



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: October 17, 2013

RE: AACI Company, Inc. / 097 - 33216 - 00629

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 6/13/13



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**AACI Company, Inc.
9 South Keystone Ave.
Indianapolis, Indiana 46201**

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

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

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

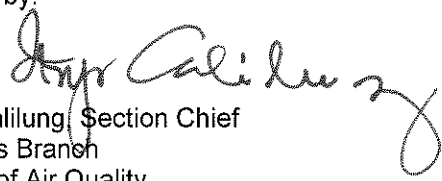
Operation Permit No.: M097-33216-00629	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: October 17, 2013 Expiration Date: October 17, 2023

TABLE OF CONTENTS

A. SOURCE SUMMARY.....	4
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
B. GENERAL CONDITIONS	5
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.9 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.12 Permit Renewal [326 IAC 2-6.1-7]	
B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.14 Source Modification Requirement	
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]	
B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.17 Annual Fee Payment [326 IAC 2-1.1-7]	
B.18 Credible Evidence [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS.....	10
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]	
C.1 Permit Revocation [326 IAC 2-1.1-9]	
C.2 Opacity [326 IAC 5-1]	
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5 Fugitive Dust Emissions [326 IAC 6-4]	
C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-6.1-5(a)(2)]	
C.7 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.8 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.9 Compliance Monitoring [326 IAC 2-1.1-11]	
C.10 Instrument Specifications [326 IAC 2-1.1-11]	

Corrective Actions and Response Steps

- C.11 Response to Excursions or Exceedances
- C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

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

- C.13 Malfunctions Report [326 IAC 1-6-2]
- C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

D.1 EMISSIONS UNIT OPERATION CONDITIONS..... 16

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

- D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]
- D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.3 Particulate Control

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

- D.1.4 Parametric Monitoring
- D.1.5 Broken or Failed Bag Detection

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

- D.1.6 Record Keeping Requirements

D.2 EMISSIONS UNIT OPERATION CONDITIONS..... 18

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

- D.2.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]
- D.2.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]
- D.2.3 VOC Work Practices Requirements [326 IAC 8-2-9]
- D.2.4 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

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

- D.2.6 Record Keeping Requirements

D.3 EMISSIONS UNIT OPERATION CONDITIONS..... 18

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

- D.3.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]

Annual Notification 21

Malfunction Report 22

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 sandblasting and surface coating operation.

Source Address:	9 South Keystone Ave., Indianapolis, Indiana 46201
General Source Phone Number:	317-767-0145
SIC Code:	3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)
County Location:	Marion
Source Location Status:	Attainment for all 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) Schmidt 6.5 cubic foot Abrasive Sand Pot, identified as SP-002, installed in 2012 that uses a Black Magnum 20/40 coal slag blast media for sandblasting. The sand pot has a maximum capacity of 1362.42 lbs. per hour of media and is equipped with a Dust Collection System, identified as CU-001, which discharges exhaust air back into the facility.
- (b) One (1) DeVilbliss Paint Booth, identified as PB-001, installed in September 1995, with a maximum surface coating capacity of 1.0 metal units (such as parts for drilling rigs, pump systems, tank linings, and various other large parts) per hour. Dry filters, identified as CU-002, are used for particulate control for PB-001. Air from the paint booth is filtered before it is exhausted outside via a stack in the roof (Stack S-001).
- (c) Two (2) Armstrong Model UHPA290AE natural gas space heaters, identified as H-001 and H-002 respectively, installed in 1995, with each unit having a heat input rate of 287,500 Btu/hr. These units exhaust outside via a stack in the roof (Stack S-002 and S-003 venting for H-001 and H-002 respectively).
- (d) One (1) Nordine Model KG7TC-100D-35C HVAC unit, identified as H-003, with a 100,000 Btu/hr heat input rate. The HVAC unit exhausts outside via a stack in the roof (Stack S-004).
- (e) Paved roads.

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, M097-33216-00629, 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 M097-33216-00629 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 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.7 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.8 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.9 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.10 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.11 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.12 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.13 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.14 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.15 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) Schmidt 6.5 cubic foot Abrasive Sand Pot, identified as SP-002, installed in 2012 that uses a Black Magnum 20/40 coal slag blast media for sandblasting. The sand pot has a maximum capacity of 1362.42 lbs. per hour of media and is equipped with a Dust Collection System, identified as CU-001, which discharges exhaust air back into the facility.

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

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

D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from the sandblasting shall not exceed 0.03 grains per dry standard cubic foot (dscf).

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

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Particulate Control

- (a) In order to comply with Condition D.1.1, the control system associated with SP-002 shall be in operation at all times SP-002 is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements

D.1.4 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collection system used in conjunction with the sandblasting process, at least once per day when the sandblasting process is in operation. When for any one reading, the pressure drop across the dust collection unit is outside the normal range of 2.0 and 6.0 inches of water, the Permittee shall take reasonable response.. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.5 Broken or Failed Bag Detection

- (a) For a single compartment baghouses 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 C- Response to Excursions or Exceedances).

- (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 emissions unit. 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 C- Response to Excursions or Exceedances).

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.1.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.4, the Permittee shall maintain a daily records of the daily pressure drop readings across the dust collection system controlling the sandblasting unit. 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 (i.e. the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this Condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) One (1) DeVilbiss Paint Booth, identified as PB-001, installed in September 1995, with a maximum surface coating capacity of 1.0 metal units (such as parts for drilling rigs, pump systems, tank linings, and various other large parts) per hour. Dry filters, identified as CU-002, are used for particulate control for PB-001. Air from the paint booth is filtered before it is exhausted outside via a stack in the roof (Stack S-001).

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

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

D.2.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]

- (a) Pursuant to 326 IAC 6.5-1-2(h), the spray coating operation shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after the observation:
- (1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detectable at the exhaust or accumulates on the ground.

D.2.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at the spray operation shall not exceed: three and five-tenths (3.5) pounds per gallon of coating excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit).

D.2.3 VOC Work Practices Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), the following work practices shall be used to minimize VOC emissions from mixing operation, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials:

- (a) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.

- (c) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (d) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (e) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

D.2.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC content limitations contained in Condition D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.2.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limits established in Condition D.2.2. Records necessary to demonstrate compliance shall be available no later than 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material used and solvent added to coatings
 - (2) The amount of coating material and solvent less water used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) Two (2) Armstrong Model UHPA290AE natural gas space heaters, identified as H-001 and H-002 respectively, installed in 1995, with each unit having a heat input rate of 287,500 Btu/hr. These units exhaust outside via a stack in the roof (Stack S-002 and S-003 venting for H-001 and H-002 respectively).
- (d) One (1) Nordine Model KG7TC-100D-35C HVAC unit, identified as H-003, with a 100,000 Btu/hr heat input rate. The HVAC unit exhausts outside via a stack in the roof (Stack S-004).

(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.3.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from each natural gas space heater and natural gas HVAC unit shall not exceed 0.03 grains per dry standard cubic foot (dscf).

**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:	AACI Company, Inc.
Address:	9 South Keystone Ave.
City:	Indianapolis, Indiana 46201
Phone #:	317-767-0145
MSOP #:	M097-33216-00629

I hereby certify that AACI Company, Inc. is:

☐ still in operation.

☐ no longer in operation.

I hereby certify that AACI Company, Inc. is:

☐ in compliance with the requirements of
MSOP M097-33216-00629.

☐ not in compliance with the requirements of
MSOP M097-33216-00629.

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 Renewal

Source Background and Description
--

Source Name: Source Location: County: SIC Code: Permit Renewal No.: Permit Reviewer:	AACI Company, Inc. 9 South Keystone Ave., Indianapolis, IN 46201 Marion 3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified) M097-33216-00629 Brandon Miller
---	---

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from AACI Company, Inc. relating to the operation of a stationary sandblasting and surface coating operation. On May 16, 2013, AACI Company, Inc. submitted an application to the OAQ requesting to renew its operating permit. AACI Company, Inc. was issued its first MSOP M097-25555-00629 on October 2, 2008.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) One (1) DeVilbliss Paint Booth, identified as PB-001, installed in September 1995, with a maximum surface coating capacity of 1.0 metal units (such as parts for drilling rigs, pump systems, tank linings, and various other large parts) per hour. Dry filters, identified as CU-002, are used for particulate control for PB-001. Air from the paint booth is filtered before it is exhausted outside via a stack in the roof (Stack S-001).
- (b) Two (2) Armstrong Model UHPA290AE natural gas space heaters, identified as H-001 and H-002 respectively, installed in 1995, with each unit having a heat input rate of 287,500 Btu/hr. These units exhaust outside via a stack in the roof (Stack S-002 and S-003 venting for H-001 and H-002 respectively).
- (c) One (1) Nordine Model KG7TC-100D-35C HVAC unit, identified as H-003, with a 100,000 Btu/hr heat input rate. The HVAC unit exhausts outside via a stack in the roof (Stack S-004).
- (d) Paved roads

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit
--

The source also consists of the following emission units that were constructed and are operating without a permit:

- (a) One (1) Schmidt 6.5 cubic foot Abrasive Sand Pot, identified as SP-002, installed in 2012 that uses a Black Magnum 20/40 coal slag blast media for sandblasting. The sand pot has a maximum capacity of 1362.42 lbs. per hour of media and is equipped with a Dust Collection System, identified as CU-001, which discharges exhaust air back into the facility.

The source also consists of the following emission units that were operating without a permit:

- (b) One (1) DeVilbliss Paint Booth, identified as PB-001, has changed coatings. The permitted coatings did not make the source subject to 326 IAC 8-2-9. The new coatings have VOC emissions that make the source subject to 326 IAC 8-2-9.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) One (1) Schmidt 6.5 cubic foot Abrasive Sand Pot, identified as SP-001, installed in 1995 that uses a Black Magnum 20/40 coal slag blast media for sandblasting. The sand pot has a maximum capacity of 400 lbs. per hour of media.

Existing Approvals

The source was issued MSOP No. 097-25555-00629 on October 2, 2008. There have been no subsequent approvals issued.

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

Enforcement Issue

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit".

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

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Attainment effective November 8, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X. The 1-hour designation was revoked effective June 15, 2005. Unclassifiable or attainment effective federally July 11, 2013, for PM_{2.5}.

(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. Marion 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}

Marion County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. 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. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

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

Fugitive Emissions

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.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	greater than 25 but less than 100
PM ₁₀	greater than 25 but less than 100
PM _{2.5}	greater than 25 but less than 100
SO ₂	less than 25
VOC	less than 25
CO	less than 25
NO _x	less than 25
GHGs as CO ₂ e	less than 100,000
Single HAP	less than 10
Total HAP	less than 25

HAPs	tons/year
Xylene	5.52
Methyl Isobutyl Ketone	1.37
Ethyl benzene	2.37
PAH	0.06
Total	9.32

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

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all regulated pollutants, excluding GHGs, is less than 100 tons per year. However, PM, PM_{2.5} and PM₁₀ are 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(29)) of GHGs is less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

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 (NSPSs)

- (b) This source is not subject to the New Source Performance Standard for Surface Coating Metal Furniture (40 CFR 60, Subpart EE), which is incorporated by reference as 326 IAC 12. This source does not coat metal furniture.
- (c) This source is not subject to the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations (40 CFR 60, Subpart MM), which is incorporated by reference as 326 IAC 12. This source does not coat automobiles or light duty trucks.
- (d) This source is not subject to the New Source Performance Standard for Industrial Surface Coating: Large Appliances (40 CFR 60, Subpart SS), which is incorporated by reference as 326 IAC 12. This source does not coat large appliances.
- (e) This source is not subject to the New Source Performance Standard for Metal Coil Surface Coating (40 CFR 60, Subpart TT), which is incorporated by reference as 326 IAC 12. This source does not coat metal coils.
- (f) This source is not subject to the New Source Performance Standard for Beverage Can Surface Coating Industry (40 CFR 60, Subpart WW), which is incorporated by reference as 326 IAC 12. This source does not coat beverage cans.
- (g) There are no other applicable New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM 326 IAC 20-80-1, are not included in the permit, since AACI Company, Inc. is not considered a major source, is not located at a major source, and is not part of a major source of emissions of HAPs.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Plastic Parts and Products, 40 CFR 63.4480, Subpart PPPP (326 IAC 20-81-1), are not included in the permit, since AACI Company, Inc. does not coat plastic parts or products, is not considered a major source, is not located at a major source, and is not part of a major source of emissions of HAPs.
- (j) The requirements of the National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR 63.11169) Subpart HHHHHH, are not included in the permit because AACI Company, Inc. is considered an area source which does not utilize spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP as defined in 40 CFR 63.11180, does not perform spray application to motor vehicles and mobile equipment, and does not perform paint stripping using MeCl.
- (k) 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 the permit.

State Rule Applicability - Entire Source

The following state rules are applicable to the source:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Unrestricted Potential Emissions section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (d) 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.

- (e) 326 IAC 5-1 (Opacity Limitations)
The source, located in Marion County, is subject to the opacity limitations specified in 326 IAC 5-1-2(2). 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 average 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.
- (g) 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (i) 326 IAC 6.5 Particulate Matter Limitations Except Lake County
This rule applies to sources or facilities with a potential to emit particulate matter located in the counties of Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne that are specifically listed in 326 IAC 6.5-2 through 6.5-10 or sources located in the above mentioned counties with either the potential to emit one hundred (100) tons or more or actual emissions of ten (10) tons or more. This source is subject to 326 IAC 6.5 because it is located in Marion County, its unlimited potential to emit PM is equal to or greater than 10 tons per year and there are not enforceable limits in the permit to limit the actual emissions to less than 10 tons per year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2 applies to this source.
- (j) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Neither the source nor any individual emission units has potential to emit of SO₂ greater than 10 pounds per hour or 25 tons per year. Therefore, 326 IAC 7-1.1 does not apply.
- (k) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (l) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability – Individual Facilities

Sandblasting Operation

- (a) 326 IAC 6-3-1 (Particulate Emission Limitations for Manufacturing Processes)
Upon further evaluation, the sandblasting facility is subject to a particulate matter limitation specified in 326 IAC 6.5 that is as stringent as or more stringent than the particulate limitation established in 326 IAC 6-3. Therefore, this rule no longer applies to the sandblasting.

- (b) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2(a), the sandblasting operation is subject to the particulate matter (PM) limit of 0.03 grains per dry standard cubic foot of exhaust gas (gr/dscf). SP-002 has an exhaust gas rate of 10,125 cubic feet per minute. Based on these grain loading and flow rate, the PM emissions from SP-002 are equivalent to 2.64 pounds per hour (lb/hr) when operating. The PM uncontrolled emission is 13.62 lb/hr and the PM controlled emission is 0.14 lb/hr. The uncontrolled emission is not lower than the PM limit but the controlled emission is lower than the PM limit. The pound per hour limitation for 326 IAC 6.5 was calculated with the following equation:

$$E = L \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times A \times \frac{60 \text{ mins}}{1 \text{ hour}}$$

Where: L = 0.03 grains per dry standard cubic foot; and

A = Exhaust gas rate from sandblasting operation

The United Air Specialist MCB09-10-X dust collection system, CU-001, shall be in operation at all times SP-002 is in operation, in order to comply with this limit. As a result of this rule being more stringent than 326 IAC 6-3, this rule is a new requirement.

Spray Coating Operations

- (c) 326 IAC 6-3-1 (Particulate Emission Limitations for Manufacturing Processes)
Upon further evaluation, the spray coating operation is subject to a particulate matter limitation specified in 326 IAC 6.5 that is as stringent as or more stringent than the particulate limitation established in 326 IAC 6-3. Therefore this rule no longer applies.
- (d) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2(h), the spray coating operation shall be controlled by a dry particulate filter and subject to the following:
- (1) The source shall operate the control device in accordance with manufacturer's specifications.
 - (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after the observation:
 - (A) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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

As a result of this rule being more stringent than 326 IAC 6-3, this rule is a new requirement.

- (e) 326 IAC 8-1-6 (New facilities; general reduction requirements)
The paint booth, identified as PB-001, has potential VOC emissions less than twenty-five (25) tons per year and is regulated by provisions in 326 IAC 8-2-9 (miscellaneous metal

and plastic parts coating). Pursuant to 326 IAC 8-1-6(1) and (3), this rule does not apply to the spray coating operation.

- (f) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating)
The paint booth, identified as PB-001, has potential VOC emissions greater than fifteen (15) pounds per day before add-on controls (See Appendix A, page 8). Pursuant to 326 IAC 8-2-1(a)(4), since the source does not limit actual emissions to less than fifteen (15) pounds per day before add-on controls, coats large metal pump systems and other metal products, and this facility was constructed after July 1, 1990, 326 IAC 8-2-9 applies to the paint booth.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at the spray operation shall not exceed forty-two hundredths (0.42) kilogram per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water that is air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit).

The following work practices shall be used to minimize VOC emissions from mixing operation, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials:

- (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
- (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

As a result of the change in coatings used, this rule is a new requirement. The two coatings, TNEMEC Series 46H and TNEMEC Series 141, comply with the VOC content limits.

Natural Gas Space Heaters

- (g) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This rule is a new requirement. Pursuant to 326 IAC 6.5, the two (2) Armstrong natural gas space heaters are subject to the particulate matter (PM) limit of 0.03 gr/dscf of exhaust gas. Each Armstrong space heater has an exhaust gas rate of 4,400 cubic feet per minute and a heat input rating of 287,500 Btu/hr (0.2875 MMBtu/hr). Each Armstrong space heater has a PM emission rate of 0.000014 gr/dscf. This PM emission rate is less than the 0.03 gr/dscf. Each Armstrong natural gas fired space heater is able to comply with 326 IAC 6.5 without using a control device. The grain per dry standard cubic foot of exhaust limitation was calculated with the following equation:

$$E = H \times F \times \frac{1 \text{ MMCF}}{1020 \text{ MMBtu}} \times \frac{1 \text{ hour}}{60 \text{ mins}} \times \frac{7000 \text{ grains}}{1 \text{ pound}} + A$$

Where: H = heat input of an Armstrong space heater in MMBtu/hour

F = PM emission factor for natural gas (1.9 pounds/hour); and

A = Exhaust gas rate from Armstrong space heaters

Natural Gas HVAC Unit

- (h) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
 This rule is a new requirement. Pursuant to 326 IAC 6.5, the Nordine natural gas HVAC unit is subject to the particulate matter (PM) limit of 0.03 gr/dscf of exhaust gas. The Nordine unit has an exhaust gas rate of 995 cubic feet per minute and a heat input rating of 100,000 Btu/hr (0.1 MMBtu/hr). The Nordine unit has a PM emission rate of 0.000022 gr/dscf. This PM emission rate is less than the 0.03 gr/dscf. The Nordine natural gas fired HVAC unit is able to comply with 326 IAC 6.5 without using a control device. The grain per dry standard cubic foot of exhaust limitation was calculated with the following equation:

$$E = H \times F \times \frac{1 \text{ MMCF}}{1020 \text{ MMBtu}} \times \frac{1 \text{ hour}}{60 \text{ mins}} \times \frac{7000 \text{ grains}}{1 \text{ pound}} + A$$

Where: H = heat input of Nordine HVAC unit in MMBtu/hour

F = PM emission factor for natural gas (1.9 pounds/hour); and

A = Exhaust gas rate from Nordine HVAC unit

Compliance Determination and Monitoring Requirements

- (a) The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Dust Collection System CU-001	Water Pressure Drop	Daily	3 to 6 inches	Response Steps

These monitoring conditions are necessary because the Dust Collection System for the sandblasting operation must operate properly to comply with 326 IAC 6.5 (PM Limitations).

- (b) There are no testing requirements applicable to this source.

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 May 16, 2013. Additional information was received on July 26, 2013.

Conclusion

The operation of this stationary sandblasting and surface coating operation shall be subject to the conditions of the attached MSOP Renewal No. 097-33216-00629.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brandon Miller at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5373 or toll free at 1-800-451-6027 extension 4-5373.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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

Page 1 of 6 TSD App A

Company Name: AACI Company, Inc.
Address: 9 South Keystone Ave., Indianapolis, Indiana 46201
Permit No: 097-33216-00629
Reviewer: Brandon Miller
Date: August 5, 2013

Unlimited Potential to Emit (tons/year)										
Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Worst Single HAP
PB-001	21.07	21.07	21.07	0	0	9.27	0	0	9.32	5.52 xylene
SP-002	59.67	59.67	59.67	0	0	0.00	0	0	0	0
Paved Roads	0.06	0.01	0.00	0	0	0.00	0	0	0.00	0
Combustion	0.01	0.02	0.02	0.002	0.29	0.02	0.24	350	5.47E-03	5.22E-03 hexane
Total Emissions	80.81	80.78	80.77	0.002	0.29	9.28	0.24	350	9.32	5.52 Xylene

**Appendix A: Emissions Calculations
VOC and Particulate**

Page 2 of 6 TSD App A

From Surface Coating Operations SB-001

Company Name: AACI Company, Inc.
Address City IN Zip: 9 South Keystone Ave., Indianapolis, Indiana 46201
Permit Number: 097-33216-00629
Reviewer: Brandon Miller
Date: August 5, 2013

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
TNEMEC Series 46H PartA	11.3	16%	0%	16.0%	0.0%	75%	0.25	0.50	1.80	1.80	0.22	5.39	0.98	2.07	2.40	60%
TNEMEC Series 46H PartB	12.2	17%	0%	16.6%	0.0%	75%	0.25	0.50	2.02	2.02	0.25	6.06	1.11	2.23	2.70	60%
Total TNEMEC Series 46H											0.48	11.46	2.09	4.30	5.09	
TNEMEC Series 141 Part A	15.3	10%	0%	10.3%	0.0%	82%	0.67	1.00	1.57	1.57	1.05	25.17	4.59	16.01	1.92	60%
TNEMEC Series 141 Part B	9.4	7%	0%	7.4%	0.0%	82%	0.33	1.00	0.70	0.70	0.23	5.57	1.02	5.06	0.85	60%
Total TNEMEC Series 141											1.28	30.74	5.61	21.07	2.77	
Xylene (cleaning)	7.2	100%	0%	100.0%	0.0%	0%	0.13	0.50	7.17	7.17	0.45	10.76	1.96	0.00	-	60%
MEK (cleaning)	6.7	100%	0%	100.0%	0.0%	0%	0.13	1.00	6.68	6.68	0.84	20.04	3.66	0.00	-	60%
													Total TNEMEC Series 46H plus Xylene cleaner		4.05	4.30
													Total TNEMEC Series 141 plus MEK cleaner	9.27	21.07	
													Total Potential to Emit	9.27	21.07	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
TNEMEC Series 46H is only cleaned with Xylene cleaner and TNEMEC Series 141 is only cleaned with MEK Cleaner
Total = Highest value between Total TNEMEC Series 46H plus Xylene Cleaner and Total TNEMEC Series 141 plus MEK Cleaner

Appendix A: Emission Calculations

HAP Emission Calculations

From Surface Coating Operations SB-001

Company Name: AACI Company, Inc.
Address City IN Zip: 9 South Keystone Ave., Indianapolis, Indiana, 46201
Permit Number: 097-33216-00629
Permit Reviewer: Brandon Miller
Date: August 5, 2013

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Methyl Isobutyl Ketone	Weight % Ethyl Benzene	Weight % PAHs	Xylene Emissions (ton/yr)	Methyl Isobutyl Ketone Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	PAHs Emissions (ton/yr)
TNEMEC Series 46H PartA	11.3	0.25000	0.500	30.00%	0.00%	5.00%	1.00%	1.85	0.00	0.31	0.06
TNEMEC Series 46H PartB	12.2	0.25000	0.500	30.00%	0.00%	5.00%	0.00%	2.00	0.00	0.33	0.00
Total TNEMEC Series 46H								3.85	0.00	0.64	0.06
TNEMEC Series 141 Part A	15.3	0.66667	1.000	10.00%	0.00%	5.00%	0.00%	4.46	0.00	2.23	0.00
TNEMEC Series 141 Part B	9.4	0.33333	1.000	5.00%	10.00%	1.00%	0.00%	0.68	1.37	0.14	0.00
Total TNEMEC Series 141								5.14	1.37	2.37	0.00
Xylene (cleaning)	7.2	0.12500	0.500	85.00%	0.00%	15.00%	0.00%	1.67	0.00	0.29	0.00
MEK (cleaning)	6.7	0.12500	1.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Total TNEMEC Series 46H plus Xylene cleaner								5.52	0.00	0.94	0.06
Total TNEMEC Series 141 plus MEK cleaner								5.14	1.37	2.37	0.00
Total Potential Emissions								5.52	1.37	2.37	0.06

METHODOLOGY

Net HAP Emissions (tons/yr)

9.32

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

TNEMEC Series 141 is cleaned up with MEK. TNEMEC Series 46H is cleaned up with Xylene.

Total Potential Emissions (tons/yr) = higher value between Total TNEMEC Series 46H plus Xylene Cleaner and Total TNEMEC Series 141 plus MEK cleaner

Appendix A: Emission Calculations

Page 4 of 6 TSD App A

Abrasive Blasting - Confined SP-002

Company Name: AACI Company, Inc.

Address City IN Zip: 9 South Keystone Avenue, Indianapolis, Indiana 46201

Permit Number: 097-33216-00629

Reviewer: Brandon Miller

Date: August 5, 2013

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487
Coal slag	85

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

Internal diameter, in	Nozzle Pressure (psig)							
	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)

FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =

D = Density of abrasive (lb/ft3) From Table 2 =

D1 = Density of sand (lb/ft3) =

ID = Actual nozzle internal diameter (in) =

ID1 = Nozzle internal diameter (in) from Table 3 =

Flow Rate (FR) (lb/hr) =

1265

85

99

0.56

0.5

1362 per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM / lb abrasive) From Table 1 =

FR = Flow Rate (lb/hr) =

w = fraction of time of wet blasting =

N = number of nozzles =

0.010

1362.418

0 %

1

Uncontrolled Emissions =	13.62 lb/hr
	59.67 ton/yr

Controlled Emissions =	0.14 lb/hr
	0.60 ton/yr

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs

Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)

E = EF x FR x (1-w/200) x N

w should be entered in as a whole number (if w is 50%, enter 50)

Estimated baghouse efficiency = 99%, as reported by the source.

Assumes PM10 and PM2.5 = PM

Appendix A: Emissions Calculations

Page 5 of 6 TSD App A

Paved Roads

Company Name: AACI Company, Inc.

Address: 9 South Keystone Ave., Indianapolis, Indiana 46201

Permit No: 097-33216-00629

Reviewer: Brandon Miller

Date: August 5, 2013

Paved Roads at Industrial Site

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	1.0	1.0	1.0	1.0	1.0	10,000	1.894	1.9	691.3
Vehicle (leaving plant) (one-way trip)	1.0	1.0	1.0	1.0	1.0	10,000	1.894	1.9	691.3
Totals			2.0		2.0			3.8	1382.6

Average Vehicle Weight Per Trip = 1.0 tons/trip
Average Miles Per Trip = 1.89 miles/trip

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	1.0	1.0	1.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3

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

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

	PM	PM10	PM2.5	
Unmitigated Emission Factor, E_f =	0.087	0.017	0.0043	lb/mile
Mitigated Emission Factor, E_{ext} =	0.080	0.016	0.0039	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.0301	0.0060	0.0015	0.03	0.01	0.00	0.03	0.01	0.00
Vehicle (leaving plant) (one-way trip)	0.0301	0.0060	0.0015	0.03	0.01	0.00	0.03	0.01	0.00
Totals	0.0601	0.0120	0.0030	0.05	0.01	0.00	0.05	0.01	0.00

Methodology

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

Abbreviations

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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MMBTU/HR <100

Page 6 of 6 TSD App A

Company Name: AACI Company, Inc.
Address City IN Zip: 9 South Keystone Ave., Indianapolis, Indiana 46201
Permit Number: 097-33216-00629
Reviewer: Brandon Miller
Date: August 5, 2013

2 space heaters each with a heat input of 287,500Btu/hr
1 HVAC unit with heat input of 100,000 Btu/hr

Heat Input Capacity MMBTU/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
0.68	1020	5.8

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.01	0.02	0.02	0.00	0.29	0.02	0.24

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

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

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

Methodology

All emission factors are based on normal firing.

MMBTU = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					
	Benzene 2.1E-03	Dichlorobenzen 1.2E-03	Formaldehyd 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics
Potential Emission in tons/yr	6.09E-06	3.48E-06	2.17E-04	5.22E-03	9.86E-06	5.45E-03

Emission Factor in lb/MMcf	HAPs - Metals					
	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganes 3.8E-04	Nickel 2.1E-03	Total - Metals
Potential Emission in tons/yr	1.45E-06	3.19E-06	4.06E-06	1.10E-06	6.09E-06	1.59E-05

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	5.47E-03
Worst HAP	5.22E-03

Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	348	0.0	0.0
Summed Potential Emissions in tons/yr	348		
CO2e Total in tons/yr	350		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) +
N2O Potential Emission ton/yr x N2O GWP (310).



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: David Clifton
AACI Company, Inc.
PO Box 1047
Indianapolis, IN 46206

DATE: October 17, 2013

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

SUBJECT: Final Decision
MSOP - Renewal
097 - 33216 - 00629

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

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

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

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

Final Applicant Cover letter.dot 6/13/2013



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

October 17, 2013

TO: East Washington Branch Library

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

Subject: **Important Information for Display Regarding a Final Determination**


Applicant Name: AACI Company, Inc.
Permit Number: 097 - 33216 - 00629

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	LPOGOST 10/17/2013 AACI Company, Inc 097 - 33216 - 00629 final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 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	Handling 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		David Clifton AACI Company, Inc PO Box 1047 Indianapolis IN 46206 (Source CAATS) Via confirmed delivery									
2		Marion County Health Department 3838 N. Rural St Indianapolis IN 46205-2930 (Health Department)									
3		Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)									
4		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)									
5		Matt Mosier Office of Sustainability 1200 S Madison Ave #200 Indianapolis IN 46225 (Local Official)									
6		East Washington Branch Library 2822 East Washington Street Indianapolis IN 46201 (Library)									
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--