



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 28, 2011

RE: Bates Technologies LLC / 057-30769-00066

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

**Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY**

**Bates Technologies LLC
9059 Technology Lane,
Fishers, Indiana 46038**

(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.: M057-30769-00066	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 28, 2011 Expiration Date: December 28, 2021

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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Permit Revocation [326 IAC 2-1.1-9]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 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.8 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.12 Response to Excursions or Exceedances	
C.13 Actions Related to Noncompliance Demonstrated by a Stack Test	

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

- C.14 Malfunctions Report [326 IAC 1-6-2]
- C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.16 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 [326 IAC 6-3-2]
- 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 Visible Emissions Notations
- D.1.5 Parametric Monitoring
- D.1.6 Broken or Failed Detection

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

- D.1.7 Record Keeping Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 19

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

- D.2.1 326 IAC 8-3-2 (Cold Cleaning Operations)

Annual Notification 20
Malfunction Report 21

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary metal anodizing and metal finishing plant.

Source Address:	9059 Technology Lane, Fishers, Indiana 46038
General Source Phone Number:	317-841-2400
SIC Code:	3541 (Machine Tools, Metal Cutting Types) and 3599 (Industrial and Commercial Machinery and Equipment, Not Elsewhere Classified)
County Location:	Hamilton
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and 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) Pneumatic blasters:
- (1) One (1) pneumatic blaster, identified as #12, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (2) One (1) pneumatic blaster, identified as #13, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (3) One (1) pneumatic blaster, identified as #14, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
- (b) One (1) tabletop-scale nickel electroplating process, constructed in 2006, using a maximum of four (4) cold plating tanks with a current of 10 ampere applied for each tank.
- (c) Masking operations, constructed in 2006, with a maximum capacity of 12 wheels per day.
- (d) Solvent cleaning operations, constructed in 2006, with a maximum capacity of 0.3 gal per day.

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, M057-30769-00066, 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 M057-30769-00066 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

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

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

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

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

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

All required notifications shall be submitted to:

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

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

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

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

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

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

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

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

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

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

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

permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

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

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

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

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Pneumatic blasters:
- (1) One (1) pneumatic blaster, identified as #12, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (2) One (1) pneumatic blaster, identified as #13, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (3) One (1) pneumatic blaster, identified as #14, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.

(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 [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #12, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.
- (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #13, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.
- (c) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #14, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.

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

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour;}$$

$$P = \text{process weight rate in tons per hour}$$

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

A Preventive Maintenance Plan is required for pneumatic blasters #12, #13, and #14 and respective vacuum system baghouses. Section B - Preventive Maintenance Plan contains Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.3 Particulate Control

- (a) In order to comply with Condition D.1.1, the vacuum system baghouses for particulate control shall be in operation and control emissions from the three (3) pneumatic blasters, identified as #12, #13, and #14, at all times that the pneumatic blasters are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust for pneumatic blasters #12, #13, and #14 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) When an abnormal emission is observed, 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 Parametric Monitoring

The Permittee shall record the pressure drop across each of the vacuum system baghouse used in conjunction with the pneumatic blasters #12, #13, and #14, at least once per day when the pneumatic blasters #12, #13, and #14 are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months.

D.1.6 Broken or Failed Bag Detection

For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.

Bag failure can be indicated by a significant drop in the baghouses 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.1.7 Record Keeping Requirement

- (a) To document the compliance status with Condition D.1.4, the Permittee shall maintain daily records of the visible emission notations of the stack exhausts for pneumatic blasters #12, #13, and #14. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (i.e. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.5, the Permittee shall maintain the daily records of the pressure drop across the vacuum system baghouse used in conjunction with the pneumatic blasters #12, #13, and #14. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., the process did not operate that day).
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) Masking operations, constructed in 2006, with a maximum capacity of 12 wheels per day.
- (d) Solvent cleaning operations, constructed in 2006, with a maximum capacity of 0.3 gal per day.

(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.2.1 326 IAC 8-3-2 (Cold Cleaning Operations)

Any degreaser using VOC containing solvents is considered a cold cleaning operation. The cold cleaning operations constructed after January 1, 1980, the Permittee shall:

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

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

**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:	Bates Technologies LLC
Address:	9059 Technology Lane
City:	Fishers, Indiana 46038
Phone #:	317-841-2400
MSOP #:	M057-30769-00066

I hereby certify that Bates Technologies LLC is:

still in operation.

no longer in operation.

I hereby certify that Bates Technologies LLC is:

in compliance with the requirements of MSOP M057-30769-00066.

not in compliance with the requirements of MSOP M057-30769-00066.

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:	Bates Technologies LLC
Source Location:	9059 Technology Lane, Fishers, Indiana, 46038
County:	Hamilton
SIC Code:	3541 (Machine Tools, Metal Cutting Types) and 3599 (Industrial and Commercial Machinery and Equipment, Not Elsewhere Classified)
Permit Renewal No.:	M057-30769-00066
Permit Reviewer:	Swarna Prabha

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Bates Technologies LLC, relating to the operation of a stationary metal anodizing and metal finishing plant. On August 5, 2011, Bates Technologies LLC, submitted an application to the OAQ requesting to renew its operating permit.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Pneumatic blasters:
- (1) One (1) pneumatic blaster, identified as #12, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (2) One (1) pneumatic blaster, identified as #13, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
 - (3) One (1) pneumatic blaster, identified as #14, constructed in 2006, maximum capacity of 600 lbs/hr of metal, with particulate matter emissions controlled by an individual vacuum system baghouse, using glass and silicon carbide media of 1.4 lbs/hr, exhausting outside through a stack.
- (b) One (1) tabletop-scale nickel electroplating process, constructed in 2006, using a maximum of four (4) cold plating tanks with a current of 10 ampere applied for each tank.

NOTE: This is a table top operation associated with the nickel plating operation and per EPA guidance it is considered a bench scale operation (Amendment Proposed as of June 20, 2011). Therefore, no requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 63.11514, Subpart WWWW (National Emission Standards for Hazardous Air Pollutants Area Source Standards for Plating and Polishing) applicable.

- (c) Masking operations, constructed in 2006, with a maximum capacity of 12 wheels per day.

- (d) Solvent cleaning operations, constructed in 2006, with a maximum capacity of 0.3 gal per day.

Existing Approvals

The source was issued MSOP (057-21799-00066) on October 5, 2006. No further approvals have been issued since then.

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

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Hamilton County:

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM _{2.5} .	

- (a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (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. Hamilton 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}
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Hamilton County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
Hamilton County has been classified as attainment or unclassifiable in Indiana for criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	82.30
PM ₁₀	57.62
PM _{2.5}	57.62
SO ₂	0.0
VOC	1.27
CO	0.0
NO _x	0.0
GHGs	0
Single HAP	Less than 10
Total HAP	Less than 25

- (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, PM₁₀ and PM_{2.5} 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.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} ***	SO ₂	NO _x	VOC	CO	** GHGs	Total HAPs	Worst Single HAP
Pneumatic Blaster #12	27.43	19.2	19.2	0.0	0.0	0.0	0.0	0.0	6.68	3.29 (Chromium)
Pneumatic Blaster #13	27.43	19.2	19.2	0.0	0.0	0.0	0.0	0.0	6.68	3.29 (Chromium)
Pneumatic Blaster #14	27.43	19.2	19.2	0.0	0.0	0.0	0.0	0.0	6.68	3.29 (Chromium)
Nickel Electroplating Operation	0.02	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.02 (Nickel)
Masking Operation	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0	0
Solvent Cleaning	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.23	0.19 (Toluene)
Total PTE of Entire Source	82.30	57.62	57.62	0.0	0.0	1.27	0.0	0.0	20.28	9.87 (Chromium)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO ₂ e	25	10
PSD Major Source Thresholds	250	250	N/A	250	250	250	250	100,000 CO ₂ e	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **The 100,000CO ₂ e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. ***PM _{2.5} listed is direct PM _{2.5} .										

This existing stationary source is not major for Emission Offset and Nonattainment NSR because the emissions of the nonattainment pollutant, PM_{2.5} are less than one hundred (<100) tons per year.

This existing stationary source is not major for PSD because the emissions of the attainment pollutants are less than 250 tons per year.

Federal Rule Applicability

- (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.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 63.11514, Subpart XXXXXX (National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories) are not included in the permit, even though this source is an area source containing materials that have the potential to emit metals, defined to be the compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), in the amounts greater than or equal to 0.1 percent by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight (of the metal), it is not in one of the SIC categories that are applicable to Subpart XXXXXX.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 63.11514, Subpart WWWWWW (National Emission Standards for Hazardous Air Pollutants Area Source Standards for Plating and Polishing Operations) are not included in the permit, because this is a table top nickel plating operation and it is considered a bench-scale operation, which is small enough to be performed on a bench, table or similar structure so that the equipment is not directly contacting the floor.
- (e) 40 CFR 63, Subpart T (Halogenated Solvent Cleaning)
The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart T are not included in this permit since it has neither vapor nor cold cleaning machines (of either batch or in-line design) according to the definitions pursuant to 40 CFR 63.461. This source does not heat any solvent (which would meet the definition of "cold" cleaning), nor does it boil any solvent (which would meet the definition of "vapor" cleaning). Moreover, the source uses none of the solvents listed at 40 CFR 63.460(a), nor any combination of these in a total concentration greater than five (5) percent by weight, as a cleaning agent.
- (f) This source is not subject to the requirements of National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area source, 40 CFR Subpart TTTTTT, as defined in § 63.11462, because this source does not process Secondary Nonferrous Metals
- (g) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))

MSOP applicability is discussed under the Permit Level Determination – MSOP section above.

326 IAC 2-2 (Prevention of Significant Deterioration)

The source is not one of the twenty-eight (28) listed source categories, the source is located in Hamilton County, and the potential to emit of each attainment pollutants is less than 250 tons per year. This source is not a major source pursuant to 326 IAC 2-2, PSD, and the requirements of 326 IAC 2-2 are not applicable.

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

Hamilton County has been designated as nonattainment for the PM-2.5 standard; however, since the potential to emit of PM-2.5 is less than 100 tons per year, this source is a minor source of PM-2.5 emissions and is not subject to the requirements of 326 IAC 2-1.1-5, Non-attainment New Source Review.

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.

326 IAC 2-6 (Emission Reporting)

This source is still 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.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6.5 (PM Limitations Except Lake County)

This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

State Rule Applicability – Individual Facilities

Pneumatic Blasters:

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

- (a) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #12, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.
- (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #13, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.
- (c) Pursuant to 326 IAC 6-3-2, the particulate emissions from the pneumatic blaster, identified as blaster #14, shall be limited to 1.83 pounds per hour when operating at a maximum process weight rate of 601.4 pounds per hour of metal including media, which is equivalent to 0.3 tons/hr.

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

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

Calculations to determine if the blasters can comply (see Appendix for the PM PTE of each blaster :

$$\text{PM (before control)} = (27.43 \text{ tons PM/yr}) * (1 \text{ yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) \\ = 6.26 \text{ lbs PM/hr for each blaster}$$

$$\begin{aligned}\text{PM (after control)} &= (0.27 \text{ tons PM/yr}) * (1\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) \\ &= 0.062 \text{ lbs PM/hr for each blaster}\end{aligned}$$

Since the PM PTE before control is greater than the allowable emissions, the vacuum system baghouses have to control the emissions from the blasters. In utilizing the vacuum system baghouses for PM control, the maximum controlled particulate emission rate of each blaster is 0.06 pound per hour, which is less than the allowable rate (1.83 pound of particulate per hour each). The three (3) pneumatic blasters will comply with the requirements of 326 IAC 6-3-2 by using their individual vacuum system baghouses. The vacuum system baghouses shall be in operation at all times that the pneumatic blasters #12, #13, and #14 are in operation, in order to comply with this limit.

Nickel Electroplating Operation:

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

Pursuant to 326 IAC 6-3-1(b)(14), the nickel electroplating operations are exempt from the requirements of 326 IAC 6-3-2 because the PM potential to emit is less than 0.551 lb/hr.

Masking and Solvent Cleaning Operation:

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The masking operations are not subject to the requirements of 326 IAC 8-1-6 because potential emissions from the masking operations are less than twenty-five (25) tons of VOC per year.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

Pursuant to 326 IAC 8-2-1(a)(4), the masking operations, which are located in Hamilton County and constructed after July 1, 1990, are not subject to the requirements of 326 IAC 8-2-9 because the actual emissions from the masking operations are less than fifteen (15) pounds of VOC per day.

326 IAC 20-6-1 (Halogenated Solvent Cleaning)

The requirements of 326 IAC 20-6-1 are not applicable to the cleanup operations for the Priming Booth (PB1), Bus Assembly Operation (AL1, AL2) and Undercoating and Foam Deadening Operation (UFBLD), and Final Finish Operation (FF) because the degreasing operations do not use a solvent that contains any of the halogenated compounds listed in 326 IAC 20-6-1(a).

326 IAC 8-3-2 (Cold Cleaning Operations)

Any degreaser using VOC containing solvents is considered a cold cleaning operation. The cold cleaning operations constructed after January 1, 1980, the Permittee shall:

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

This is a new requirement to the source.

Compliance Determination and Monitoring Requirements

The three existing pneumatic blasters, identified as #12, #13, and #14, are controlled by individual vacuum system baghouse. The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
(3) Vacuum system baghouses	Pressure Drop each	Daily	3.0 to 6.0 inches	Response Steps
	Bag in the baghouse	As needed	Normal-Abnormal	
	Visible Emissions each	Daily	Normal-Abnormal	

These monitoring conditions are necessary because the vacuum system baghouses for the three pneumatic blasters, identified as #12, #13 and #14, must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-6.1 (MSOP).

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 August 05, 2011, and additional information was received on August 26, 2011.

Conclusion

The operation of this metal anodizing and metal finishing plant shall be subject to the conditions of the attached MSOP Renewal No. M057-30769-00066.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Swarna Prabha 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) (234-5376) or toll free at 1-800-451-6027 extension (45376).
- (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: Emission Calculations

Company Name: Bates Technologies, Inc.
 Source Location: 9059 Technology Lane, Fishers, Indiana, 46038
 Permit Number: M057-30769-00066
 Reviewer: Swarna Prabha

Uncontrolled Potential to Emit (tons/year)					
Emissions Generating Activity					
Pollutant	Three Pneumatic Blasters #12, #13, #14	Nickel Electroplating Operation	Masking Operation	*Solvent Cleaning Operation	TOTAL
PM	82.29	0.016	0.00	0.00	82.30
PM-10	57.60	0.016	0.00	0.00	57.62
PM2.5	57.60	0.02	0.00	0.00	57.62
SO2	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00
VOC	0.00	0.00	0.89	0.38	1.27
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	20.04	0.02	0.00	0.23	20.28
worst case single HAP	9.87	0.02	0.00	0.19	9.87

Controlled Potential to Emit (tons/year)					
Emissions Generating Activity					
Pollutant	**Three Pneumatic Blasters #12, #13, #14	Nickel Electroplating Operation	Masking Operation	*Solvent Cleaning Operation	TOTAL
PM	0.82	0.016	0.00	0.00	0.84
PM-10	0.58	0.016	0.00	0.00	0.59
PM2.5	0.58	0.02	0.00	0.00	0.59
SO2	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00
VOC	0.00	0.00	0.89	0.38	1.27
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	0.20	0.02	0.00	0.23	0.44
worst case single HAP	0.10	0.02	0.00	0.19	0.30

Total emissions are based on rated capacity at 8,760 hours/year.

PM and PM10 Emissions are based on the permit #M057- 21799-00066, issued on October 5, 2006. PM set equal to PM-10 (except for pneumatic blasting where PM-10 = 0.70% * PM) based on the Permit # 057-21799-00066, issued on October 5, 2006.

*The Haps for solvent cleaning were not included in the permit #057-21799-00066, and are included in this renewal.

The MEK is no longer a HAP. It has been deleted from EPA's list of HAP effective December 19, 2005.

** The metal HAPs are included in the calculations for the Pneumatic blasters.

Appendix A: Emission Calculations
Abrasive Blasting #12, #13 and #14 - Confined

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Lane, Fishers, Indiana, 46038
Permit Number: M057-30769-00066
Reviewer: Swarna Prabha

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

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 for three pneumatic blasters

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 =

420
150
99
0.31
0.3125

Flow Rate (FR) (lb/hr) = 626.223 per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =
 EF = emission factor (lb PM10/ lb PM) From Table 1 =
 FR = Flow Rate (lb/hr) =
 w = fraction of time of wet blasting =
 N = number of nozzles =

0.010
0.700
626.223
0
3

Uncontrolled PTE PM =	18.79 lb/hr
	82.29 ton/yr *
Uncontrolled PTE PM10 =	13.15 lb/hr
	57.60 ton/yr
Controlled Emissions PM =	0.82 ton/yr **
Controlled Emissions PM10 =	0.58 ton/yr

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. 1, 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)

* PM PTE before control for each blaster = 27.43 tons/year

** PM PTE after control for each balster = 0.27 tons/yr

Blaster Allowable Emission Rate Pursuant to 326 IAC 6-3-2(e):

Allowable emission limit, pursuant to 326 IAC 6-3-2 = $4.10 \times P^{0.67}$ lb/hour, for process weight rates, P, expressed in tons/hour

Per original MSOP No. 11722, the maximum process weight rate for each pneumatic blaster is 600 lbs/hr. Therefore, based on the above formula:

Allowable PM for each b 1.83 lb/hour * 4.38 lb/hr / ton/yr = 8.02 ton/yr (equivalent allowable annual emission rate)

**Appendix A: Process Particulate Emissions
Potential Metal Hazardous Air Pollutant Process Emissions (MHAP)
from the Pneumatic Shot blasting Operations**

**Company Name: Bates technologies, Inc.
Address City IN Zip: 9059 Technology Lane, Fishers, Indiana, 46038
MSOP No: M057-30769-00066
Reviewer: Swarna Prabha**

Unit ID	* Total Uncontrolled Potential Particulate (PM) (tons/yr)	Weight % Chromium Compounds	Weight % Lead Compounds	Weight % Manganese Compounds	Weight % Nickel Compounds	Chromium Compounds Emissions (ton/yr)	Lead Compounds Emissions (ton/yr)	Manganese Compounds Emissions (ton/yr)	Nickel Compounds Emissions (ton/yr)
<i>pneumatic shot blasters #12, #13, #14</i>									
Three (3) Pneumatic blasters	82.286	12.00%	0.35%	2.00%	10.00%	9.874	0.288	1.646	8.229
Total Uncontrolled Potential Emissions (tons/yr)						9.87	0.29	1.65	8.23
Control Efficiency (%)						99%			
Controlled Potential Emissions (tons/year)						0.099	0.003	0.016	0.082

Methodology:

Uncontrolled Potential Emissions (tons/yr) = Total Potential Particulate (tons/yr) * Weight % Metal HAP

Controlled Potential Emissions (tons/yr) = Uncontrolled Potential Emissions (tons/yr) * (1 - Control Efficiency (%))

Total Combined HAPs (tons/yr)	20.04
Controlled Potential Emissions (tons/year)	0.20

Notes:

Total emissions based on rated capacity at 8,760 hours/year.

Potential emissions for the metallic HAPs, including: Chromium, Lead, Manganese and Nickel, were determined using a "worst case" content from the MSDS provided by the source.

Metal HAPS, including Cadmium, Chromium, Lead, Manganese and Nickel, are particulate in nature and can be controlled using a control device.

Appendix A: Emission Calculations
Nickel Electroplating

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Lane, Fishers, Indiana, 46038
Permit Number: M057-30769-00066
Reviewer: Swarna Prabha

(1) Uncontrolled total particulate matter emissions from nonchromium electroplating tanks
PM Emissions = EF grains/A-hr * Capacity amp * 8,760 hrs/yr * lbs/7000 grains * ton/2000 lbs
= 0.0158 tons/yr

where:

EF = 0.63 grains/A-hr Uncontrolled emission factor for PM
Maximum Capacity = 40 amp (4 tanks @ 10 amps each)

(2) Uncontrolled nickel emissions from nonchromium electroplating tanks
Nickel Emissions = EF grains/A-hr * Capacity amp * 8,760 hrs/yr * lbs/7000 grains * ton/2000 lbs
= 0.0158 tons/yr

where:

EF = 0.63 grains/A-hr Uncontrolled emission factor for Ni
Maximum Capacity = 40 amp (4 tanks @ 10 amps each)

Emission Calculations are based on AP-42 -Table 12.20-4 (Supplement B 7/96)

¹ Activity rate assumes a maximum use of 4 tanks simultaneously with a current of 10 amp applied to each tank for every hour of usage. Using 24 hrs/day and 365 days/year in the PTE

**Appendix A: Emission Calculations
Masking Operation**

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Lane, Fishers, Indiana, 46038
Permit Number: M057-30769-00066
Reviewer: Swarna Prabha

(1) PTE of VOC tons/yr = 0.0625 gal/wheel * 4 wheels/shift * 3 shift/day * 8.15 lbs/gal * 80% * 365 days/yr * ton/2000 lbs
= **0.892** tons/yr
PTE of VOC lbs/day = 4.890 lbs/day

NOTE:

(1) Emissions from Masking operations are based on the Permit # M057-21799-00066.
The MEK is no longer a HAP. It has been deleted from EPA's list of HAP effective December 19, 2005.

Methodology:

PTE of VOC tons/yr = [Maximum capacity (gal/unit) x (units/shift) x (shift/day) x VOC lbs/ gal x days/yr x tons/2000 lbs]
VOC (lbs/gal) = [Density (lbs/gal)] x [Weight % VOC/100]
PTE of VOC (lbs/day) = [PTE of VOC (tons/yr) x (2000 lbs/ton) / (365 days/yr)]

**Appendix A: Emission Calculations
Solvent Cleaning Operation**

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Lane, Fishers, Indiana, 46038
Permit Number: M057-30769-00066
Reviewer: Swarna Prabha

Uncontrolled VOC emissions from the Solvent Cleaning Operation:

$$\begin{aligned} \text{PTE of VOC (tons/yr)} &= 0.1 \text{ gal/shift} * 3 \text{ shift/day} * 365 \text{ days/yr} * 6.885 \text{ lbs/gal} * 100\% * \text{ton}/2000 \text{ lbs} \\ &= \mathbf{0.377} \text{ tons/yr} \\ \text{PTE of VOC (lbs/day)} &= 2.066 \text{ lbs/day} \end{aligned}$$

$$\begin{aligned} \text{*Toluene Emissions} &= 0.1 \text{ gal/shift} * 3 \text{ shift/day} * 365 \text{ days/yr} * 6.885 \text{ lbs/gal} * 50\% * \text{ton}/2000 \text{ lbs} \\ &= \mathbf{0.188} \end{aligned}$$

$$\begin{aligned} \text{*Tetrachloroethylene} &= 0.1 \text{ gal/shift} * 3 \text{ shift/day} * 365 \text{ days/yr} * 6.885 \text{ lbs/gal} * 20\% * \text{ton}/2000 \text{ lbs} \\ &= \mathbf{0.038} \text{ tons/yr} \end{aligned}$$

NOTE:

Emissions from cleaning operations are based on the Permit # M057-21799-00066.

The MEK is no longer a HAP. It has been deleted from EPA's list of HAP effective December 19, 2005.

*The Haps for solvent cleaning were not included in the permit #057-21799-00066, and are included in this renewal.

Methodology:



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Darrell Day
Bates Technologies LLC
9059 Technology Ln
Fishers, IN 46038

DATE: December 28, 2011

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

SUBJECT: Final Decision
MSOP
057-30769-00066

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

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

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

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

December 28, 2011

TO: Hamilton East Public Library

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

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

Applicant Name: Bates Technologies LLC
Permit Number: 057-30769-00066

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 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 12/28/2011 Bates Technologies LLC 057-30769-00066 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Darrell Day Bates Technologies LLC 9059 Technology Ln Fishers IN 46038 (Source CAATS)										
2		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060-5405 (Health Department)										
3		Hamilton County Board of Commissioners One Hamilton County Square Noblesville IN 46064 (Local Official)										
4		Fishers Town Council and Town Manager 1 Municipal Dr. Fishers IN 46038 (Local Official)										
5		Hamilton East Public Library 5 Municipal Drive Fishers IN 46038 (Library)										
6												
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.
---	--	--	--