INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: October 2, 2006

RE: Ryobi Die Casting / 145-15571-00031

FROM: Nisha Sizemore
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, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Ryobi Die Casting (USA), Inc.
800 West Mausoleum Road
Shelbyville, Indiana 46176

(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.

The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F145-15571-00031	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 2, 2006 Expiration Date: October 2, 2011

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

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, A.3 and A.4 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 2-8-3(b)]

The Permittee owns and operates a stationary aluminum die-casting plant.

Authorized individual:	President
Source Address:	800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address:	800 West Mausoleum Road, Shelbyville, Indiana 46176
General Source Phone:	(317) 392-8398
SIC Code:	3363
County Location:	Shelby County
Source Location Status:	Nonattainment for Ozone under 8-hour standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not in 1 of 8 Source Categories

A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

This aluminum die casting company consists of four (4) plants which represent four physical buildings. Since these four (4) plants are located on the same property and under common control of the same entity, they will be considered one (1) source in this FESOP.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) Ten (10) shotblasting lines, constructed after 1986, consisting of the following:

(1) Two (2) shotblasting lines, identified as SBS-6 and SBS-7, with maximum process rates of 3,239 and 1,900 pounds of parts per hour, both controlled by scrubber WDC-1, and exhausting through stack SV# WDC-1.

(2) Three (3) shotblasting lines, identified as SBS-8 through SBS-10, with maximum process rates of 575, 1,640, and 4,000 pounds of parts per hour, controlled by scrubber WDC-3, and exhausting through stack SV# WDC-3.

(3) Two (2) shotblasting lines, identified as 03-SBS-01 and 03-SBS-04, with maximum process rates of 5,670 and 2,403 pounds of parts per hour, both controlled by scrubber 03-WDC-01, and exhausting through stack SV# 03-WDC-01.

(4) Two (2) shotblasting lines, identified as 03-SBS-02 and 03-SBS-03, with maximum process rates of 1,280 and 1,920 pounds of parts per hour, both controlled by scrubber 03-WDC-02, and exhausting through stack SV# 03-WDC-02.

(5) One (1) shotblasting line, identified as 03-SBS-06, with a maximum process rate of 3,008 pounds of parts per hour, controlled by scrubber 03-WDC-03, and exhausting through stack SV# 03-WDC-03.

(b) Six (6) natural gas-fired aluminum melting furnaces, using propane as back-up fuel, consisting of the following:

(1) One (1) aluminum melting furnace, identified as MF-5, constructed in 1989, with a maximum throughput rate of 10,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 14.4 MMBtu/hr, and exhausting through stack SV# MF-5.

(2) One (1) aluminum melting furnace, identified as MF-6, constructed in 1994, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat capacity of 19.3 MMBtu/hr, and exhausting through stack SV# MF-6.

(3) One (1) aluminum melting furnace, identified as MF-1S, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 15.0 MMBtu/hr, and exhausting through stack SV# MF-1S.

(4) One (1) aluminum melting furnace, identified as MF-2M, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 23.8 MMBtu/hr, and exhausting through stack SV# MF-2M.

(5) One (1) aluminum melting furnace, identified as MF-3N, constructed in 2000, with a maximum throughput rate of 7,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat capacity of 13.4 MMBtu/hr, and exhausting through stack SV# MF-3N.

(6) One (1) aluminum melting furnace, identified as MF-1, constructed in 2005, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 18 MMBtu/hr, and exhausting through stack SV# MF-1.

(c) One (1) aluminum scrap handling process, with a maximum throughput rate of 12,500 pounds of trimmed aluminum parts per hour.

(d) One (1) aluminum die casting process, constructed in 1986, with a maximum throughput rate of 27.5 tons of parts per hour.

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) One hundred and four (104) natural gas-fired combustion units in Plant 1, with a total heat capacity of 104.36 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Three (3) pre-heat stations, each with a maximum heat input of 0.008 MMBtu/hr.

(B) One (1) make-up air unit, with a maximum heat input of 1.02 MMBtu/hr.

(C) Three (3) make-up air units, each with a maximum heat input of 1.972 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 2.066 MMBtu/hr.

(E) Four (4) make-up air units, each with a maximum heat input of 2.137 MMBtu/hr.

(F) Sixteen (16) make-up air units, each with a maximum heat input of 2.1875 MMBtu/hr.

(G) Two (2) make-up air units, each with a maximum heat input of 2.324 MMBtu/hr.

(H) One (1) make-up air unit, with a maximum heat input of 2.5 MMBtu/hr.

(I) Two (2) make-up air units, each with a maximum heat input of 3.052 MMBtu/hr.

(J) Six (6) make-up air units, each with a maximum heat input of 3.327 MMBtu/hr.

(K) One (1) make-up air unit, with a maximum heat input of 4.1 MMBtu/hr.

(L) One (1) make-up air unit, with a maximum heat input of 5 MMBtu/hr.

(M) Fifty-one (51) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(N) Ten (10) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(O) One (1) office heater, with a maximum heat input of 0.215 MMBtu/hr.

(P) One (1) office heater, with a maximum heat input of 0.16 MMBtu/hr.

(2) Fourteen (14) natural gas-fired combustion units in Plant 2, with a total heat capacity of 11.12 MMBtu/hr, using propane as back-up fuel, including the following:

(A) One (1) make-up air unit, with a maximum heat input of 0.75 MMBtu/hr.

(B) One (1) air curtain, with a maximum heat input of 3.5 MMBtu/hr.

(C) One (1) air curtain, with a maximum heat input of 3.0 MMBtu/hr.

(D) One (1) air curtain, with a maximum heat input of 2.203 MMBtu/hr.

(E) Nine (9) space unit heaters, each with a maximum heat input of 0.2 MMBtu/hr.

(F) One (1) office heater, with a maximum heater input of 0.0514 MMBtu/hr.

(3) Eighty-eight (88) natural gas-fired combustion units in Plant 3 (with no back-up fuel), with a total heat capacity of 117.12 MMBtu/hr, including the following:

(A) Two (2) pre-heat stations, each with a maximum heat input of 2.0 MMBtu/hr.

(B) Six (6) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(C) Eight (8) door heaters, each with a maximum heat input of 0.814 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 0.751 MMBtu/hr.

(E) Two (2) make-up air units, each with a maximum heat input of 1.503 MMBtu/hr.

(F) Six (6) make-up air units, each with a maximum heat input of 1.784 MMBtu/hr.

(G) One (1) make-up air unit, with a maximum heat input of 1.972 MMBtu/hr.

(H) Three (3) make-up air units, each with a maximum heat input of 2.536 MMBtu/hr.

(I) Four (4) make-up air units, each with a maximum heat input of 3.287 MMBtu/hr.

(J) Sixteen (16) make-up air units, each with a maximum heat input of 3.945 MMBtu/hr.

(K) Thirty-nine (39) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(4) Seven (7) natural gas-fired combustion units in Plant 4, with a total heat capacity of 1.5 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Five (5) unit heaters, each with a maximum heat input of 0.216 MMBtu/hr.

(B) One (1) door heater, with a maximum heat input of 0.39 MMBtu/hr.

(C) One (1) AC/heater, with a maximum heat input of 0.031 MMBtu/hr.

(b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(d) Machining where an aqueous cutting coolant continuously floods the machining interface.

(e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(g) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(h) Quenching operations used with heat treating processes.

(i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(j) Paved and unpaved roads and parking lots with public access.

(k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(l) Stationary fire pumps.

(m) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

(n) Cleaners and solvents having a vapor pressure equal to or less than 2kPa (15mm Hg or 0.3 psi) measured at 38 degrees C (100^{o}F) or a vapor pressure equal to or less than 0.7 kPa (5mm Hg, or 0.1 psi) measured at 20^{o}C (68^{o}F), the use of which for all cleaners and solvents combined does not exceed 145 gallons per twelve (12) consecutive month period.

A.5 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.6 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) 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.

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 [326 IAC 2-8-6]

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 [326 IAC 2-8-4(4)]

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 [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(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 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(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.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report 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) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification 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).

B.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 PMP does 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.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance

Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to ***permit number*** and issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised

(3) deleted

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(c), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) 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.

(2) If IDEM, OAQ upon receiving a timely and complete 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.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
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 2-8 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 needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site on a rolling five (5) year basis, which documents all such changes and emissions trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]

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 FESOP 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.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) 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.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][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

Emissions Limitations and Standards [326 IAC 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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 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.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(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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 Data Section, Office of Air Quality
100 North Senate Avenue
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 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment

and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification 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).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision 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] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(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 have a scale such that the expected normal reading 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 pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(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;

(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.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(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 and 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 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(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.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(c) 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.

(d) 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).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be 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.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(a) Ten (10) shotblasting lines, constructed after 1986, consisting of the following:

(1) Two (2) shotblasting lines, identified as SBS-6 and SBS-7, with maximum process rates of 3,239 and 1,900 pounds of parts per hour, both controlled by scrubber WDC-1, and exhausting through stack SV# WDC-1.

(2) Three (3) shotblasting lines, identified as SBS-8 through SBS-10, with maximum process rates of 575, 1,640, and 4,000 pounds of parts per hour, controlled by scrubber WDC-3, and exhausting through stack SV# WDC-3.

(3) Two (2) shotblasting lines, identified as 03-SBS-01 and 03-SBS-04, with maximum process rates of 5,670 and 2,403 pounds of parts per hour, both controlled by scrubber 03-WDC-01, and exhausting through stack SV# 03-WDC-01.

(4) Two (2) shotblasting lines, identified as 03-SBS-02 and 03-SBS-03, with maximum process rates of 1,280 and 1,920 pounds of parts per hour, both controlled by scrubber 03-WDC-02, and exhausting through stack SV# 03-WDC-02.

(5) One (1) shotblasting line, identified as 03-SBS-06, with a maximum process rate of 3,008 pounds of parts per hour, controlled by scrubber 03-WDC-03, and exhausting through stack SV# 03-WDC-03.

(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 2-8-4(1)]

D.1.1 PM and PM10 Emissions [326 IAC 2-2] [326 IAC 2-8-4]

The PM and PM10 emissions from the shotblasting lines shall not exceed the emission limits listed in the table below.

Unit ID	PM/PM10 Emission Limit (lbs/hr)
SBS-6	1.92
SBS-7	1.92
SBS-8	1.92
SBS-9	1.92
SBS-10	1.38
03-SBS-01	1.38
03-SBS-02	1.92
03-SBS-03	1.92
03-SBS-04	1.92
03-SBS-06	1.22

Combined with the PM/PM10 emissions from other emission units, the PM/PM10 emissions from the entire source are limited to less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following shotblasting lines shall not exceed the pound per hour limits listed in the table below:

Unit ID	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
SBS-6	3,239	5.66
SBS-7	1,900	3.96
SBS-8	575	1.78
SBS-9	1,640	3.59
SBS-10	4,000	6.52
03-SBS-01	5,670	8.24
03-SBS-02	1,280	3.04
03-SBS-03	1,920	3.99
03-SBS-04	2,403	4.64
03-SBS-06	3,008	5.39

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

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

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

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with Conditions D.1.1 and D.1.2, each of the following shotblasting lines shall be controlled by the associated scrubber, as listed in the table below, when these units are in operation:

Unit ID	Scrubber ID
SBS-6	WDC-1
SBS-7	
SBS-8	WDC-3
SBS-9	
SBS-10	
03-SBS-01	03-WDC-01
03-SBS-04	
03-SBS-02	03-WDC-02
03-SBS-03	
03-SBS-06	03-WDC-03

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

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the scrubber stack exhausts (stacks SV# WDC-1, WDC-3, 03-WDC-01, 03-WDC-02, and 03-WDC-03) shall be performed once per day during normal daylight operations. 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of each of the scrubbers used to control emissions from shotblasting lines at least once per day when the associated shotblasting lines are in operation. The pressure drop range and the minimum flow rate of the scrubber fluid for each scrubber are listed in the table below. When for any one reading, the pressure drop or flow rate across any of the scrubbers is outside the normal range, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Scrubber ID	Process ID	Pressure Drop ranges (inches of water)	Minimum Flow Rate (gallons/min)
WDC-1	SBS-6	15-18	150
	SBS-7		
WDC-3	SBS-8	15-18	150
	SBS-9		
	SBS-10		
03-WDC-01	03-SBS-01	15-18	150
	03-SBS-04		
03-WDC-02	03-SBS-02	15-18	150
	03-SBS-03		
03-WDC-03	03-SBS-06	10-13	90

The instruments used for determining the pressure drop and flow rate shall comply with Section C - Pressure Gauge and Other 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.1.7 Scrubber Detection

In the event that a scrubber malfunction has been observed:

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the scrubber stack exhausts.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain daily records of the pressure drop and flow rate of each scrubber during normal operation.

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

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(b) Six (6) natural gas-fired aluminum melting furnaces, using propane as back-up fuel, consisting of the following:

(1) One (1) aluminum melting furnace, identified as MF-5, constructed in 1989, with a maximum throughput rate of 10,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 14.4 MMBtu/hr, and exhausting through stack SV# MF-5.

(2) One (1) aluminum melting furnace, identified as MF-6, constructed in 1994, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat capacity of 19.3 MMBtu/hr, and exhausting through stack SV# MF-6.

(3) One (1) aluminum melting furnace, identified as MF-1S, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 15.0 MMBtu/hr, and exhausting through stack SV# MF-1S.

(4) One (1) aluminum melting furnace, identified as MF-2M, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 23.8 MMBtu/hr, and exhausting through stack SV# MF-2M.

(5) One (1) aluminum melting furnace, identified as MF-3N, constructed in 2000, with a maximum throughput rate of 7,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat capacity of 13.4 MMBtu/hr, and exhausting through stack SV# MF-3N.

(6) One (1) aluminum melting furnace, identified as MF-1, constructed in 2005, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 18 MMBtu/hr, and exhausting through stack SV# MF-1.

(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 2-8-4(1)]

D.2.1 FESOP Limits [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the amount of propane and propane equivalents used in all the melting furnaces (MF-1, MF-5, MF-6, MF-1S, MF-2M, and MF-3N) shall not exceed 7,400 kilogallons per twelve (12) consecutive month period with compliance determined at the end of each month. For the purpose of determining compliance, every million cubic feet (MMCF) of natural gas used shall be equivalent to 8.12 kilogallons of propane.

Combined with the NOx and CO emissions from other existing units, the NOx and CO emissions from the entire source are each limited to less than 100 tons per year. Therefore, the requirement of 327 IAC 2-7 (Part 70 Program) are not applicable.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.2 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain monthly records of the total natural gas and propane usages for the melting furnaces.

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

D.2.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(c) One (1) aluminum scrap handling process, with a maximum throughput rate of 12,500 pounds of trimmed aluminum parts per hour.

(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 2-8-4(1)]

D.3.1 PM and PM10 Emissions [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the PM/PM10 emissions from the aluminum scrap handling process shall not exceed 3.75 lbs/hr.

Combined with the PM/PM10 emissions from other emission units, the PM10 emissions from the entire source are limited to less than 100 tons/yr and the PM emissions from the entire source are limited to less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from the aluminum scrap handling process shall not exceed 14.0 pounds per hour when operating at a process weight rate of 12,500 pounds per hour.

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

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

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

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(d) One (1) aluminum die casting process, constructed in 1986, with a maximum throughput rate of 27.5 tons of parts per hour.

(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 2-8-4(1)]

There are no specifically applicable requirements for the unit at this section.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] Insignificant Activities

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) One hundred and four (104) natural gas-fired combustion units in Plant 1, with a total heat capacity of 104.36 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Three (3) pre-heat stations, each with a maximum heat input of 0.008 MMBtu/hr.

(B) One (1) make-up air unit, with a maximum heat input of 1.02 MMBtu/hr.

(C) Three (3) make-up air units, each with a maximum heat input of 1.972 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 2.066 MMBtu/hr.

(E) Four (4) make-up air units, each with a maximum heat input of 2.137 MMBtu/hr.

(F) Sixteen (16) make-up air units, each with a maximum heat input of 2.1875 MMBtu/hr.

(G) Two (2) make-up air units, each with a maximum heat input of 2.324 MMBtu/hr.

(H) One (1) make-up air unit, with a maximum heat input of 2.5 MMBtu/hr.

(I) Two (2) make-up air units, each with a maximum heat input of 3.052 MMBtu/hr.

(J) Six (6) make-up air units, each with a maximum heat input of 3.327 MMBtu/hr.

(K) One (1) make-up air unit, with a maximum heat input of 4.1 MMBtu/hr.

(L) One (1) make-up air unit, with a maximum heat input of 5 MMBtu/hr.

(M) Fifty-one (51) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(N) Ten (10) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(O) One (1) office heater, with a maximum heat input of 0.215 MMBtu/hr.

(P) One (1) office heater, with a maximum heat input of 0.16 MMBtu/hr.

(2) Fourteen (14) natural gas-fired combustion units in Plant 2, with a total heat capacity of 11.12 MMBtu/hr, using propane as back-up fuel, including the following:

(A) One (1) make-up air unit, with a maximum heat input of 0.75 MMBtu/hr.

(B) One (1) air curtain, with a maximum heat input of 3.5 MMBtu/hr.

(C) One (1) air curtain, with a maximum heat input of 3.0 MMBtu/hr.

(D) One (1) air curtain, with a maximum heat input of 2.203 MMBtu/hr.

(E) Nine (9) space unit heaters, each with a maximum heat input of 0.2 MMBtu/hr.

(F) One (1) office heater, with a maximum heater input of 0.0514 MMBtu/hr.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] Insignificant Activities

(3) Eighty-eight (88) natural gas-fired combustion units in Plant 3 (with no back-up fuel), with a total heat capacity of 117.12 MMBtu/hr, including the following:

(A) Two (2) pre-heat stations, each with a maximum heat input of 2.0 MMBtu/hr.

(B) Six (6) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(C) Eight (8) door heaters, each with a maximum heat input of 0.814 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 0.751 MMBtu/hr.

(E) Two (2) make-up air units, each with a maximum heat input of 1.503 MMBtu/hr.

(F) Six (6) make-up air units, each with a maximum heat input of 1.784 MMBtu/hr.

(G) One (1) make-up air unit, with a maximum heat input of 1.972 MMBtu/hr.

(H) Three (3) make-up air units, each with a maximum heat input of 2.536 MMBtu/hr.

(I) Four (4) make-up air units, each with a maximum heat input of 3.287 MMBtu/hr.

(J) Sixteen (16) make-up air units, each with a maximum heat input of 3.945 MMBtu/hr.

(K) Thirty-nine (39) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(4) Seven (7) natural gas-fired combustion units in Plant 4, with a total heat capacity of 1.5 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Five (5) unit heaters, each with a maximum heat input of 0.216 MMBtu/hr.

(B) One (1) door heater, with a maximum heat input of 0.39 MMBtu/hr.

(C) One (1) AC/heater, with a maximum heat input of 0.031 MMBtu/hr.

(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 2-8-4(1)]

D.5.1 FESOP Limits [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the amount of natural gas and natural gas equivalents used in all the insignificant combustion units at Plants 1, 2, 3, and 4 shall not exceed 560 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance determined at the end of each month. For the purpose of determining compliance, every 1,000 gallons of propane used shall be equivalent to 0.14 MMCF of natural gas.

Combined with the NOx and CO emissions from other existing units, the NOx and CO emissions are each limited to less than 100 tons per year. Therefore, the requirement of 327 IAC 2-7 (Part 70 Program) are not applicable.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.2 Record Keeping Requirements

(a) To document compliance with Condition D.5.1, the Permittee shall maintain monthly records of the natural gas and propane usages for the insignificant combustion units in plants 1, 2 and 4, and the natural gas usage for the insignificant combustion units in plant 3.

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

D.5.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] Insignificant Activities

(e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(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 2-8-4(1)]

D.6.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from each of the brazing, cutting, soldering and welding processes shall not exceed the pounds per hour emission rate calculated based on the following equation:

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Ryobi Die Casting (USA), Inc.
Source Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
FESOP No.: F145-15571-00031

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 BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Ryobi Die Casting (USA), Inc.
Source Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
FESOP No.: F145-15571-00031

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Ryobi Die Casting (USA), Inc.
Source Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
FESOP No.: F145-15571-00031
Facility: Melt Furnaces MF-1, MF-5, MF-6, MF-1S, MF-2M, and MF-3N
Parameter: Total Propane and Propane Equivalent Usage
Limit: Less than 7,400 kilogallons per twelve (12) consecutive month with compliance determined at the end of each month.
1 MMCF natural gas usage = 8.12 kilogallons propane usage

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Ryobi Die Casting (USA), Inc.
Source Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
FESOP No.: F145-15571-00031
Facility: Insignificant Combustion Units in Plant 1, 2, and 3
Parameter: Total Natural Gas and Natural Gas Equivalent Usage
Limit: Less than 560 MMCF per twelve (12) consecutive month with compliance determined at the end of each month.
1,000 gallons propane usage = 0.14 MMCF natural gas usage

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Ryobi Die Casting (USA), Inc.
Source Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
Mailing Address: 800 West Mausoleum Road, Shelbyville, Indiana 46176
FESOP No.: F145-15571-00031

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: ______________________________________

Title/Position: ______________________________________

Date: ______________________________________

Phone: ______________________________________

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name:	Ryobi Die Casting (USA), Inc.
Source Location:	800 West Mausoleum Road, Shelbyville, Indiana 46176
County:	Shelby
SIC Code:	3363
Operation Permit No.:	F145-15571-00031
Permit Reviewer:	ERG/YC

On August 21, 2006, the Office of Air Quality (OAQ) had a notice published in The Shelbyville, News, Shelbyville, Indiana, stating that Ryobi Die Casting (USA), Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate an aluminum die-casting plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (**bolded** language has been added, the language with a line ~~through~~ it has been deleted). The Table of Contents has been modified, if applicable, to reflect these changes.

1. In Condition C.8(g) Asbestos Abatement Projects, the reference to the condition not being federally enforceable should be removed. 326 IAC 14-10 has been incorporated into the Indiana SIP. The permit has been changed as follows:

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

…

(g) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. ~~The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.~~

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Ryobi Die Casting (USA), Inc.
Source Location:	800 West Mausoleum Road, Shelbyville, Indiana 46176
County:	Shelby County
SIC Code:	3363
Operation Permit No.:	F145-15571-00031
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a FESOP application from Ryobi Die Casting (USA), Inc. relating to the operation of an aluminum die-casting plant.

Source Definition

This aluminum die casting company consists of four (4) plants which represent four physical buildings. Since these four (4) plants are located on the same property and are owned by one (1) company, IDEM, OAQ determined that these four (4) plants are considered one (1) source in this FESOP.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

One (1) natural gas-fired aluminum melting furnace, identified as MF-6, constructed in 1994, using propane as a back-up fuel, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 19.3 MMBtu/hr, and exhausting to stack SV# MF-6.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) Ten (10) shotblasting lines, constructed after 1986, consisting of the following:

(1) Two (2) shotblasting lines, identified as SBS-6 and SBS-7, with maximum process rates of 3,239 and 1,900 pounds of parts per hour, both controlled by scrubber WDC-1, and exhausting through stack SV# WDC-1.

(2) Three (3) shotblasting lines, identified as SBS-8 through SBS-10, with maximum process rates of 575, 1,640, and 4,000 pounds of parts per hour, controlled by scrubber WDC-3, and exhausting through stack SV# WDC-3.

(3) Two (2) shotblasting lines, identified as 03-SBS-01 and 03-SBS-04, with maximum process rates of 5,670 and 2,403 pounds of parts per hour, both controlled by scrubber 03-WDC-01, and exhausting through stack SV# 03-WDC-01.

(4) Two (2) shotblasting lines, identified as 03-SBS-02 and 03-SBS-03, with maximum process rates of 1,280 and 1,920 pounds of parts per hour, both

controlled by scrubber 03-WDC-02, and exhausting through stack SV# 03-WDC-02.

(5) One (1) shotblasting line, identified as 03-SBS-06, with a maximum process rate of 3,008 pounds of parts per hour, controlled by scrubber 03-WDC-03, and exhausting through stack SV# 03-WDC-03.

(b) Five (5) natural gas-fired aluminum melting furnaces, using propane as back-up fuel, consisting of the following:

(1) One (1) aluminum melting furnace, identified as MF-5, constructed in 1989, with a maximum throughput rate of 10,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 14.4 MMBtu/hr, and exhausting through stack SV# MF-5.

(2) One (1) aluminum melting furnace, identified as MF-1S, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 15.0 MMBtu/hr, and exhausting through stack SV# MF-1S.

(3) One (1) aluminum melting furnace, identified as MF-2M, constructed in 1998, with a maximum throughput rate of 9,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 23.8 MMBtu/hr, and exhausting through stack SV# MF-2M.

(4) One (1) aluminum melting furnace, identified as MF-3N, constructed in 2000, with a maximum throughput rate of 7,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat capacity of 13.4 MMBtu/hr, and exhausting through stack SV# MF-3N.

(5) One (1) aluminum melting furnace, identified as MF-1, constructed in 2005, with a maximum throughput rate of 15,000 pounds of aluminum ingots and internally generated aluminum scrap per hour, with a maximum heat input capacity of 18 MMBtu/hr, and exhausting through stack SV# MF-1.

(c) One (1) aluminum scrap handling process, with a maximum throughput rate of 12,500 pounds of trimmed aluminum parts per hour.

(d) One (1) aluminum die casting process, constructed in 1986, with a maximum throughput rate of 27.5 tons of parts per hour.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new emission units or pollution control equipment being added during this review period.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) One hundred and four (104) natural gas-fired combustion units in Plant 1, with a total heat capacity of 104.36 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Three (3) pre-heat stations, each with a maximum heat input of 0.008 MMBtu/hr.

(B) One (1) make-up air unit, with a maximum heat input of 1.02 MMBtu/hr.

(C) Three (3) make-up air units, each with a maximum heat input of 1.972 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 2.066 MMBtu/hr.

(E) Four (4) make-up air units, each with a maximum heat input of 2.137 MMBtu/hr.

(F) Sixteen (16) make-up air units, each with a maximum heat input of 2.1875 MMBtu/hr.

(G) Two (2) make-up air units, each with a maximum heat input of 2.324 MMBtu/hr.

(H) One (1) make-up air unit, with a maximum heat input of 2.5 MMBtu/hr.

(I) Two (2) make-up air units, each with a maximum heat input of 3.052 MMBtu/hr.

(J) Six (6) make-up air units, each with a maximum heat input of 3.327 MMBtu/hr.

(K) One (1) make-up air unit, with a maximum heat input of 4.1 MMBtu/hr.

(L) One (1) make-up air unit, with a maximum heat input of 5 MMBtu/hr.

(M) Fifty-one (51) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(N) Ten (10) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(O) One (1) office heater, with a maximum heat input of 0.215 MMBtu/hr.

(P) One (1) office heater, with a maximum heat input of 0.16 MMBtu/hr.

(2) Fourteen (14) natural gas-fired combustion units in Plant 2, with a total heat capacity of 11.12 MMBtu/hr, using propane as back-up fuel, including the following:

(A) One (1) make-up air unit, with a maximum heat input of 0.75 MMBtu/hr.

(B) One (1) air curtain, with a maximum heat input of 3.5 MMBtu/hr.

(C) One (1) air curtain, with a maximum heat input of 3.0 MMBtu/hr.

(D) One (1) air curtain, with a maximum heat input of 2.203 MMBtu/hr.

(E) Nine (9) space unit heaters, each with a maximum heat input of 0.2 MMBtu/hr.

(F) One (1) office heater, with a maximum heater input of 0.0514 MMBtu/hr.

(3) Eighty-eight (88) natural gas-fired combustion units in Plant 3 (with no back-up fuel), with a total heat capacity of 117.12 MMBtu/hr, including the following:

(A) Two (2) pre-heat stations, each with a maximum heat input of 2.0 MMBtu/hr.

(B) Six (6) door heaters, each with a maximum heat input of 0.4 MMBtu/hr.

(C) Eight (8) door heaters, each with a maximum heat input of 0.814 MMBtu/hr.

(D) One (1) make-up air unit, with a maximum heat input of 0.751 MMBtu/hr.

(E) Two (2) make-up air units, each with a maximum heat input of 1.503 MMBtu/hr.

(F) Six (6) make-up air units, each with a maximum heat input of 1.784 MMBtu/hr.

(G) One (1) make-up air unit, with a maximum heat input of 1.972 MMBtu/hr.

(H) Three (3) make-up air units, each with a maximum heat input of 2.536 MMBtu/hr.

(I) Four (4) make-up air units, each with a maximum heat input of 3.287 MMBtu/hr.

(J) Sixteen (16) make-up air units, each with a maximum heat input of 3.945 MMBtu/hr.

(K) Thirty-nine (39) space unit heaters, each with a maximum heat input of 0.1 MMBtu/hr.

(4) Seven (7) natural gas-fired combustion units in Plant 4, with a total heat capacity of 1.5 MMBtu/hr, using propane as back-up fuel, including the following:

(A) Five (5) unit heaters, each with a maximum heat input of 0.216 MMBtu/hr.

(B) One (1) door heater, with a maximum heat input of 0.39 MMBtu/hr.

(C) One (1) AC/heater, with a maximum heat input of 0.031 MMBtu/hr.

(b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(d) Machining where an aqueous cutting coolant continuously floods the machining interface.

(e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(g) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(h) Quenching operations used with heat treating processes.

(i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(j) Paved and unpaved roads and parking lots with public access.

(k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(l) Stationary fire pumps.

(m) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

(n) Cleaners and solvents having a vapor pressure equal to or less than 2kPa (15mm Hg or 0.3 psi) measured at 38 degrees C (100^{o}F) or a vapor pressure equal to or less than 0.7 kPa (5mm Hg, or 0.1 psi) measured at 20^{o}C (68^{o}F), the use of which for all cleaners and solvents combined does not exceed 145 gallons per twelve (12) consecutive month period.

Existing Approvals

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

(a) Registration issued on February 26, 1986; and

(b) Construction Permit (145-3502-00031) issued on May 19, 1994.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issues

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

(c) IDEM is aware that the source was not issued a FESOP by December 14, 1996 nor did they submit a Part 70 application by that date.

Recommendation

The staff recommends to the Commissioner that the FESOP 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 administratively complete FESOP application for the purposes of this review was received on February 7, 2002. Additional information was received on March 19, 2002, May 6, 2002, and March 21, 2003, April 14, 2005, May 20, 2005, May 23, 2005, and May 24, 2005.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 10).

Potential To Emit for the Source

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

Pollutant	Potential To Emit (tons/year)
PM	Greater than 250
PM-10	Greater than 250
SO_2	18.6
VOC	26.0
CO	124
NOx	225

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Hexane	2.67
Formaldehyde	0.11
Other HAPs	0.01
TOTAL	2.79

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, CO, and NOx are greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

[Note: This source only uses aluminum ingots and is not primarily engaged in the metal recovery process. Therefore, this source is not considered a “secondary metal production plant” and is not in 1 of 28 source categories, as defined in 326 IAC 2-2-1(y), for the PSD regulations.]

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 FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NOx	HAPs
10 Shotblasting Lines	Less than 76.3	Less than 76.3	-	-	-	-	-
6 Aluminum Melting Furnaces	2.22	3.46	Less than 5.55	2.51	38.3	Less than 70.3	0.86
Al Scrap Handling Process	16.4	16.4	-	-	-	-	-
Die Casting Process	-	-	2.41	16.9	-	1.20	-
Insignificant Combustion Units (Plants 1, 2, 3, and 4)	Less than 0.80	Less than 2.13	Less than 3.00	Less than 1.54	Less than 23.5	Less than 28.0	Less than 0.53
Other Insignificant Units	Less than 1.0	Less than 1.0	-	Less than 1.0	-	-	Negligible
Total Emissions	Less than 96.7	Less than 99.3	Less than 11.0	Less than 22.0	Less than 61.8	Less than 99.5	Less than 1.39
Title V Source Thresholds	NA	100	100	100	100	100	10 for a single HAP and 25 for total HAPs

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

County Attainment Status

The source is located in Shelby County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment or Unclassifiable
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

Note: On August 7, 2006, a temporary emergency rule took effect redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

(a) Shelby County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

(b) 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 the ozone standards. Shelby County has been designated as nonattainment for the 8-hour ozone standard. Therefore,

VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Shelby 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) and 326 IAC 2-2.

(d) Fugitive Emissions
Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this permit.

(b) The source does not manufacture any aluminum at this plant. Therefore, this source is not subject to the New Source Performance Standards for primary aluminum reduction plants (40 CFR 60.190-195, Subpart S).

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 20, 40 CFR Part 61 and 63) included in this permit.

(d) The source does not manufacture any aluminum at this plant. Therefore, this source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for primary aluminum reduction plants (40 CFR 63.840-859, Subpart LL).

(e) The source only inputs the aluminum ingots or internally generated aluminum scrap for the die casting processes. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Aluminum Production (40 CFR 63.1500-1504, Subpart RRR) are not included in this permit.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)
This source is located in Shelby County, which has been redesignated as a nonattainment area for 8-hour Ozone in June 2004. The potential to emit VOC of this source is less than 100 tons/yr and the potential to emit NOx of this source is greater than 100 tons per year. Since the actual NOx emissions from this source have never exceeded 100 tons per year, the source has agreed to take FESOP limits to limit the NOx emissions from the entire source to less than 100 tons/yr (see the discussion for FESOP limits below). Therefore, this source is a minor source under Emission Offset review.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
The source was constructed in 1986 and modified in 1989, 1994, 1998, 2000, and 2005. This source is not in 1 of the 28 source categories defined in 326 IAC 2-2-1(p)(1) and has the potential to emit PM and PM10 greater than 250 tons/yr. The PM and PM10 emissions from the shotblasters are always controlled by scrubbers and the actual PM and PM10 emissions have never exceeded 250 tons/yr. The source has agreed to take the FESOP limits to limit the PM10 emissions to less than 100 tons/yr. In order to be a PSD minor source, the Permittee shall comply with the following:

(a) The PM emissions from the shotblasters shall not exceed the emission limits listed in the table below:

Process ID	PM Emission Limit (lbs/hr)
SBS-6	1.92
SBS-7	1.92
SBS-8	1.92
SBS-9	1.92
SBS-10	1.38
03-SBS-01	1.38
03-SBS-02	1.92
03-SBS-03	1.92
03-SBS-04	1.92
03-SBS-06	1.22

These emission limits are equivalent to a total of 76.3 tons/yr of PM emissions. The use of scrubbers with these units ensures compliance with the limits above.

(b) The PM emissions from the aluminum scrap handling process shall not exceed 3.75 lbs/hr. This is equivalent to 16.4 tons/yr of PM emissions. According to the emission calculations in Appendix A, the potential to emit PM of this unit is in compliance with this limit.

Combined with the PM emissions from other existing units, PM emissions from the entire source are limited to less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 are not applicable to this source.

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

The source was constructed prior to July 27, 1997 and the potential to emit HAP emissions of the entire source is less than 10 tons/yr for a single HAP and less than 25 tons/yr for any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 2-8-4 (FESOP)

The potential to emit PM10, NO_x and CO before control is each greater than 100 tons/yr from this source. The Permittee has accepted the following FESOP limits:

(a) The PM10 emissions from the shotblasters shall not exceed the emission limits listed in the table below:

Process ID	PM10 Emission Limit (lbs/hr)
SBS-6	1.92
SBS-7	1.92
SBS-8	1.92
SBS-9	1.92
SBS-10	1.38
03-SBS-01	1.38
03-SBS-02	1.92
03-SBS-03	1.92
03-SBS-04	1.92
03-SBS-06	1.22

These emission limits are equivalent to a total of 76.3 tons/yr of PM10 emissions. The use of scrubbers for these shotblasters ensures compliance with the PM10 emission limits above (see Appendix A).

(b) The amount of propane and propane equivalents used in all the six (6) melting furnaces (MF-1, MF-5, MF-6, MF-1S, MF-2M, and MF-3N) shall not exceed 7,400 kilogallons per

twelve (12) consecutive month period with compliance determined at the end of each month. For the purpose of determining compliance, every million cubic feet (MMCF) of natural gas used shall be equivalent to 8.12 kilogallons of propane. This is equivalent to 70.3 tons/yr of NO_x emissions and 38.3 tons/yr of CO emissions.

(c) The PM10 emissions from the aluminum scrap handling process shall not exceed 3.75 lbs/hr. This is equivalent to 16.4 tons/yr of PM10 emissions. According to the emission calculations in Appendix A, the potential to emit PM10 of this unit is in compliance with this limit.

(d) The amount of natural gas and natural gas equivalents used in all the insignificant combustion units at Plants 1, 2, 3, and 4 shall not exceed 560 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance determined at the end of each month. For the purpose of determining compliance, every 1,000 gallons of propane used shall be equivalent to 0.14 MMCF of natural gas. This is equivalent to 28.0 tons/yr of NO_x emissions and 23.5 tons/yr of CO emissions.

Combined with the PM10, NO_x, and CO emissions from other existing units, the PM10, NO_x, and CO emissions from the entire source are each limited to less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-7 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Shelby County and the potential to emit of all criteria pollutants is less than one hundred (100) tons per year (i.e., does not require a Part 70 Permit). 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 Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

State Rule Applicability - The Shotblasting Lines

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

The allowable particulate emission rate from each shotblasting line shall not exceed the pounds per hour limitation calculated with the following equation:

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

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

The equivalent particulate emission limit for each shotblasting line is listed in the table below:

Process ID	Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
SBS-6	3,239	5.66
SBS-7	1,900	3.96
SBS-8	575	1.78
SBS-9	1,640	3.59
SBS-10	4,000	6.52
03-SBS-1	5,670	8.24
03-SBS-2	1,280	3.04
03-SBS-3	1,920	3.99
03-SBS-4	2,403	4.64
03-SBS-6	3,008	5.39

According to the emission calculations (see Appendix A), the potential to emit PM from each shotblasting line (with a control a scrubber at 99.9% efficiency) is less than the emission limit in the table above. Therefore, these shotblasting lines are in compliance with 326 IAC 6-3-2.

State Rule Applicability - The Six (6) Aluminum Melting Furnaces

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

The melting furnaces are used to melt only aluminum ingots. The emissions from these furnaces are only from the natural gas and propane combustion at these units. Therefore, these melting furnaces are not subject to the requirements of 326 IAC 6-3-2.

State Rule Applicability – Aluminum Scrap Handling Process

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from the scrap handling process shall not exceed 14.0 pounds per hour when operating at a process weight rate of 12,500 pounds per hour.

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

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

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

State Rule Applicability - Die Casting Process

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The die casting process at this source was constructed after January 1, 1980. However, the potential VOC emissions from this process are less than 25 tons/yr. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

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

The die casting process at this source is a closed molding operation (injection molding operation). Therefore, there are no particulate emissions emitted from this process and the requirements of 326 IAC 6-3-2 are not applicable.

State Rule Applicability - Insignificant Activities

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from each of the brazing, cutting, soldering and welding processes shall not exceed the pounds per hour emission rate calculated based on the following equation:

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

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

Testing Requirements

The major pollutants from this source are the PM and PM10 emissions emitted from the shotblasting lines. These shotblasting lines are currently controlled by scrubbers. The Permittee is required to perform daily monitoring of the pressure drop and the flow rate for the scrubbers, which ensures proper operation of the scrubbers. Therefore, no stack testing is required for these units.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

1. The ten (10) shotblasting lines, which are controlled by five (5) scrubbers, have applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the scrubber stack exhausts shall be performed once per day during normal daylight operations when venting to the atmosphere. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 Permittee shall monitor and record the pressure drop and flow rate of each of the scrubbers used to control emissions from shotblasting lines at least once per day when the associated shotblasting lines are in operation. The pressure drop range and the minimum flow rate of the scrubber fluid for each scrubber are listed

in the table below. When for any one reading, the pressure drop or flow rate across any of the scrubbers is outside the normal range, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Scrubber ID	Process ID	Pressure Drop ranges (inches of water)	Minimum Flow Rate (gallons/min)
WDC-1	SBS-6	15-18	150
	SBS-7		
WDC-3	SBS-8	15-18	150
	SBS-9		
	SBS-10		
03-WDC-01	03-SBS-01	15-18	150
	03-SBS-04		
03-WDC-02	03-SBS-02	15-18	150
	03-SBS-03		
03-WDC-03	03-SBS-06	10-13	90

The instruments used for determining the pressure drop and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(c) In the event that a scrubber malfunction has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the scrubbers used to control PM/PM10 emissions from the shotblasting lines must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 2-8-4 (FESOP), and 326 IAC 2-2 (PSD).

2. There are no specifically applicable monitoring conditions for the melting furnaces, the aluminum scrap handling process, and the die casting process at this source.

Conclusion

The operation of this aluminum die-casting plant shall be subject to the conditions of the attached proposed FESOP No.: F147-15571-00031.

Appendix A: Emissions Calculations
PM and PM10 Emissions
From 10 Shotblasting Lines

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

Unit ID	Max. Shot input Rate (lbs/hr)	PM Emission Factor (lbs/lbs)	PTE of PM before Control (lbs/hr)	PTE of PM before Control (tons/yr)	PM10 Emission Factor (lbs/lbs PM)	PTE of PM10 before Control (lbs/hr)	PTE of PM10 before Control (tons/yr)	Scrubber ID	Control Efficiency	PTE of PM after Control (lbs/hr)	PTE of PM after Control (tons/yr)	PTE of PM10 after Control (lbs/hr)	PTE of PM10 after Control (tons/yr)
SBS-6	192,000	0.01	1,920	8,410	0.70	1,344	5,887	WDC-1	99.9%	1.92	8.41	1.34	5.89
SBS-7	192,000	0.01	1,920	8,410	0.70	1,344	5,887	WDC-1	99.9%	1.92	8.41	1.34	5.89
SBS-8	192,000	0.01	1,920	8,410	0.70	1,344	5,887	WDC-3	99.9%	1.92	8.41	1.34	5.89
SBS-9	192,000	0.01	1,920	8,410	0.70	1,344	5,887	WDC-3	99.9%	1.92	8.41	1.34	5.89
SBS-10	138,000	0.01	1,380	6,044	0.70	966	4,231	WDC-3	99.9%	1.38	6.04	0.97	4.23
03-SBS-01	138,000	0.01	1,380	6,044	0.70	966	4,231	03-WDC-01	99.9%	1.38	6.04	0.97	4.23
03-SBS-02	192,000	0.01	1,920	8,410	0.70	1,344	5,887	03-WDC-02	99.9%	1.92	8.41	1.34	5.89
03-SBS-03	192,000	0.01	1,920	8,410	0.70	1,344	5,887	03-WDC-02	99.9%	1.92	8.41	1.34	5.89
03-SBS-04	192,000	0.01	1,920	8,410	0.70	1,344	5,887	03-WDC-01	99.9%	1.92	8.41	1.34	5.89
03-SBS-06	122,400	0.01	1,224	5,361	0.70	857	3,753	03-WDC-03	99.9%	1.22	5.36	0.86	3.75
Total				**76,317**			**53,422**				**76.3**		**53.4**

* The emission factors are from grit blasting from Air Quality Permits, Vol.1, Section 3 "Abrasive Blasting" (1991 Edition) by Stappa Alapco.

Methodology

PTE of PM before Control (lbs/hr) = Max. Abrasive Usage (lbs/hr) x PM Emission Factor (lbs/lbs)
PTE of PM before Control (tons/yr) = Max. Abrasive Usage (lbs/hr) x PM Emission Factor (lbs/lbs) x 8760 hr/yr x 1 ton/2000 lbs
PTE of PM10 before Control = Potential PM Emissions x PM10 Emission Factor
PTE of PM/PM10 after Control = PTE of PM/PM10 before Control x (1 - Control Efficiency)

Appendix A: Emission Calculations
Combustion Emissions from Six (6) Melt Furnaces

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

1. From Natural Gas Combution (<100 MMBut/hr):

Total Heat Input MMBtu/hr: 104

Pollutant

		PM	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lbs/MMCF		1.9	7.6	0.6	100	5.5	84.0
Unit ID	Heat Input Capacity (MMBtu/hr)	PTE of PM (tons/yr)	PTE of PM10 (tons/yr)	PTE of SO_2 (tons/yr)	PTE of NOx (tons/yr)	PTE of VOC (tons/yr)	PTE of CO (tons/yr)
MF-1	18.0	0.15	0.60	0.05	7.88	0.43	6.62
MF-5	14.4	0.12	0.48	0.04	6.31	0.35	5.30
MF-6	19.3	0.16	0.64	0.05	8.45	0.46	7.10
MF-1S	15.0	0.12	0.50	0.04	6.57	0.36	5.52
MF-2M	23.8	0.20	0.79	0.06	10.4	0.57	8.76
MF-3N	13.4	0.11	0.45	0.04	5.87	0.32	4.93
Total	**104**	**0.86**	**3.46**	**0.27**	**45.5**	**2.50**	**38.2**

*PM10 emission factor is condensable and filterable PM10 combined.
**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3 (AP-42 Supplement D 3/98).

Methodology

PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

2. From the Back-Up Fuel (Propane) Combustion:

Heat Input Capacity MMBtu/hr: 104
Sulfur Content S (gr/100 ft^3): 15

		PM	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lbs/kgal		0.6	0.6	1.5 *(0.10S)*	19	0.5	3.2
Unit ID	Heat Input Capacity (MMBtu/hr)	PTE of PM (tons/yr)	PTE of PM10 (tons/yr)	PTE of SO_2 (tons/yr)	PTE of NOx (tons/yr)	PTE of VOC (tons/yr)	PTE of CO (tons/yr)
MF-1	18.0	0.52	0.52	1.29	16.4	0.43	2.76
MF-5	14.4	0.41	0.41	1.03	13.1	0.34	2.21
MF-6	19.3	0.55	0.55	1.39	17.6	0.46	2.96
MF-1S	15.0	0.43	0.43	1.08	13.6	0.36	2.30
MF-2M	23.8	0.68	0.68	1.71	21.6	0.57	3.65
MF-3N	13.4	0.38	0.38	0.96	12.2	0.32	2.05
Total	**104**	**2.98**	**2.98**	**7.46**	**94.5**	**2.49**	**15.9**

*Assume the PM10 emission factor is equivalent to the PM emission factor.
Emission factors are from AP-42, Chapter 1.5-1 (AP-42, 10/96).

Methodology

PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu x Emission Factor (lbs/kgal)/2,000 lb/ton

3. PTE of the Furnaces (Worst Case Scenario):

Pollutant	PM	PM10	SO_2	NOx	VOC	CO
***PTE (tons/yr)**	**2.98**	**3.46**	**7.46**	**94.5**	**2.50**	**38.2**

*PTE of these units are the worst case scenario between burning natural gas and propane.

Appendix A: Emission Calculations
Combustion Emissions from Six (6) Melt Furnaces with Limits

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

1. Potential to Emit While Using NG:

Heat Input Capacity MMBtu/hr		**Potential Throughput MMCF/yr**
104	(6 units combined)	**911**

	Pollutant					
	PM	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.87**	**3.46**	**0.27**	**45.6**	**2.51**	**38.3**

*PM10 emission factor is condensable and filterable PM10 combined.
**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

2. Limited PTE While Using Propane:

Heat Input Capacity MMBtu/hr		**Throuput Limit kgal/yr**	Sulfur Content (gr/100 ft^3) 15
104	(6 units combined)	**7,400**	

	Pollutant					
	PM	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	1.5 *(0.10S)*	19	0.5	3.2
Potential to Emi t in tons/yr	**2.22**	**2.22**	**5.55**	**70.3**	**1.85**	**11.8**

*Assume the PM10 emission factor is equivalent to the PM emission factor.
Emission factors are from AP-42, Chapter 1.5-1 (AP-42, 10/96).

Methodology

Limited PTE (tons/yr) = Throughput Limit (kgal/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

3. Limited PTE of the Furnaces (Worst Case Senario):

Pollutant	PM	PM10	SO_2	NOx	VOC	CO
***Limited PTE (tons/yr)**	**2.22**	**3.46**	**5.55**	**70.3**	**2.51**	**38.3**

*PTE of these units are the worst case scenario between burning natural gas and propane.

Appendix A: Emission Calculations
HAP Emissions
From Six (6) Melt Furnaces

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

PTE of HAPs While Burning Natural Gas (note there are no HAP emssion factors availabe for propane combustion):

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
104	(6 units combined)	911.0

	Pollutant					
Emission Factor in lbs/MMCF	Hexane 1.8E+00	Formaldehyde 7.5E-02	Toluene 3.4E-03	Benzene 2.1E-03	Nickel 2.1E-03	**Total HAPs**
Unlimited Potential to Emit (tons/yr)	**0.82**	**0.03**	**1.55E-03**	**9.57E-04**	**9.57E-04**	**0.86**

Emission factors are from AP-42, Chapter 1.4, Table 1.4-3 (AP-42, 03/98).

Methodology

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

Appendix A: Emission Calculations
Emissions from the Scrap Handling Process

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

Max. Al Throughput (lbs/hr)

12,500

	Pollutant					
	PM	PM10	SO_2	NO_x	VOC	CO
Emission Factor in lbs/ton	0.6	0.6	-	-	-	-
Potential to Emit in lbs/hr	3.75	3.75	-	-	-	-
Potential to Emit in tons/yr	16.4	16.4	-	-	-	-

Note: Emission factors are from AP-42, Table 12.10-7 for the scrap and charge handling process at gray iron foundaries (AP-42, 05/03).

Methodology

PTE (lbs/hr) = Max. Al Throughput (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton)
PTE (tons/yr) = Max. Al Throughput (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 8760 hr/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations
Emissions from the Die Casting Process

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

Max. Al Input tons/hr	Potential Throughput MMCF/yr
27.5	240.9

	Pollutant					
	PM*	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lbs/ton	-	-	0.02	0.01	0.14	-
Potential to Emit in tons/yr	-	-	**2.41**	**1.20**	**16.9**	-

Note: Emission factors are from FIRE, Version 6.24, for Aluminum Pouring/Casting (SIC 30400114).

Methodology

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

Appendix A: Emission Calculations
From Insignificant Combustion Units (Plants 1, 2, and 4)

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

1. Potential to Emit While Burning Natural Gas:

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
117	**(125 units combined)**	1024.7

	Pollutant					
	PM	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.97**	**3.89**	**0.31**	**51.2**	**2.82**	**43.0**

*PM10 emission factor is condensable and filterable PM10 combined.
**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

2. Potential to Emit Emissions While Burning Propane:

Heat Input Capacity MMBtu/hr		Potential Throughput kgals/year	Sulfur Content (gr/100 ft^3)
117	**(125 units combined)**	11198.4	15

	Pollutant					
	PM	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.5 *(0.10S)*	14	0.5	1.9
Potential to Emit in tons/yr	**2.24**	**2.24**	**8.40**	**78.4**	**2.80**	**10.6**

*Assume the PM10 emission factor is equivalent to the PM emission factor.
Emission factors are from AP-42, Chapter 1.5-1 (AP-42, 10/96).

Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu
PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu x Emission Factor (lb/kgal)/2,000 lb/ton

3. Total Potential to Emit from the Insignificant Combustion Units in Plants 1, 2, and 4:

Pollutant	PM	PM10	SO_2	NOx	VOC	CO
*Potential to Emit (tons/yr)	2.24	3.89	8.40	78.4	2.82	43.0

*PTE of these units are the worst case scenario between burning natural gas and propane.

Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From Insignificant Combustion Units (Plant 3)

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
117	**(88 units combined)**	1026.0

	Pollutant					
	PM	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.97**	**3.90**	**0.31**	**51.3**	**2.82**	**43.1**

*PM10 emission factor is condensable and filterable PM10 combined.
**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

Appendix A: Emission Calculations
Limited PTE of All Insignificant Combustion Units (Plant 1, 2, 3, and 4)

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

1. Potential to Emit with Natural Gas Usage Limit:

Heat Input Capacity MMBtu/hr		**Throuput Limit MMCF/yr**
234	**(213 units combined)**	**560**

	Pollutant					
	PM	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.53**	**2.13**	**0.17**	**28.0**	**1.54**	**23.5**

*PM10 emission factor is condensable and filterable PM10 combined.
**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

2. Potential to Emit While Buring Propane (only the units at Plants 1, 2, and 4 can use propane):

Heat Input Capacity MMBtu/hr		**Throuput Limit kgal/yr**	Sulfur Content (gr/100 ft^3)
117	**(125 units combined)**	**4000**	15

	Pollutant					
	PM*	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.5 *(0.10S)*	14	0.5	1.9
Potential to Emi t in tons/yr	**0.80**	**0.80**	**3.00**	**28.0**	**1.00**	**3.80**

*PM and PM10 emission factors are condensable and filterable PM10 combined.
Emission factors are from AP-42, Chapter 1.5-1 (AP-42, 10/96).

Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu
PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu x Emission Factor (lb/kgal)/2,000 lb/ton

3. Limited PTE for All the Insignificant Combustion Units (Worst Case Scenario):

Pollutant	PM	PM10	SO_2	NOx	VOC	CO
*Potential to Emit (tons/yr)	0.80	2.13	3.00	28.0	1.54	23.5

*PTE of these units are the worst case scenario between burning natural gas and propane.

Appendix A: Emission Calculations
HAP Emissions
From All Insignificant Combustion Units (Plant 1, 2, 3, and 4)

Company Name: Ryobi Die Casting (USA), Inc.
Address: 800 W. Mausoleum Road, Shelbyville, IN 46176
FESOP: 145-15571-00031
Reviewer: ERG/YC
Date: August 10, 2006

PTE of HAPs While Burning Natural Gas (note there are no HAP emssion factors availabe for propane combustion):

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr	Throughput Limit MMCF/yr
234	(213 units combined)	2050.7	560

	Pollutant					
Emission Factor in lbs/MMCF	Hexane 1.8E+00	Formaldehyde 7.5E-02	Toluene 3.4E-03	Benzene 2.1E-03	Nickel 2.1E-03	**Total HAPs**
Unlimited Potential to Emit (tons/yr)	**1.85**	**0.08**	**3.49E-03**	**2.15E-03**	**2.15E-03**	**1.93**
Limited Potential to Emit (tons/yr)	**0.50**	**0.02**	**9.52E-04**	**5.88E-04**	**5.88E-04**	**0.53**

Emission factors are from AP-42, Chapter 1.4, Table 1.4-3 (AP-42, 03/98).

Methodology

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
Unlimited PTE (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs
Limited PTE (tons/yr) = Throughput Limit (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs