC 2-6.1-5] | |
| C.18 | General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13] | |
| SECTION D.1 | EMISSIONS UNIT OPERATION CONDITIONS..... | 16 |
| | Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] | |
| D.1.1 | Particulate Matter (PM) [326 IAC 6-2-4] | |
| D.1.2 | Preventive Maintenance Plan [326 IAC 1-6-3] | |

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS..... 17
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]
D.1.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)] D.1.2
Preventive Maintenance Plan [326 IAC 1-6-3]
Compliance Determination Requirements
D.1.3 Particulate Matter
Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.1.4 Visible Emissions Notations
D.1.4 Baghouse Parametric Monitoring - Pressure Readings
D.1.5 Broken or Failed Bag Detection
Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]
D.1.6 Record Keeping Requirements

CERTIFICATION..... 19
ANNUAL NOTIFICATION..... 20
MALFUNCTION REPORT..... 21

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary ball and roller bearings production facility.

| | |
|------------------------------|---|
| Source Address: | 7601 Rockville Road, Indianapolis, Indiana 46206 |
| Mailing Address: | 7601 Rockville Road, Indianapolis, Indiana 46206 |
| General Source Phone Number: | (414) 937-4332 |
| SIC Code: | 3562 |
| County Location: | Marion |
| Source Location Status: | Nonattainment for PM2.5 standard Attainment for all other criteria pollutants |
| Source Status: | Minor Source Operating Permit Program Minor Source, under PSD and Nonattainment NSR Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories |

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas fired boiler, installed in 1999, with a maximum heat input capacity of 4.2 million Btu per hour (MMBtu/hr), exhausting to stack S2.
- (b) Two (2) Grinding operations, each with a maximum capacity of 30 tons per hour, and each using a baghouse as control with a maximum flow rate of 10,000 cubic feet per minute (cfm), and exhausting to the atmosphere.
- (c) Grit blasting operations, with a maximum capacity of 30 tons per hour, and a maximum flow rate of 2,102 cubic feet per minute (cfm), using a baghouse as control, and exhausting to the atmosphere.
- (d) One (1) force draft natural gas heater, identified as Q17, installed in 1999, each with a maximum heat input capacity of 0.4 MM Btu/hr, exhausting to the atmosphere.
- (e) Four (4) natural gas heating generators, installed in 1999, each with a maximum heat input capacity of 0.125 MM Btu/hr, exhausting to the atmosphere.
- (f) Nine (9) natural gas and carbon monoxide furnaces, installed in 1999, with varying heat input capacities totaling 6.82 MMBtu/hr of natural gas, exhausting to the atmosphere.
- (g) Eleven (11) force draft natural gas heaters, installed in 1999, each with a maximum heat input capacity of 3.125 MM Btu/hr, exhausting to the atmosphere.
- (h) One (1) soil and groundwater remediation system (air sparging, air stripping, soil vapor extraction), constructed in 1997, consisting of soil vapor extraction well, sparging well, low profile air stripper, identified as Emissions Unit AS-1, with maximum air flow capacity of 300 acfm, and a maximum water flow rate of thirty (30) gallons per hour, and soil-vapor extraction (SVE) blower, identified as Emission Unit SVE-1, with maximum air flow capacity of 100 acfm, exhausting to R-1.

SECTION B GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M097-28057-00025, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

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

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

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) All terms and conditions of permits established prior to M097-28057-00025 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

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

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

B.15 Source Modification Requirement

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

B.16 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section) to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

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

C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

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

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three

(3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.14 Response to Excursions or Exceedances

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

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

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

C.16 Malfunctions Report [326 IAC 1-6-2]

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

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) natural gas fired boiler, installed in 1999, with a maximum heat input capacity of 4.2 million Btu per hour (MMBtu/hr), exhausting to stack S2.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the natural gas fired boiler shall not exceed 0.60 pound per MMBtu heat input.

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

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

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) Two (2) Grinding operations, each with a maximum capacity of 30 tons per hour, and each using a baghouse as control with a maximum flow rate of 10,000 cubic feet per minute (cfm), and exhausting to the atmosphere.
- (c) Grit blasting operations, with a maximum capacity of 30 tons per hour, and a maximum flow rate of 2,102 cubic feet per minute (cfm), using a baghouse as control, and exhausting to the atmosphere.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations except Lake County), PM emissions from the grinding and grit blasting operations shall not exceed 0.03 grain per dry standard cubic foot of exhaust air.

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

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

Compliance Determination Requirements

D.2.3 Particulate Matter

- (a) In order to comply with Condition D.1.1, the control equipment for PM, PM10 and PM2.5 for the grinding and grit blasting operations shall be in operation at all times when the grinding and grit blasting operations is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.4 Visible Emissions Notations

- (a) Visible emission notations of the two (2) Grinding operations and Grit blasting operation stack exhausts shall be performed once per day 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 Section C - Response to Excursions and Exceedances 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 - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.2.5 Baghouse Parametric Monitoring - Pressure Readings

- (a) The Permittee shall record the pressure drop across the baghouse controlling the Grinding and Grit blasting operations at least once per day when the blasting machine is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse, controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit 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) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down no later than the completion of the processing of the material in the line. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain daily records of visible emission notations of the Grinding and Grit blasting operations stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the plant did not operate that day).
- (a) To document compliance with Condition D.2.5, the Permittee shall maintain daily records of pressure drop readings of the grinding and grit blasting operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of notation (e.g., the process did not operate that day).
- (b) 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**

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

Source Name: Rexnord Industries, LLC.
Source Address: 7601 Rockville Road, Indianapolis, Indiana 46206
Mailing Address: 7601 Rockville Road, Indianapolis, Indiana 46206
MSOP No.: M097-28057-00025

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

| | |
|----------------------|-----------------------------|
| Company Name: | Rexnord Industries, LLC. |
| Address: | 7601 Rockville Road |
| City: | Indianapolis, Indiana 46206 |
| Phone #: | (414) 937-4332 |
| MSOP #: | M097-28057-00025 |

I hereby certify that Rexnord Industries, LLC. is :

still in operation.

no longer in operation.

I hereby certify that Rexnord Industries, LLC. is :

in compliance with the requirements of MSOP M097-28057-00025.

not in compliance with the requirements of MSOP M097-28057-00025.

| |
|---------------------------------------|
| Authorized Individual (typed): |
| Title: |
| Signature: |
| 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: |
| |
| |
| |
| |

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865
Fax Number: (317) 327-2274**

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

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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

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

Source Background and Description

| | |
|----------------------------|--|
| Source Name: | Rexnord Industries, LLC |
| Source Location: | 7601 Rockville Road, Indianapolis, IN 46206 |
| County: | Marion |
| SIC Code: | 3562 |
| Permit Renewal No.: | 097-28057-00025 |
| Permit Reviewer: | Julia Shannon/EVP |

The Office of Air Quality (OAQ) has reviewed the minor source operating permit renewal application from Rexnord Industries, LLC relating to the operation of a ball and roller bearings production facility.

History

On October 28, 2008, Rexnord Industries, LLC submitted an application to the OAQ requesting to renew its operating permit. Rexnord Industries, LLC was issued MSOP, M097-17895-00025, on September 11, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) natural gas fired boiler, installed in 1999, with a maximum heat input capacity of 4.2 million Btu per hour (MMBtu/hr), exhausting to stack S2.
- (b) Two (2) Grinding operations, each with a maximum capacity of 30 tons per hour, and each using a baghouse as control with a maximum flow rate of 10,000 cubic feet per minute (cfm), and exhausting to the atmosphere.
- (c) Grit blasting operations, with a maximum capacity of 30 tons per hour, and a maximum flow rate of 2,102 cubic feet per minute (cfm), using a baghouse as control, and exhausting to the atmosphere.
- (d) One (1) force draft natural gas heater, identified as Q17, installed in 1999, each with a maximum heat input capacity of 0.4 MM Btu/hr, exhausting to the atmosphere.
- (e) Four (4) natural gas heating generators, installed in 1999, each with a maximum heat input capacity of 0.125 MM Btu/hr, exhausting to the atmosphere.
- (f) Nine (9) natural gas and carbon monoxide furnaces, installed in 1999, with varying heat input capacities totaling 6.82 MMBtu/hr of natural gas and 0.28 MMBtu/ hr of carbon monoxide, exhausting to the atmosphere.
- (g) Eleven (11) force draft natural gas heaters, installed in 1999, each with a maximum heat input capacity of 3.125 MM Btu/hr, exhausting to the atmosphere.
- (h) One (1) soil and groundwater remediation system (air sparging, air stripping, soil vapor extraction), constructed in 1997, consisting of soil vapor extraction well, sparging well, low profile air stripper, identified as Emissions Unit AS-1, with maximum air flow capacity of 300 acfm, and a maximum water flow rate of thirty (30) gallons per hour, and soil-vapor extraction (SVE) blower, identified as Emission Unit SVE-1, with maximum air flow capacity of 100 acfm, exhausting to R-1.

Emission Units and Pollution Control Equipment Removed From the Source

- (a) One (1) automatic spray coat electrostatic atomizer, identified as EP seg.1, installed in 1967, with a maximum throughput of 1.9 gallons coating per hour, used for coating metal bearing housing, using dry filters as control, and exhausting to stack S3.
- (b) One (1) manual coating electrostatic atomizer, identified as EP seg. 2, installed in 1967, with a maximum throughput of 2.0 gallons per hour, used for coating metal bearing housing, using dry filters as control, and exhausting to stack S3.

Unpermitted Emission Units and Pollution Control Equipment

There have been no unpermitted emission units constructed and/or operated without a permit at the source since the last approval.

Existing Approvals

Since the issuance of the MSOP 097-17895-00025 on September 11, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Notice-Only Change No. 097-20187-00025 issued on June 1, 2005.

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

Enforcement Issue

IDEM is aware that this MSOP Renewal application was submitted at a date later than the original MSOP expired. IDEM is reviewing this matter and will take appropriate action.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marion County.

| Pollutant | Designation |
|------------------|--|
| SO ₂ | Better than national standards. |
| CO | Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County. |
| O ₃ | Attainment effective November 8, 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 | Attainment effective July 10, 2000, for the part of Franklin |

| Pollutant | Designation |
|--|---|
| | Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is 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 effective April 5, 2005 for PM2.5. | |

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) 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. Marion 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) PM2.5

Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM2.5 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

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

(d) Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980; therefore fugitive emissions are not counted toward the determination of PSD applicability.

Unrestricted Potential Emissions

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. The potential to emit of PM, PM10, PM2.5 and CO are each greater than 25 tons per year. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, therefore fugitive emissions are not counted toward the determination of PSD applicability.

Potential to Emit After Issuance

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

| Process/ Emission Unit | Potential To Emit (tons/year) | | | | | | | |
|---|-------------------------------|------------------|-------------------|-----------------|--------------|--------------|-----------------|--------------|
| | PM | PM ₁₀ | PM _{2.5} | SO ₂ | VOC | CO | NO _x | HAPs |
| Natural Gas Combustion | 0.33 | 1.31 | 1.31* | 0.10 | 0.95 | 14.52 | 17.29 | 0.33 |
| Heat Treat Natural Gas and Carbon Monoxide Furnaces | 0.05 | 0.22 | 0.22* | 0.02 | 0.16 | 24.07 | 2.85 | - |
| Soil and Groundwater Remediation | - | - | - | - | 0.031 | - | - | 0.031 |
| Grinding and Grit Blasting | 24.89 | 24.89 | 24.89* | - | - | - | - | - |
| Total Emissions | 25.28 | 26.42 | 26.42 | 0.12 | 1.138 | 38.60 | 20.14 | 0.357 |
| PSD Major Source Thresholds | 250 | 250 | -- | -- | 250 | 250 | 250 | -- |
| Title V Major Source Thresholds | NA | 100 | -- | -- | 100 | 100 | 100 | 25 |
| Nonattainment NSR Major Source Thresholds | -- | -- | 100 | 100 | -- | -- | -- | -- |
| negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. | | | | | | | | |

*PM2.5 emissions assumed equal to PM10 emissions.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. Steam generating units that have a maximum design heat input capacity of less than ten (10) million Btu per hour (10 mm Btu/hr) are not subject to 40 CFR Part 60 Subpart Dc. Therefore, this source is not subject to 40 CRF Part 60 Subpart Dc.

- (b) NESHAP 40 CFR Part 63, Subpart GGGGG (National Emission Standards for Hazardous Air Pollutants for Site Remediation) is not included for this source since the source is not a major source of HAP emissions (PTE of any single HAP is less than ten (10) tons per year and/or PTE of a combination of HAPs is less than twenty-five (25) tons per year).
- (c) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

Marion County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM_{2.5} emissions, and the effective date of these rules was July 15th, 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. PM_{2.5} emissions from this source are less than one hundred (100) tons per twelve consecutive month period. Therefore, this source is not subject to nonattainment new source review requirements for PM_{2.5} emissions.

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

This source, which is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, is not subject to the requirements of 326 IAC 2-2 (PSD). The potential emissions of all pollutants are less than 250 tons per year; therefore, this source is not a major PSD source.

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source has potential single HAP and total HAP emissions of less than 10 and 25 tons per year, respectively, therefore, this rule does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

326 IAC 6.5 (Particulate Matter Limitations)

This source is not specifically listed in 326 IAC 6.5-1-6 (Marion County). This source has actual emissions of ten (10) tons or more of particulate matter per year. Pursuant to this rule, particulate

matter emissions from the grinding and grit blasting operations shall not exceed 0.03 grains per dry standard cubic foot (gr/dcsf).

The three (3) baghouses controlling emissions from grinding and grit blasting will be in operation at all times when grinding and grit blasting are in operation, therefore the source will be able to comply with 326 IAC 6.5.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating), particulate emissions from the natural gas boiler, with heat input capacities of 4.2 MMBtu/hr shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{where: } Pt = \text{Pounds of particulate matter emitted per MMBtu heat input.}$$

Q = Total source maximum operating capacity rating in MMBtu per hour.

The total maximum operating capacity of the boiler is 4.2 million Btu per hour (MMBtu/hr). For Q less than 10 MMBtu/hr, Pt shall not exceed 0.6. Therefore, pounds of particulate matter emitted per million Btu shall not exceed 0.6 for the natural gas boiler.

Compliance calculation:

PTE of PM from boiler B5 is 0.03 ton/yr or 0.007 lb/hr.
0.035 lb/hr / 0.94 MMBtu/hr = 0.037 lb/MMBtu

Therefore, the natural gas boiler will comply with the limits in 326 IAC 6-2-4.

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

The limitations pursuant to 326 IAC 6.5-1 are more stringent than 326 IAC 6-3-1. Therefore, this regulation is not included in the permit.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

This rule applies to all facilities with a potential to emit greater than twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. None of the emission units at this source are subject to the requirements of this rule because they each have potential sulfur dioxide emissions less than twenty-five (25) tons per year.

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 potential to emit of VOC from each emission unit is less than twenty-five (25) tons per year. Therefore, 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) does not apply to this source.

No other 326 IAC 8 rules apply to this source.

Compliance Determination and Monitoring Requirements

Compliance Determination

The grinding and grit blasting operations and the associated control systems have applicable compliance determination conditions as specified below:

- (a) In order to comply with 326 IAC 6.5, the control equipment for PM, PM10 and PM2.5 for grinding and grit blasting operations shall be in operation at all times when grinding and grit blasting is in operation.

Compliance Monitoring

The grinding and grit blasting operations and the associated control system have applicable compliance monitoring conditions as specified below:

| Emission Unit / Control | Operating Parameters | Frequency |
|-------------------------------------|-----------------------------|------------------|
| Grit Blasting Operations / Baghouse | Pressure Drop | Once per day |
| Visible Emissions Notations | Opacity | Once per day |

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal M097-28057-00025 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 October 28, 2008.

Conclusion

The operation of this ball and roller bearings production facility shall be subject to the conditions of the attached MSOP Renewal No. M097-28057-00025.

Appendix A: Emissions Calculations
Grinding and Grit Blasting

Company Name: Rexnord Industries, LLC
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

Grinding operation with 10,000 cfm baghouse:

PM Emissions (lb/hr) = Flow Rate (cfm) x PM Limit (grains.dscf) x 60 min/hr x 1 lb/7,000 grains

PM Emissions (lb/hr) = 10,000 x 0.03 gr/dscf x 60 min/hr x 1 lb/7,000 grains

PM Emissions = **2.571 lb/hr**

PM Emissions = **11.26 ton/yr**

Grinding maintenance with 10,000 cfm baghouse:

PM Emissions (lb/hr) = Flow Rate (cfm) x PM Limit (grains.dscf) x 60 min/hr x 1 lb/7,000 grains

PM Emissions (lb/hr) = 10,000 x 0.03 gr/dscf x 60 min/hr x 1 lb/7,000 grains

PM Emissions = **2.571 lb/hr**

PM Emissions = **11.26 ton/yr**

Grit Blasting operation with 2,102 cfm baghouse:

PM Emissions (lb/hr) = Flow Rate (cfm) x PM Limit (grains.dscf) x 60 min/hr x 1 lb/7,000 grains

PM Emissions (lb/hr) = 2,102 x 0.03 gr/dscf x 60 min/hr x 1 lb/7,000 grains

PM Emissions = **0.541 lb/hr**

PM Emissions = **2.367 ton/yr**

Total PM emissions from all grinding & grit blasting operations = **24.89**

PM emission factors from previous air permit.

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

Company Name: Rexnord Industries, LLc
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

| | Heat Input Capacity MMBtu/hr | Potential Throughput MMCF/yr |
|------------------------------|---------------------------------|---------------------------------|
| 4 x 0.125 heating generators | 0.5 | |
| natural gas boiler | 4.2 | |
| 11 x 3.125 heaters | 34.375 | |
| Q17 heater | 0.4 | |
| | 39.475 | 345.801 |

| Emission Factor in lb/MMCF | Pollutant | | | | | | |
|-------------------------------|-----------|-------|---------|------|-------|------|-------|
| | PM* | PM10* | PM2.5** | SO2 | NOx | VOC | CO |
| | 1.9 | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| Potential Emission in tons/yr | 0.33 | 1.31 | 1.31 | 0.10 | 17.29 | 0.95 | 14.52 |

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

** PM2.5 emissions assumed equal to PM10

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors 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 (SUPPLEMENT D 3/98)

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

See next page for HAPs emissions calculations.

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

Company Name: Rexnord Industries, LLc
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

| 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 | 3.631E-04 | 2.075E-04 | 1.297E-02 | 3.112E-01 | 5.879E-04 |

| 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 | 8.645E-05 | 1.902E-04 | 2.421E-04 | 6.570E-05 | 3.631E-04 |

Total HAPS 3.263E-01

Methodology is the same as previous page.

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

Appendix A: Emissions Calculations
Heat Treat Natural Gas and Carbon Monoxide Furnaces

Company Name: Rexnord Industries, LLC
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

| Emission Unit | Flow Rate Capacities (cfh) | | Heat Input Capacities (MMBTU/hr) | | Potential Throughputs (MMCF/yr) | | |
|------------------|----------------------------|------------|----------------------------------|-------------|---------------------------------|-------------|-------------|
| | Number | rxn gas | NG | rxn gas | NG | rxn gas | NG |
| surface furnaces | 3 | 50 | 525 | 0.05 | 0.54 | 0.44 | 4.6 |
| batch furnaces | 2 | 30 | 3160 | 0.03 | 3.22 | 0.26 | 27.68 |
| rotary furnace | 1 | 30 | 1460 | 0.03 | 1.49 | 0.26 | 12.79 |
| autoquench | 1 | 100 | 1200 | 0.11 | 1.22 | 0.88 | 10.51 |
| toolroom | 1 | 50 | 140 | 0.05 | 0.14 | 0.44 | 1.23 |
| toolroom HS | 1 | 10 | 10 | 0.01 | 0.01 | 0.09 | 0.09 |
| Totals | | 270 | 6495 | 0.28 | 6.62 | 2.37 | 56.9 |

rxn gas = carbon monoxide
 cfh = cubic feet per hour
 1 cubic foot = 1,020 Btu
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 cubic feet of gas
 Heat Input Capacity (MMBTU/Hr) = Flow rate capacity (cfh) x 1.0

| rxn gas makeup | | |
|----------------|--------|--------|
| Constituent | Makeup | % |
| N2 | 1602 | |
| H2 | 1130 | |
| CO | 846 | 23.50% |
| HCH4 | 14.4 | |
| CO2 | 7.2 | |

CO Conversion factor (lb/MMCF) = 1.25 g/L x 2.2 lb/1000g x 1L/0.035315 CF x 1,000,000 CF/MMF
 CO Emission Factor = CO% in rxn gas x CO Conversion factor (lb/MMCF)

| | Pollutant | | | | | | |
|--|-----------|---------|---------|---------|-------|----------|--------|
| | PM | PM10 | PM2.5 | SO2 | NOx | VOC | CO |
| Natural gas emission factor in lb/MMcf | 1.9 | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| Carbon Monoxide Conversion Factor in lb/MMcf | | | | | | | 18,300 |
| Potential Emission in tons/yr from natural gas heating | 0.054055 | 0.21622 | 0.21622 | 0.01707 | 2.845 | 0.156475 | 2.3898 |
| Potential Emission of carbon monoxide in tons/yr | | | | | | | 21.69 |

NG Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3.
 CO Emission factor from the calculation above in the "rxn Gas Makeup" box
 PTE = Potential to Emit

Calculations
 NG PTE (tons/yr) = NG Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) x (ton/2,000 lb)
 CO PTE (Ton/yr) = rxn gas Potential Throughput (MMCF/yr) x CO Emission Factor (lb/MMCF) x (ton/2,000 lb)

**Appendix A: Emissions Calculations
Soil and Groundwater Remediation**

Company Name: Rexnord Industries, LLc
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

| Constituent | Influent to stripper | | Potential Voc (HAP) Emissions | | |
|----------------------------|----------------------|----------|-------------------------------|---------|--------------|
| | mg/L | lb/gal | lb/hr | lb/day | ton/yr |
| 1,1-dichloroethane | 0.26 | 4.46E-07 | 0.00080 | 0.01926 | 0.00351 |
| cis 1,2 - dichloroethylene | 0.05 | 8.57E-08 | 0.00015 | 0.00370 | 0.00068 |
| 1,1 - dichloroethylene | 0.01 | 1.71E-08 | 3.09E-05 | 0.00074 | 0.00014 |
| chloroethane | 0.39 | 6.69E-07 | 0.00120 | 0.02889 | 0.00527 |
| vinil chloride | 0.06 | 1.03E-07 | 0.00019 | 0.00444 | 0.00081 |
| trichloroethylene | 0.005 | 8.57E-09 | 0.00002 | 0.00037 | 6.760E-05 |
| trans 1,2 dichloroethylene | 1.227 | 2.10E-06 | 0.00379 | 0.09089 | 0.01659 |
| chloroform | 0.005 | 8.57E-09 | 1.54E-05 | 0.00037 | 6.760E-05 |
| carbon | 0.262 | 4.49E-07 | 0.00081 | 0.01941 | 0.00354 |
| tetrachloride | | | | | |
| tetrachloroethylene | 0.005 | 8.57E-09 | 1.54E-05 | 0.00037 | 6.76E-05 |
| Total | | | | | 0.031 |

Influent to Stripper (mg/L) data based on October 29, 2007 analytical data.

Air Stripper'd Max groundwater processing capacity: 30 gal/min

Convert mg/L to lb/gal: 1mg/L x 1 kg/1,000,000 mg x 1 lb/2.205 kg x 3.781 L/gal

Calculations

Potential VOC (HAP) Emission (ton/yr) = Influent to Stripper (lb/gal) x GW Process Cap (gal/min) x 60 min/hr x 24 hr/day x 365 day/yr x 1ton/2,000 ll

**Appendix A: Emissions Calculations
Grinding and Shot Blasting**

Company Name: Rexnord Industries, LLc
Address City IN Zip: 7601 Rockville Road, Indianapolis, IN 46206
Permit Number: 097-28057-00025
Reviewer: JS/EVP

BEFORE CONTROLS

| Pollutant | Natural Gas Combustion | Heat Treat Natural Gas and Carbon Monoxide Furnaces | Soil and Groundwater Remediation | Grinding & Grit Blasting | TOTAL |
|-----------------------|------------------------|---|----------------------------------|--------------------------|-------|
| PM | 0.33 | 0.05 | - | 24.89 | 25.28 |
| PM10 | 1.31 | 0.22 | - | 24.89 | 26.42 |
| PM2.5 | 1.31 | 0.22 | - | 24.89 | 26.42 |
| SO2 | 0.10 | 0.02 | - | - | 0.121 |
| NOx | 17.29 | 2.85 | - | - | 20.14 |
| VOC | 0.95 | 0.16 | 0.031 | - | 1.138 |
| CO | 14.52 | 24.07 | - | - | 38.60 |
| total HAPs | 0.3263 | - | 0.031 | - | 0.357 |
| worst case single HAP | 0.3112 | - | 0.017 | - | 0.328 |