



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Minor Source Operating Permit (MSOP)
for Modern Aluminum Castings in Vigo County

MSOP Renewal No.: M167-37375-00154

The Indiana Department of Environmental Management (IDEM) has received an application from Modern Aluminum Castings located at 1400 North 14th Street, Terre Haute, IN 47807 for a renewal of its MSOP issued on November 7, 2011. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Modern Aluminum Castings to continue to operate its existing source.

This draft MSOP Renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Vigo County Public Library
1 Library Square
Terre Haute, IN 47807

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M167-37375-00154 in all correspondence.

Comments should be sent to:

Tamara Havics
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 2-8219
Or dial directly: (317) 232-8219
Fax: (317) 232-6749 attn: Tamara Havics
E-mail: THavics@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Tamara Havics of my staff at the above address.



Jason R. Krawczyk, Section Chief
Permits Branch
Office of Air Quality



Indiana Department of Environmental Management

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Carol S. Comer
Commissioner

Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

Modern Aluminum Castings 1400 North 14th Street Terre Haute, Indiana 47807

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

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

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

Operation Permit No.: M167-37375-00154	
Issued by: Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum foundry making sand-casted parts, using clean melt charge.

Source Address:	1400 North 14th Street, Terre Haute, Indiana 47807
General Source Phone Number:	812-232-0007
SIC Code:	3365 (Aluminum Foundries)
County Location:	Vigo (Harrison Township)
Source Location Status:	Nonattainment for SO ₂ standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas-fired melting process, with a combined maximum throughput melting rate of 0.76 tons per hour, and consisting of the following:
 - (1) One (1) reverberatory furnace, identified as REV-1, constructed in January, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (2) One (1) reverberatory furnace, identified as REV-2, constructed in July, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (3) One (1) natural gas-fired crucible furnace, identified as Cru-1, constructed in January, 2009, with a maximum throughput melt rate of 200 pounds per hour (0.10 tons per hour), melting only clean charge, with a maximum heat input rate of 0.230 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
- (b) One (1) Molding and Sand System, with a combined maximum sand throughput rate of 18.56 tons per hour, and a combined maximum metal throughput rate of 0.76 tons per hour, using baghouse DC-SAND-1 for particulate control, exhausting through stack SV-SAND-1, and consisting of the following:

- (1) One (1) sand system, identified as Sand, constructed in January, 1972, consisting of a mullor mixer, and conveyors;
 - (2) One (1) B&P 2016 sand molding machine, identified as Mold-1, constructed in January, 1993;
 - (3) One (1) B&P 2620 sand molding machine, identified as Mold-2, constructed in January, 1997;
 - (4) One (1) Osborn Roto-lift sand molding operation, consisting of two machines, identified as Mold-3;
 - (5) One (1) Airset sand molding machine, identified as AMold;
 - (6) One (1) permanent mold process, identified as PMold, consisting of two (2) machines, using no sand in its process;
 - (7) One (1) Jolt Squeezer machine operation, identified as Squeeze Mold-1.
- (c) One (1) Pouring, Casting, and Cooling system, and one (1) Shakeout and Knockout system, with a maximum metal throughput rate of 0.76 tons per hour and a maximum sand throughput of 18.56 tons per hour.
- (d) Three (3) Supplemental Sand Silos, pneumatically loaded, consisting of the following:
- (1) Two (2) supplemental sand silos, identified as SSAND-1 and SSAND-2, constructed in January, 1997, each with a maximum storage capacity of silica sand of 20 tons and a maximum annual throughput rate of 50 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-1, and SV-SSAND-2, respectively;
 - (2) One (1) supplemental sand silo, identified as SSAND-3, constructed in January, 2001, with a maximum storage capacity of silica sand of 15 tons, and a maximum annual throughput rate of 38 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-3.
- (e) One (1) Finishing operation, with a maximum metal throughput rate of 0.76 tons per hour, consisting of the following:
- (1) One (1) bandsaw, identified as BSaw-1, constructed in January, 1954, using no controls, and exhausting inside the plant;
 - (2) One (1) bandsaw, identified as BSaw-2, constructed in January, 1991, using no controls, and exhausting inside the plant.
 - (3) Twenty (20) grinders, collectively identified as Grind-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (4) One (1) Hand Burring Machine, identified as Burr-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (5) One (1) Vibratory Wet Deburr Machine, identified as VBurr-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (6) Two (2) Rivet Machines, installed in 2001, using no controls, and exhausting inside the plant;

- (7) Twenty (20) burr guns, installed in 2001, using no controls, and exhausting inside the plant;
- (8) Twenty (20) hand sanders, installed in 2001, using no controls, and exhausting inside the plant.
- (f) One (1) Shot Peen Machine, identified as Peen-1, constructed in January, 1976, with a maximum metal throughput rate of 0.76 tons per hour, using no controls, exhausting to SV-Peen-1.
- (g) One (1) core-making process, with a combined maximum throughput capacity of 0.10 tons per hour, consisting of the following:
 - (1) One (1) Cold Box Core Making operation, identified as CBCore, constructed in January, 1996, consisting of two machines, using no controls, and exhausting through stack SV-CBCore;
 - (2) One (1) Warm Box Core Making operation, identified as WBCore, constructed in January, 1980, consisting of two core machines, using no controls, and exhausting inside the plant;
 - (3) One (1) Shell/Harrison Core Making operation, identified as SHCore, constructed in January, 2010, consisting of two core machines and a natural gas-fired combustion unit with a maximum heat input capacity of 0.15 MMBtu/hr, using no controls, and exhausting inside the plant;
 - (4) One (1) Airset Core Making operation, identified as ACore, constructed in January, 2010, using no controls, and exhausting inside the plant;
 - (5) One (1) Oil Sand Core Making operation, identified as OSCore, constructed in January, 1955, consisting of two core machines and one (1) natural gas-fired combustion drying oven, with a maximum heat input capacity of 0.30 MMBtu/hr, using no controls, and exhausting inside the plant;
 - (6) Six (6) natural gas-fired drying ovens with a combined maximum heat input capacity of 0.66 MMBtu/hr, using no controls, and exhausting inside the plant.
- (h) One (1) welding process, consisting of the following:
 - (1) One (1) MIG Welding Station, identified as MIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant;
 - (2) One (1) TIG Welding Station, identified as TIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant.
- (i) One (1) Paint and Powder Coating Booth, identified as PB-1, constructed in January, 2009, using one high volume low pressure gun and powder gun, with a maximum throughput of 438 gallons per year, using dry filters for particulate control, exhausting through stack SV-PB-1.
- (j) Various natural gas-fired combustion units, consisting of space heaters and office heaters, with a combined maximum heat input capacity of 0.575 MMBtu/hr, using no controls, and exhausting inside the plant.

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, M167-37375-00154, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. 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 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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

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

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (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.

The Permittee shall implement the PMPs.

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

If, due to circumstances beyond the 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 and Enforcement Branch, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

- (c) 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.
- (d) 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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M167-37375-00154 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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

B.12 Permit Renewal [326 IAC 2-6.1-7]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

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

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

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

- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

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

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Permit Revocation [326 IAC 2-1.1-9]

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

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

C.2 Opacity [326 IAC 5-1]

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

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

C.3 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.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 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.6 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.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

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

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

C.8 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than

twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to 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 excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ

that retesting in one hundred eighty (180) 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.

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

C.14 Malfunctions Report [326 IAC 1-6-2]

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

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

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

C.16 General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]

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

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

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) natural gas-fired melting process, with a combined maximum throughput melting rate of 0.76 tons per hour, and consisting of the following:
 - (1) One (1) reverberatory furnace, identified as REV-1, constructed in January, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (2) One (1) reverberatory furnace, identified as REV-2, constructed in July, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (3) One (1) natural gas-fired crucible furnace, identified as Cru-1, constructed in January, 2009, with a maximum throughput melt rate of 200 pounds per hour (0.10 tons per hour), melting only clean charge, with a maximum heat input rate of 0.230 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
- (b) One (1) Molding and Sand System, with a combined maximum sand throughput rate of 18.56 tons per hour, and a combined maximum metal throughput rate of 0.76 tons per hour, using baghouse DC-SAND-1 for particulate control, exhausting through stack SV-SAND-1, and consisting of the following:
 - (1) One (1) sand system, identified as Sand, constructed in January, 1972, consisting of a mullor mixer, and conveyors;
 - (2) One (1) B&P 2016 sand molding machine, identified as Mold-1, constructed in January, 1993;
 - (3) One (1) B&P 2620 sand molding machine, identified as Mold-2, constructed in January, 1997;
 - (4) One (1) Osborn Roto-lift sand molding operation, consisting of two machines, identified as Mold-3;
 - (5) One (1) Airset sand molding machine, identified as AMold;
 - (6) One (1) permanent mold process, identified as PMold, consisting of two (2) machines, using no sand in its process.
 - (7) One (1) Jolt Squeezer machine operation, identified as Squeeze Mold-1.
- (c) One (1) Pouring, Casting, and Cooling system, and one (1) Shakeout & Knockout system, with a maximum metal throughput rate of 0.76 tons per hour and a maximum sand throughput of 18.56 tons per hour.
- (d) Three (3) Supplemental Sand Silos, pneumatically loaded, consisting of the following:
 - (1) Two (2) supplemental sand silos, identified as SSAND-1 and SSAND-2, constructed in January, 1997, each with a maximum storage capacity of silica sand of 20 tons and a

- maximum annual throughput rate of 50 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-1, and SV-SSAND-2, respectively;
- (2) One (1) supplemental sand silo, identified as SSAND-3, constructed in January, 2001, with a maximum storage capacity of silica sand of 15 tons, and a maximum annual throughput rate of 38 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-3.
- (e) One (1) Finishing operation, with a maximum metal throughput rate of 0.76 tons per hour, consisting of the following:
- (1) One (1) bandsaw, identified as BSaw-1, constructed in January, 1954, using no controls, and exhausting inside the plant;
 - (2) One (1) bandsaw, identified as BSaw-2, constructed in January, 1991, using no controls, and exhausting inside the plant.
 - (3) Twenty (20) grinders, collectively identified as Grind-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (4) One (1) Hand Burring Machine, identified as Burr-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (5) One (1) Vibratory Wet Deburr Machine, identified as VBurr-1, constructed in January, 2001, using no controls, and exhausting inside the plant.
 - (6) Two (2) Rivet Machines, installed in 2001, using no controls, and exhausting inside the plant;
 - (7) Twenty (20) burr guns, installed in 2001, using no controls, and exhausting inside the plant;
 - (8) Twenty (20) hand sanders, installed in 2001, using no controls, and exhausting inside the plant.
- (f) One (1) Shot Peen Machine, identified as Peen-1, constructed in January, 1976, with a maximum metal throughput rate of 0.76 tons per hour, using no controls, exhausting to SV Peen-1.
- (g) One (1) core-making process, with a combined maximum throughput capacity of 0.10 tons per hour, consisting of the following:
- (1) One (1) Cold Box Core Making operation, identified as CBCore, constructed in January, 1996, consisting of two machines, using no controls, and exhausting through stack SV-CBCore;
 - (2) One (1) Warm Box Core Making operation, identified as WBCore, constructed in January, 1980, consisting of two core machines, using no controls, and exhausting inside the plant;
 - (3) One (1) Shell/Harrison Core Making operation, identified as SHCore, constructed in January, 2010, consisting of two core machines and a natural gas-fired combustion unit with a maximum heat input capacity of 0.15 MMBtu/hr, using no controls, and exhausting inside the plant;

- (4) One (1) Airset Core Making operation, identified as ACore, constructed in January, 2010, using no controls, and exhausting inside the plant;
- (5) One (1) Oil Sand Core Making operation, identified as OSCore, constructed in January, 1955, consisting of two core machines and one (1) natural gas-fired combustion drying oven, with a maximum heat input capacity of 0.30 MMBtu/hr, using no controls, and exhausting inside the plant.
- (6) Six (6) natural gas-fired drying ovens with a combined maximum heat input capacity of 0.66 MMBtu/hr, using no controls, and exhausting inside the plant;
- (h) One (1) welding process, consisting of the following:
 - (1) One (1) MIG Welding Station, identified as MIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant;
 - (2) One (1) TIG Welding Station, identified as TIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant.
- (i) One (1) Paint and Powder Coating Booth, identified as PB-1, constructed in January, 2009, using one high volume low pressure gun and powder gun, with a maximum throughput of 438 gallons per year, using dry filters for particulate control, exhausting through stack SV-PB-1.
- (j) Various natural gas-fired combustion units, consisting of space heaters and office heaters, with a combined maximum heat input capacity of 0.575 MMBtu/hr, using no controls, and exhausting inside the plant.

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

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

D.1.1 Particulate Emissions [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, particulate matter emissions from each emission unit at this source shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm), or three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall melt only clean charge in the two (2) reverberatory melt furnaces and one (1) crucible furnace, identified as REV-1, REV-2, and Cru-1, at all times.
- (b) Clean charge shall be defined as furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650°F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

Compliance with this condition shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable because it will not be one (1) of the twenty-eight (28) source categories. Compliance with this condition shall also render the requirements of 40

CFR 63, Subpart RRR not applicable.

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

A Preventive Maintenance Plan is required for the sand system and its control device, DC-Sand-1. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Particulate Control

In order to assure compliance with Condition D.1.1, the baghouse DC-SAND-1 for particulate control shall be in operation and control emissions from the sand and molding system at all times that the sand and molding system, is in operation.

D.1.5 Testing [326 IAC 2-1.1-11]

In order to verify the emission factor used for determining the potential to emit calculations for the Molding and Sand System the Permittee shall perform a material mass balance for the sand system for PM, PM10, and PM2.5, not later than 180 days from the commencement of operation after issuance of this permit, MSOP Renewal No. M167-37375-00154, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 shall include filterable and condensable particulate matter.

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

D.1.6 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across baghouse DC-SAND-1 at least once per day when the associated sand system unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.6, the Permittee shall maintain daily records of the pressure drop across the baghouse(s). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the sand system did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Modern Aluminum Castings
Address:	1400 North 14th Street
City:	Terre Haute, Indiana 47807
Phone #:	812-232-0007
MSOP #:	M167-37375-00154

I hereby certify that Modern Aluminum Castings is :

still in operation.

no longer in operation.

I hereby certify that Modern Aluminum Castings is :

in compliance with the requirements of MSOP M167-37375-00154.

not in compliance with the requirements of MSOP M167-37375-00154.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

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

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

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

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

Source Background and Description

Source Name:	Modern Aluminum Castings
Source Location:	1400 North 14th Street, Terre Haute, IN 47807
County:	Vigo (Harrison Township)
SIC Code:	3365 (Aluminum Foundries)
Permit Renewal No.:	M167-37375-00154
Permit Reviewer:	Tamara Havics

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Modern Aluminum Castings relating to the operation of stationary aluminum foundry making sand-casted parts, using clean melt charge. On July 6, 2016, Modern Aluminum Casting Co., Inc. submitted an application to the OAQ requesting to renew its operating permit. Modern Aluminum Casting Co., Inc. was issued an MSOP M167-30578-00154 on November 7, 2011.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) One (1) natural gas-fired melting process, with a combined maximum throughput melting rate of 0.76 tons per hour, and consisting of the following:
 - (1) One (1) reverberatory furnace, identified as REV-1, constructed in January, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (2) One (1) reverberatory furnace, identified as REV-2, constructed in July, 2002, with a maximum throughput melt rate of 660 pounds per hour (0.33 tons per hour), melting only clean charge, with a maximum heat input rate of 1.5 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
 - (3) One (1) natural gas-fired crucible furnace, identified as Cru-1, constructed in January, 2009, with a maximum throughput melt rate of 200 pounds per hour (0.10 tons per hour), melting only clean charge, with a maximum heat input rate of 0.230 MMBtu/hr, using no controls, and exhausting inside the plant. This furnace uses no flux materials.
- (b) One (1) Molding and Sand System, with a combined maximum sand throughput rate of 18.56 tons per hour, and a combined maximum metal throughput rate of 0.76 tons per hour, using baghouse DC-SAND-1 for particulate control, exhausting through stack SV-SAND-1, and consisting of the following:
 - (1) One (1) sand system, identified as Sand, constructed in January, 1972, consisting of a mullor mixer, and conveyors;

- (2) One (1) B&P 2016 sand molding machine, identified as Mold-1, constructed in January, 1993;
 - (3) One (1) B&P 2620 sand molding machine, identified as Mold-2, constructed in January, 1997;
 - (4) One (1) Osborn Roto-lift sand molding operation, consisting of two machines, identified as Mold-3;
 - (5) One (1) Airset sand molding machine, identified as AMold;
 - (6) One (1) permanent mold process, identified as PMold, consisting of two (2) machines, using no sand in its process;
 - (7) One (1) Jolt Squeezer machine operation, identified as Squeeze Mold-1.
- (c) One (1) Pouring, Casting, and Cooling system, and one (1) Shakeout and Knockout system, with a maximum metal throughput rate of 0.76 tons per hour and a maximum sand throughput of 18.56 tons per hour.
- (d) Three (3) Supplemental Sand Silos, pneumatically loaded, consisting of the following:
- (1) Two (2) supplemental sand silos, identified as SSAND-1 and SSAND-2, constructed in January, 1997, each with a maximum storage capacity of silica sand of 20 tons and a maximum annual throughput rate of 50 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-1, and SV-SSAND-2, respectively;
 - (2) One (1) supplemental sand silo, identified as SSAND-3, constructed in January, 2001, with a maximum storage capacity of silica sand of 15 tons, and a maximum annual throughput rate of 38 tons per year, using a bin vent for particulate control, and exhausting through stack SV-SSAND-3.
- (e) One (1) Finishing operation, with a maximum metal throughput rate of 0.76 tons per hour, consisting of the following:
- (1) One (1) bandsaw, identified as BSaw-1, constructed in January, 1954, using no controls, and exhausting inside the plant;
 - (2) One (1) bandsaw, identified as BSaw-2, constructed in January, 1991, using no controls, and exhausting inside the plant.
 - (3) Twenty (20) grinders, collectively identified as Grind-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (4) One (1) Hand Burring Machine, identified as Burr-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (5) One (1) Vibratory Wet Deburr Machine, identified as VBurr-1, constructed in January, 2001, using no controls, and exhausting inside the plant;
 - (6) Two (2) Rivet Machines, installed in 2001, using no controls, and exhausting inside the plant;
 - (7) Twenty (20) burr guns, installed in 2001, using no controls, and exhausting inside the plant;

- (8) Twenty (20) hand sanders, installed in 2001, using no controls, and exhausting inside the plant.
- (f) One (1) Shot Peen Machine, identified as Peen-1, constructed in January, 1976, with a maximum metal throughput rate of 0.76 tons per hour, using no controls, exhausting to SV-Peen-1.
- (g) One (1) core-making process, with a combined maximum throughput capacity of 0.10 tons per hour, consisting of the following:
 - (1) One (1) Cold Box Core Making operation, identified as CBCore, constructed in January, 1996, consisting of two machines, using no controls, and exhausting through stack SV-CBCore;
 - (2) One (1) Warm Box Core Making operation, identified as WBCore, constructed in January, 1980, consisting of two core machines, using no controls, and exhausting inside the plant;
 - (3) One (1) Shell/Harrison Core Making operation, identified as SHCore, constructed in January, 2010, consisting of two core machines and a natural gas-fired combustion unit with a maximum heat input capacity of 0.15 MMBtu/hr, using no controls, and exhausting inside the plant;
 - (4) One (1) Airset Core Making operation, identified as ACore, constructed in January, 2010, using no controls, and exhausting inside the plant;
 - (5) One (1) Oil Sand Core Making operation, identified as OSCore, constructed in January, 1955, consisting of two core machines and one (1) natural gas-fired combustion drying oven, with a maximum heat input capacity of 0.30 MMBtu/hr, using no controls, and exhausting inside the plant;
 - (6) Six (6) natural gas-fired drying ovens with a combined maximum heat input capacity of 0.66 MMBtu/hr, using no controls, and exhausting inside the plant.
- (h) One (1) welding process, consisting of the following:
 - (1) One (1) MIG Welding Station, identified as MIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant;
 - (2) One (1) TIG Welding Station, identified as TIG1, constructed in January, 1960, with a maximum electrode rod consumption of 0.10 pounds per hour, using no controls, and exhausting inside the plant.
- (i) One (1) Paint and Powder Coating Booth, identified as PB-1, constructed in January, 2009, using one high volume low pressure gun and powder gun, with a maximum throughput of 438 gallons per year, using dry filters for particulate control, exhausting through stack SV-PB-1.
- (j) Various natural gas-fired combustion units, consisting of space heaters and office heaters, with a combined maximum heat input capacity of 0.575 MMBtu/hr, using no controls, and exhausting inside the plant.

Existing Approvals

Since the issuance of the MSOP No. M167-30578-00154 on November 7, 2011, the source has constructed or has been operating under the following additional approvals:

- (a) Notice Only Change No. 167-31183-00154, issued on December 8, 2011.

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

Enforcement Issue

- (a) IDEM is aware that testing (material mass balance) for alternative emission factor verification for the Molding and Sand System has not been completed as required in permit M167-30578-00154.
- (b) IDEM is reviewing this matter and will take appropriate action. The compliance schedule in this proposed permit will satisfy the requirements of the above stated requirement.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Vigo County (Harrison Township).

Pollutant	Designation
SO ₂	Non-attainment effective October 4, 2013, for the Fayette and Harrison Twp. Better than national standards for the remainder of the county.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Vigo County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) **SO₂**
 U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, has designated Vigo County, Harrison Township as nonattainment for SO₂. Therefore, SO₂ emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- (d) **Other Criteria Pollutants**
 Vigo County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability. Although this operation is an aluminum foundry, it melts only a clean charge, and it is not considered a secondary metal production plant, and, therefore, is not considered one of the twenty-eight source categories as defined in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7.

Greenhouse Gas Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	224.14
PM ₁₀	78.97
PM _{2.5}	78.65
SO ₂	0.09
NO _x	3.00
VOC	13.43
CO	20.65
Single HAP	1.47 (Hexane)
Total HAP	3.77

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

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, the potential to emit of PM10 and PM2.5 is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Natural Gas Combustion Units	0.01	0.06	0.06	negl.	0.74	0.04	0.62	0.01	negl. Formaldehyde
Melting Process	4.99	4.99	4.99	0.01	2.23	0.10	0.06	0	0
Molding, Sand System, and Sand Silos	126.92	43.94	43.94	0.00	0.00	0.00	0.00	0	0
Pouring/Casting/Cooling Process	13.98	6.86	6.86	0.07	0.03	0.47	19.97	0	0
Shakeout & Knockout	10.65	7.46	7.46	0.00	0.00	3.99	0.00	0	0
Finishing Operation	56.59	5.66	5.66	0.00	0.00	0.0	0.00	0	0
Shot Peen Machine	7.02	7.02	7.02	0.00	0.00	0.00	0.00	0	0
Core Making Process	0.00	0.00	0.00	0.00	0.00	7.70	0.00	3.76	1.47
Welding Process	negl.	negl.	negl.	0.00	0.00	0.00	0.00	negl.	negl.
Paint/Powder Coating Process	2.63	2.63	2.63	0.00	0.00	1.13	0.00	0	0
Fugitive Paved/Unpaved Roads	1.33	0.35	0.04	0.00	0.00	0.00	0.00	0	0
Total PTE of Entire Source	224.14	78.97	78.65	0.09	3.00	13.43	20.65	3.77	1.47 Formaldehyde
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	NA	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	-	-	-	100	-	-	-	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant". **PM _{2.5} listed is direct PM _{2.5} .									

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

- (b) The requirements of the Standards of Performance for Ferroalloy Production Facilities , 40 CFR Part 60, Subpart Z (326 IAC 12), are not included in this permit because the source does not operate an electric submerged arc furnace, as defined in 40 CFR 60.261(a).
- (c) The requirements of the Standards of Performance for Primary Aluminum Production Plants, 326 IAC 12, 40 CFR Part 60, Subpart S (326 IAC 12), are not included in this permit because the source is not a primary aluminum reduction plant, as defined in 40 CFR 60.191.
- (d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Primary Aluminum Reduction Plants, 40 CFR 63.840, Subpart LL, are not included in this permit because the source is not a primary aluminum reduction plant, as defined in 40 CFR 63.842.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63, Subpart RRR, are not included in this permit because the source does not meet the definition of a secondary aluminum production facility, as defined in 40 CFR 63.1503. The definition of a secondary aluminum production states that for purposes of this subpart, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. This source is an aluminum foundry that melts only clean charge, customer returns, or internal scrap and does not operate a sweat furnace, thermal chip dryer or scrap dryer/delacquering kiln/decoating kiln. Therefore, the requirements of 40 CFR 63, Subpart RRR are not applicable,
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Nonferrous Metals at Area Source - Zinc, Cadmium, or Beryllium, 40 CFR 63, Subpart GGGGGG, are not included in this permit because this facility is not a zinc or beryllium production facility, as defined in 40 CFR 63.11167.

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing - Area Sources, 40 CFR 63, Subpart TTTTTT, are not included in this permit, because the source does not meet the definition of a secondary nonferrous metals processing facility, as defined in 40 CFR 63.11472.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries, 40 CFR 63, Subpart ZZZZZZ (6Z), are not included in this permit. Although the source is an area source and an aluminum foundry, it does not use material containing one or more aluminum foundry HAP as defined in 40 CFR 63.11556.
- (j) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

- (a) 326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.
- (b) 326 IAC 1-5-2 (Emergency Reduction Plans)
The source is subject to 326 IAC 1-5-2.
- (c) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
See explanation under Potential to Emit After Issuance section above.
In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall melt only clean charge in the two (2) reverberatory melt furnaces and one (1) crucible furnace, identified as REV-1, REV-2, and Cru-1, at all times.

Clean charge shall be defined as furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650°F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

Compliance with this condition shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable because it will not be one (1) of the twenty-eight (28) source categories. Compliance with this condition shall also render the requirements of 40 CFR 63, Subpart RRR not applicable.
- (d) 326 IAC 2-3 (Emission Offset)
See explanation under Potential to Emit After Issuance section above.
- (e) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
See explanation under Potential to Emit After Issuance section above.
- (f) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of PM10, PM2.5, SO2, NOx, VOC, and CO are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1
- (g) 326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte

County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

- (h) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2(2) (Opacity Limitations for Vigo County), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (i) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
This source is not subject to the provision of 326 IAC 6-3 because it is already subject to the emission limits requirements of 326 IAC 6.5, and, is therefore exempt from this rule pursuant to 326 IAC 6-3-1(c)(3). Therefore, the requirements of 326 IAC 6-3-2 do not apply.
- (j) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (k) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because there are no fugitive particulate emissions greater than 25 tons per year.
- (l) 326 IAC 6.5 (Particulate Matter Limitations except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Vigo County and its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. This source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10, therefore the requirements of 326 IAC 6.5-1-2(a) apply to each emission unit.
- (m) 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations)
The potential SO₂ emissions from each emission unit are less than twenty-five (25) tons per year and ten (10) pounds per hour, respectively. Therefore, the requirements of 326 IAC 7-1.1-2 do not apply, and are not included in this permit.
- (n) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The requirements of 326 IAC 8-1-6 are not included in the permit, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (o) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (p) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 6.5 (Particulate Matter Limitations except Lake County)
 - (1) Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions, from each of the particulate matter generating units, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).
 - (2) The requirements of 326 IAC 6.5-1-2(h) are not included in this permit for the one (1) Paint and Powder Coating Booth, identified as PB-1, because the booth uses less than five (5) gallons of coating per day. Therefore, the requirements of 326 IAC 6.5-1-2(h) do not apply.
- (b) 326 IAC 8-2-9 (VOC Rules for Surface Coating)
 The paint booth, identified as PB-1, is not subject to the requirements of 326 IAC 8-2-9 because the uncontrolled potential to emit VOC is less than fifteen (15) pounds per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply.

Compliance Determination and Monitoring Requirements

- (a) The compliance determination requirements applicable to this source are as follows:
 - (1) The baghouse DC-SAND-1 for particulate control shall be in operation at all times that the sand and molding system is in operation.
- (b) The compliance monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Baghouse DC-SAND-1	Pressure Drop	Once per day
Baghouse DC-SAND-1	Visible emissions	Once per day

These monitoring conditions are necessary because Baghouse DC-SAND-1 must operate properly to ensure compliance with 326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County).

- (c) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Sand System	Stack SV-SAND-1	PM, PM10 and PM2.5	Not later than 180 days of re-commencement of operation after issuance of permit	One time

The sand system is subject to material mass balance testing because the emission factors used are alternative emission factors that were conditionally approved by IDEM, subject to a test to verify these factors.

Note: The Permittee only melts metal when economically beneficial and has not melted in several months. Therefore the emission factor verification material mass balance testing shall be performed not later than 180 days after recommencement of melting operations.

The Permittee shall notify the IDEM, OAQ upon re-commencement of operations after issuance of this permit.

Proposed Changes

The following changes listed below are due to the proposed renewal. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

1. Section A.1 was revised to include township location and nonattainment for SO₂ standard.
2. Section A.2 was revised to include the heater for the Shell/Harrison Core Making operation.
3. Sections B and C were revised to reflect current model language. Bold and strikethrough are not shown for these sections.
4. Condition D.1.5 Testing was revised to require the testing be performed not later than 180 days after issuance of MSOP Renewal No. M167-37375-00154 since the original emission factor verification testing was not performed.
5. Conditions D.1.5, D.1.6, and D.1.8 were revised to reflect the current model language.
6. Original Condition D.1.6 and its associated recordkeeping requirements have been removed from the permit. IDEM, OAQ currently does not require two compliance monitoring methods for a single control device. Subsequent conditions were renumbered.
7. Condition D.1.7 Broken or Failed Bag Detection was added.

....

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

The Permittee owns and operates a stationary aluminum foundry making sand-casted parts, using clean melt charge.

Source Address:	1400 North 14th Street, Terre Haute, Indiana 47807
General Source Phone Number:	812-232-0007
SIC Code:	3365 (Aluminum Foundries)
County Location:	Vigo (Harrison Township)
Source Location Status:	Nonattainment for SO₂ standard Attainment for all other criteria pollutants

....

A.2 Emission Units and Pollution Control Equipment Summary

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

....

- (g) One (1) core-making process, with a combined maximum throughput capacity of 0.10 tons per hour, consisting of the following:
 - (1) One (1) Cold Box Core Making operation, identified as CBCore, constructed in January, 1996, consisting of two machines, using no controls, and exhausting through stack SV-CBCore;
 - (2) One (1) Warm Box Core Making operation, identified as WBCore, constructed in January, 1980, consisting of two core machines, using no controls, and exhausting inside the plant;
 - (3) One (1) Shell/Harrison Core Making operation, identified as SHCore, constructed in January, 2010, consisting of two core machines **and a natural gas-fired combustion unit with a maximum heat input capacity of 0.15 MMBtu/hr, using no controls, and exhausting inside the plant;**

....

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) In order to render **the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))** not applicable, the Permittee shall melt only clean charge in the two **(2)** reverberatory melt furnaces and one **(1)** crucible furnace, identified as REV-1, REV-2, and Cru-1, at all times.
- (b) Clean charge shall be defined as furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650°F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

Compliance with this condition shall render **the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))** not applicable because it will not be one (1) of the twenty-eight (28) source categories. Compliance with this condition shall also render the requirements of 40 CFR 63, Subpart RRR not applicable.

....

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

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the sand system and its control device, DC-Sand-1. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

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

D.1.4 Particulate Control

~~In order to assure compliance~~ ~~comply with Condition D.1.1,~~ the Permittee shall comply with the following:

- ~~(a)~~ ~~The baghouse DC-SAND-1 for particulate control shall be in operation~~ **and control emissions from the sand and molding system** at all times that the sand and molding system, is in operation.

D.1.5 Testing [326 IAC 2-1.1-11]

~~In order to verify the emission factor used for determining the potential to emit calculations for the Molding and Sand System demonstrate the compliance status with Condition D.1.4,~~ the Permittee shall perform a material mass balance for the sand system for PM, PM10, and PM2.5, ~~within not later than 180 days from the commencement of operation after~~ issuance of this permit, **MSOP Renewal No. M167-37375-00154**, utilizing methods approved by the Commissioner. **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. **PM10 and PM2.5 shall include filterable and condensable particulate matter.**

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

D.1.6 Visible Emissions Notations

- ~~(a)~~ ~~Visible emission notations of the sand system stack exhaust, stack SV-SAND-1, shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

- ~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- ~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- ~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~
- ~~(e) 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.1.67 Baghouse Parametric Monitoring

- ~~(a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the sand system at least once per day when the sand system is operating. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 inches of water 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.~~

The Permittee shall record the pressure drop across baghouse DC-SAND-1 at least once per day when the associated sand system unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

D.1.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the**

requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.8 Record Keeping Requirements

- ~~(a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of sand system stack exhaust, stack SV-SAND-1. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the sand system did not operate that day).~~
- (ab)** To document the compliance status with Condition D.1.76, the Permittee shall maintain daily records of the pressure drop across the baghouse(s). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the sand system did not operate that day).
- (be)** **Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.**~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.~~

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 6, 2016.

Conclusion

The operation of this stationary aluminum foundry making sand-casted parts, using clean melt charge shall be subject to the conditions of the attached MSOP Renewal No.: M167-37375-00154.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Tamara Havics at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8219 or toll free at 1-800-451-6027 extension 2-8219.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emission Calculations
Summary of Emissions**

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

Uncontrolled Potential Emissions									
Emission Unit	PM	PM-10	PM-2.5	SO ₂	NO _x	VOC	CO	Worst HAP	Total HAPs
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
								(Formaldehyde)	
Natural Gas Combustion Units	0.01	0.06	0.06	0.004	0.74	0.04	0.62	5.54E-04	0.01
Melting Process	4.99	4.99	4.99	0.01	2.23	0.10	0.06	0	0
Molding, Sand System, and Sand Silos	126.92	43.94	43.94	0.00	0.00	0.00	0.00	0	0
Pouring/Casting/Cooling Process	13.98	6.86	6.86	0.07	0.03	0.47	19.97	0	0
Shakeout & Knockout	10.65	7.46	7.46	0.00	0.00	3.99	0.00	0	0
Finishing Operation	56.59	5.66	5.66	0.00	0.00	0.0	0.00	0	0
Shot Peen Machine	7.02	7.02	7.02	0.00	0.00	0.00	0.00	0	0
Core Making Process	0.00	0.00	0.00	0.00	0.00	7.70	0.00	1.47	3.76
Welding Process	4.82E-03	4.82E-03	4.82E-03	0.00	0.00	0.00	0.00	0	0
Paint/Powder Coating Process	2.63	2.63	2.63	0.00	0.00	1.13	0.00	0	0
Fugitive Paved/Unpaved Roads	1.33	0.35	0.04	0.00	0.00	0.00	0.00	0	0
Total	224.14	78.97	78.65	0.09	3.00	13.43	20.65	1.47	3.77

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

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

Reverb furnace REV-1 @ 1.5 MMBtu/hr	***
Reverb furnace REV-2 @ 1.5 MMBtu/hr	***
Crucible furnace, Cru-1, @ 0.230 MMBtu/hr	***
Dryer ovens, 6@ 0.11 MMBtu/hr, each	0.66
Shell Core htr, 1 @ 0.15 MMBtu/hr	0.15
Oil sand core dryer 1@0.30 MMBtu/hr	0.30
Space htrs, office htrs, total 0.575 MMBtu/hr	<u>0.58</u>
Total MMBtu/hr	1.69

Heat Input Capacity MMBtu/hr		HHV mmBtu mmscf	Potential Throughput MMCF/yr
1.69	total less furnaces	1000	14.8
4.92	total with furnaces	1000	43.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.014	0.056	0.004	0.738	0.041	0.620

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
 *** Furnance Emissions are not included because they are counted in the Melting Process worksheet of these calculations.

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics					Totals
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.550E-05	8.856E-06	5.535E-04	1.328E-02	2.509E-05	1.389E-02

Emission Factor in lb/MMcf	HAPs - Metals					Totals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.690E-06	8.118E-06	1.033E-05	2.805E-06	1.550E-05	4.044E-05

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

Total HAPs 0.01

**Appendix A: Emission Calculations
Furnaces**

Company Name: Modern Aluminum Castings
 Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
 Permit Number: MSOP 167-37375-00154
 Reviewer: Tamara Havics
 Application Date: July 6, 2016

Reverberatory Furnace REV-1, using no controls

TYPE OF MATERIAL	Throughput			Capacity million British thermal units per hour/hr	Capacity mmcf/hr	
	LBS/HR	1 TON/2000 lbs	TON/HR			
Aluminum, with no flux, using clean-charge melt	660	2000	0.33	1.50	0.0015	
	PM lb/ton lb/mmcf	PM10 / PM2.5 1.50	SOx 1.05	NOx 157.5	VOC 7.35	CO 4.20
Potential Emissions lbs/hr	0.50	0.50	0.0016	0.236	0.0110	0.006
Potential Emissions lbs/day	11.9	11.9	0.038	5.7	0.265	0.151
Potential Emissions tons/year	2.17	2.17	0.007	1.03	0.048	0.028

Source of Emission Factors: based on determination of clean charge melt factors used in Cast Metals Technology permit (135-00024), and accepted for this source.
 Emission Factors from STAPPA/LAPCO Handbook Vol. 1, Section 11
 There are no flux materials used in this furnace.
 PM and PM-10/2.5 emissions based on tons per hour throughput; SO2, NOx, VOC, and CO are based on natural gas mmcf/hr.

Reverberatory Furnace REV-2, using no controls

TYPE OF MATERIAL	Throughput			Capacity million British thermal units per hour/hr	Capacity mmcf/hr	
	LBS/HR	1 TON/2000 lbs	TON/HR			
Aluminum, with no flux, using clean-charge melt	660	2000	0.33	1.50	0.0015	
	PM lb/ton lb/mmcf	PM10 / PM2.5 1.50	SOx 1.05	NOx 157.5	VOC 7.35	CO 4.20
Potential Emissions lbs/hr	0.50	0.50	0.0016	0.236	0.0110	0.006
Potential Emissions lbs/day	11.9	11.9	0.038	5.7	0.265	0.151
Potential Emissions tons/year	2.17	2.17	0.007	1.03	0.048	0.028

Source of Emission Factors: based on determination of clean charge melt factors used in Cast Metals Technology permit (135-00024), and accepted for this source.
 Emission Factors from STAPPA/LAPCO Handbook Vol. 1, Section 11
 There are no flux materials used in this furnace.
 PM, PM10 and PM2.5 emissions based on tons per hour throughput; SO2, NOx, VOC, and CO are based on natural gas mmcf/hr.
 Assume PM10=PM2.5

Crucible Furnace Cru-1, using no controls

TYPE OF MATERIAL	Throughput			Capacity million British thermal units per hour/hr	Capacity mmcf/hr	
	LBS/HR	1 TON/2000 lbs	TON/HR			
Aluminum, with no flux, using clean-charge melt	200	2000	0.10	0.23	0.00023	
	PM lb/ton lb/mmcf	PM10/ PM2.5 1.50	SOx 1.05	NOx 157.5	VOC 7.35	CO 4.20
Potential Emissions lbs/hr	0.15	0.15	0.0002	0.036	0.0017	0.001
Potential Emissions lbs/day	3.6	3.6	0.006	0.9	0.041	0.023
Potential Emissions tons/year	0.66	0.66	0.001	0.16	0.007	0.004

Source of Emission Factors: based on determination of clean charge melt factors used in Cast Metals Technology permit (135-00024), and accepted for this source.
 Emission Factors from STAPPA/LAPCO Handbook Vol. 1, Section 11
 There are no flux materials used in this furnace.
 PM, PM10 and PM2.5 emissions based on tons per hour throughput; SO2, NOx, VOC, and CO are based on natural gas mmcf/hr.
 Assume PM10=PM2.5

	PM	PM10/ PM2.5	SOx	NOx	VOC	CO
TOTAL ALL MELTING UNITS	4.99	4.99	0.01	2.23	0.10	0.06

Note: the combined total throughput for the melting process at this source is 0.76 tons per hour. Therefore, the total of all three furnaces represents the unlimited potential to emit.

Methodology for all of the above Tables:

PM, PM10, PM2.5 emissions (tons/yr) = throughput (tons/hr) * emission factor (lb/ton) * 24 hours/day * 365 days per year / 2000 lb/ton
 SO2, NOx, VOC, and CO emissions (tons/yr) = maximum gas usage capacity (mmcf/hr) * emission factor (lb/MMCF) * 24 (hr/day) * 365 (days/yr) / 2000 (lb/ton)

**Appendix A: Emission Calculations
Sand System and Sand Molding**

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

		Potential Throughput sand (tons/hr)		
Sand System and Sand Molding		18.56		
		PM	PM10	PM2.5
Emission Factors (lb/ton sand handled)		1.56	0.54	0.54
Uncontrolled Potential To Emit (lb/hr)		29.0	10.02	10.02
Uncontrolled Potential To Emit (ton/yr)		126.82	43.90	43.90

		(tons/hr)					
Supplemental Sand Silos		0.016					
		PM	PM10	PM2.5	Sand Silos	Throughput (Tons/Yr)	Throughput (Tons/hr)
Emission Factors (lb/ton sand handled)		1.56	0.54	0.54	SSAND-1	50	0.006
Uncontrolled Potential To Emit (lb/hr)		0.02	0.01	0.01	SSAND-2	50	0.006
Uncontrolled Potential To Emit (ton/yr)		0.11	0.04	0.04	SSAND-3	38	0.004
					Total Sand Silos	138.0	0.016
TOTAL SAND SYSTEM AND MOLDING (Tons/yr)		126.92	43.94	43.94			

Note: Alternative emission factor for PM is based on assumptions formed from a mass balance study performed by Cast Metals Technologies (135-00024), and conditionally accepted for this source, contingent upon mass balance testing..

PM10 emission factor based on EPA's WebFIRE database (SCC 30400350)

Assume PM10=PM2.5

Methodology for the above Tables:

Uncontrolled Potential to emit (tons/yr) = potential maximum throughput (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Controlled Potential to emit (tons/yr) = Uncontrolled potential to emit (tons/yr) * (1- control efficiency %)

Appendix A: Emission Calculations
Pouring/Casting/Cooling/Shakeout

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

Potential Throughput metal
(tons/hr)

Pouring/Casting/Cooling	0.76	total
-------------------------	------	-------

	PM	PM10	SO2	NOx	VOC	CO
Emission Factors (lb/ton metal produced)	4.2	2.06	0.02	0.01	0.140	6.00
Uncontrolled Potential To Emit (lb/hr)	3.19	1.57	0.02	0.01	0.11	4.56
Uncontrolled Potential To Emit (ton/yr)	13.98	6.86	0.07	0.03	0.47	19.97

Pouring/Casting/Cooling PM, PM10, SO2, Nox, and VOC emission factors were from FIRE 6.25

Assume PM10=PM2.5

CO emission factor is based on Self-disclosure statement per IDEM guidance memo dated August 11, 2006.

Methodology:

Uncontrolled Potential to Emit (lb/hr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton)

Uncontrolled Potential to Emit (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb

Potential Throughput metal
(tons/hr)

Shakeout & Knockout	0.76	total
---------------------	------	-------

	PM	PM10	SO2*	NOx*	VOC	CO
Emission Factors (lb/ton metal produced)	3.20	2.24	0.00	0.00	1.20	0.00
Uncontrolled Potential To Emit (lb/hr)	2.43	1.70	0.00	0.00	0.91	0.00
Uncontrolled Potential To Emit (ton/yr)	10.65	7.46	0.00	0.00	3.99	0.00

Shakeout PM and PM10 emission factors were from AP-42.

Assume PM10=PM2.5

* SO2 and NOx emissions are not included in Shakeout & Knockout section because these emissions are already counted in Pouring/Casting/Cooling table above.

Methodology:

Uncontrolled Potential to Emit (lb/hr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton)

Uncontrolled Potential to Emit (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb

**Appendix A: Emission Calculations
Finishing (Grinders, Deburr, Bandsaw)**

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

Potential Throughput castings
(tons/hr)

Finishing (Grinders, Deburr, Bandsaw)	0.76 total	
	PM	PM10
Emission Factors lbs/ton finished casting	17.00	1.70
Uncontrolled Potential To Emit (lb/hr)	12.92	1.29
Uncontrolled Potential To Emit (ton/yr)	56.59	5.66

PM emission factor for Casting Finishing is from AP-42 Ch. 12.10 (Iron Foundries).

PM10 emission factor for Casting Finishing is from AP-42 Ch. 12.13 (Steel Foundries).

Assume PM10=PM2.5

Methodology:

Uncontrolled Potential Emissions (lb/hr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton)

Uncontrolled Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb

**Appendix A: Emission Calculations
Shotblast**

Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016

Potential Throughput castings
(tons/hr)

Shot Peen Machine (Peen-1)	0.76 total	
	PM	PM10
Emission Factors lbs/ton finished casting	2.11	2.11
Uncontrolled Potential To Emit (lb/hr)	1.60	1.60
Uncontrolled Potential To Emit (ton/yr)	7.02	7.02

PM and PM-10/2.5 emission factor for Shot Peen is based on dust collector study mass balance, and has been accepted.
 Assume PM10=PM2.5

Methodology:

Uncontrolled Potential Emissions (lb/hr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton)

Uncontrolled Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb

**Appendix A: Emission Calculations
Core Making**

**Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016**

Material	Density (Lb/Gal)	Lbs VOC/Gallon	Actual Usage* (Gal / yr)	Maximum Usage** (Gal / yr)	Maximum VOC (lb/yr)	Potential VOC tons per year	HAPS				
							Hexane (tons/yr)	Phenol (tons/yr)	Formaldehyde (tons/yr)	Methanol (tons/yr)	TEA (tons/yr)
Acme Flow 2185 for Cold Box	6.05	6.05	55.0	240.9	1,457.45	0.73	0.00	0.00	0.00	0.00	0.73
TOTAL COLD BOX					1,457.45	0.73	0.00	0.00	0.00	0.00	0.73
17-550 Warm Box Catalyst	9.34	5.14	110.0	481.8	2,476.45	1.24	0.00	0.00	0.00	1.24	0.00
FB-905 for Warm Box	10.09	10.09	110.0	481.8	4,861.36	2.43	0.00	0.00	0.01	0.00	0.00
TOTAL FOR WARM BOX					7,337.81	3.67	0.00	0.00	0.01	1.24	0.00
Emulite 523-683 Binder for Oil Sand	8.01	6.00	110.0	481.8	2,890.80	1.45	0.00	0.00	1.45	0.00	0.00
TOTAL FOR OIL SAND					2,890.80	1.45	0.00	0.00	1.45	0.00	0.00
Parting Agent, Unipart HS	5.64	5.36	20.0	87.6	469.54	0.23	0.14	0.00	0.00	0.00	0.00
TOTAL FOR HARRISON SHELL SAND					469.54	0.23	0.14	0.00	0.00	0.00	0.00
Phenoset-RB r part (2:1)	10.34	6.72	110.0	481.8	3,237.70	1.62	0.00	0.10	0.01	0.08	0.00
TOTAL AIRSET CORES					3,237.70	1.62	0.00	0.10	0.01	0.08	0.00
							0.14	0.10	1.47	1.32	0.73

Potential Emissions

VOC	7.70	TOTAL HAPs	3.76
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METHODOLOGY

* Actual usage obtained from source, and is based on 2000 operating hours per year.

** Maximum Usage = Actual usage (gal/yr) extrapolated to 8,760 hours per year.

Pounds of VOC per Gallon Coating and Density obtained from MSDS sheets

Maximum VOC (lbs/yr) = Maximum usage (gal/yr) x Lbs VOC/gal

Potential VOC tons per year = Maximum VOC (lb/yr) / 2000 lb/ton

HAPS data obtained from MSDS sheets and follow above calculation methods.

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

**Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Metal Inert Gas (MIG)(carbon steel)	1	0.10	0.0055	0.0005			0.001	5.00E-05	0.000	0	5.00E-05
Tungsten Inert Gas (TIG)(carbon steel)	1	0.10	0.0055	0.0005			0.001	5.00E-05	0.000	0	5.00E-05
EMISSION TOTALS											
Potential Emissions lbs/hr							1.10E-03				1.00E-04
Potential Emissions lbs/day							2.64E-02				2.40E-03
Potential Emissions tons/year							4.82E-03				4.38E-04

Methodology:

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations
Paint: Particulate and VOC**

**Company Name: Modern Aluminum Castings
Address City IN Zip: 1400 North 14th Street, Terre Haute, IN 47807
Permit Number: MSOP 167-37375-00154
Reviewer: Tamara Havics
Application Date: July 6, 2016**

Powder Coat

Material	Density (Lb/Gal)	Lbs VOC/Gallon	Actual Usage (lbs / yr)	Maximum Usage* (lbs / yr)	Maximum VOC (lb/yr)	Potential VOC tons per year	PM (lb/hr)	PM (tons/yr)	PM10, 2.5 (lb/hr)	PM10, 2.5 (tons/yr)
White	0.00	0.00	55.0	240.9	0.00	0.00	0.33	1.45	0.33	1.45
Black	0.00	0.00	110.0	481.8	0.00	0.00	0.25	1.10	0.25	1.10
TOTAL Powder Coat					0.000	0.00	0.58	2.54	0.58	2.54

Paint

Material	Density (Lb/Gal)	Lbs VOC/Gallon	Actual Usage (Gal / yr)	Maximum Usage* (Gal / yr)	Maximum VOC (lb/yr)	Potential VOC tons per year	PM (lb/hr)	PM (tons/yr)	PM10, 2.5 (lb/hr)	PM10, 2.5 (tons/yr)
Red Laquer Coating	7.98	5.16	60.0	438.0	2260.08	1.13	0.02	0.09	0.02	0.09
TOTAL Paint					2260.08	1.13	0.02	0.09	0.02	0.09

Potential Emissions - both Powder Coating and Paint

1.13

VOC

2.63

PM

2.63

PM10, 2.5

Methodology

*Both powder coating and paint operations are seldom used and are insignificant activities. Therefore, the small usage per year based on 1200 hours was extrapolated to 8760 hours per year to obtain maximum annual usage.

Powder Coat contains no VOCs; therefore, only emissions are particulate, which were calculated based on only a 50% transfer efficiency.

**Appendix A: Emissions Calculations
Particulate Matter from Fugitive Sources**

Company Name: **Modern Aluminum Castings**
Address City IN Zip: **1400 North 14th Street, Terre Haute, IN 47807**
Permit #: **MSOP 167-37375-00154**
Reviewer: **Tamara Havics**
Date: **July 6, 2016**

Paved Roads

$$E = [(k \times (sL)^{0.91}) \times (W)^{1.02}] / (1 - (P/4N))$$

AP-42, Section 13.2.2-1

Factor	Description	Source	Summer Months			Winter Months		
			PM Value	PM ₁₀ Value	PM _{2.5} Value	PM Value	PM ₁₀ Value	PM _{2.5} Value
E =	Emission factor (lb/VMT, vehicle miles traveled)	Calculation, above	0.19	0.04	0.01	0.66	0.13	0.03
k =	PM Particle size multiplier (lb/VMT)	AP-42, Section 13.2.1	0.011	0.0022	0.00054	0.011	0.0022	0.00054
sL =	Road surface silt loading (g/m ²)	AP-42, Section 13.2.1-2	0.60	0.60	0.60	2.40	2.40	2.40
P =	Number of "wet" days in an averaging period		120	120	120	120	120	120
N =	Number of days in the averaging period		365	365	365	365	365	365
W =	Average vehicle weight (ton)		27.5	27.5	27.5	27.5	27.5	27.5

Average Annual Emission Factors

	Non-Winter Months	Winter Months	Average Factor
PM	9	3	0.30
PM ₁₀	9	3	0.06
PM _{2.5}	9	3	0.01

PM Emissions from Paved Roads

Activity	Average Vehicle Weight (tons)	No. of Vehicles (vehicles/yr)	Miles Traveled per vehicle (miles/vehicle)	Annual Mileage (VMT/yr)	Uncontrolled PM Emissions (tpy)	Uncontrolled PM-10 Emissions (tpy)	Uncontrolled PM 2.5 Emissions (tpy)
Passenger Vehicles	1	2,190	0.04	83	0.013	0.003	0.001
Total					0.013	0.003	0.001

Unpaved Roads

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

$$0.375 \text{ trip/hr} \times 0.066 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 433.62 \text{ miles per year}$$

PM

$$E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b]$$

= 9.23 lb/mile

where k = 4.9 (particle size multiplier for PM)
s = 6 % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
a = 0.7 Industrial Roads Constant for PM
b = 0.45 Constant for PM
W = 36 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{9.23 \text{ lb/mi} \times 433.62 \text{ mi/yr}}{2000 \text{ lb/ton}} = 2.00 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \text{PM } 1.32 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10

$$E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b]$$

= 2.46 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s = 6 % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
a = 0.9 Industrial Roads Constant for PM-10
b = 0.45 Constant for PM-10
W = 36 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{2.46 \text{ lb/mi} \times 433.62 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.53 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \text{PM-10 } 0.35 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-2.5

$$E_f = k \cdot [(s/12)^{0.9}] \cdot [(W/3)^b]$$

= 0.25 lb/mile

where k = 0.15 (particle size multiplier for PM-2.5)
s = 6 % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
a = 0.9 Industrial Roads Constant for PM-2.5
b = 0.45 Constant for PM-2.5
W = 36 tons average vehicle weight
M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$E = \frac{0.25 \text{ lb/mi} \times 433.62 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.05 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \text{PM-2.5 } 0.04 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

Total Fugitive Roads Emissions	PM	1.33 tons/yr uncontrolled
	PM-10	0.35 tons/yr uncontrolled
	PM2.5	0.04 tons/yr uncontrolled



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 9, 2016

Mr. Jeffrey L. Farmer
Modern Aluminum Castings
1400 N. 14th Street
Terre Haute, Indiana 47807

Re: Public Notice
Modern Aluminum Castings
Permit Level: MSOP - Renewal
Permit Number: 167-37375-00154

Dear Mr. Farmer:

Enclosed is a copy of your draft MSOP - Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Tribune Star in Terre Haute, Indiana publish the abbreviated version of the public notice no later than September 12, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Vigo Public Library, 1 Library Square in Terre Haute, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Tami Havics, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 2-8219 or dial (317) 232-8219.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



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Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

September 9, 2016

Tribune Star
P. O. Box 149
Terre Haute, Indiana 47808

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Modern Aluminum Castings, Vigo County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than September 14, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867 or dial 317-233-6867.

Sincerely,

Vicki Biddle

Vicki Biddle
Permit Branch
Office of Air Quality

Permit Level: MSOP - Renewal
Permit Number: 167-37375-00154

Enclosure

PN Newspaper.dot 2/17/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 9, 2016

To: Vigo County Public Library

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Modern Aluminum Castings
Permit Number: 167-37375-00154

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

September 9, 2016
Modern Aluminum Castings
167-37375-00154

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.


Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

Mail Code 61-53

IDEM Staff	VBIDDLE 9/9/2016		DRAFT		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Modern Aluminum Castings 167-37375-00154 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Jeffrey L Farmer Modern Aluminum Castings 1400 N 14th St Terre Haute IN 47807 (Source CAATS)										
2		Vigo County Board of Commissioners County Annex, 121 Oak Street Terre Haute IN 47807 (Local Official)										
3		Terre Haute City Council and Mayors Office 17 Harding Ave Terre Haute IN 47807 (Local Official)										
4		Vigo County Health Department 147 Oak Street Terre Haute IN 47807 (Health Department)										
5		Vigo Co Public Library 1 Library Square Terre Haute IN 47807-3609 (Library)										
6		J.P. Roehm PO Box 303 Clinton IN 47842 (Affected Party)										
7		Mr. Greg Towler Wilcox Environmental Engineering 5757 West 74th Street Indianapolis IN 46278 (Consultant)										
8												
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12												
13												
14												
15												

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