INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: October 5, 2006

RE: Bates Technologies, Inc. / 057-21799-00066

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

NEW SOURCE CONSTRUCTION
and
MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Bates Technologies, Inc.
9059 Technology Drive
Fishers, Indiana, 46038

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units 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.

This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-6.1-6, applicable to those conditions.

Operation Permit No.: MSOP 057-21799-00066	
Issued by: Origin signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date:October 5, 2006 Expiration Date:October 5, 2011

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
B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]
B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]
B.4 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]
B.5 Term of Conditions [326 IAC 2-1.1-9.5]
B.6 Enforceability
B.7 Severability
B.8 Property Rights or Exclusive Privilege
B.9 Duty to Provide Information
B.10 Certification
B.11 Annual Notification [326 IAC 2-6.1-5(a)(5)]
B.12 Preventive Maintenance Plan [326 IAC 1-6-3]
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]
B.14 Termination of Right to Operate [326 IAC 2-6.1-7(a)]
B.15 Permit Renewal [326 IAC 2-6.1-7]
B.16 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]
B.17 Source Modification Requirement
B.18 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.19 Transfer of Ownership or Operation [326 IAC 2-6.1-6]
B.20 Annual Fee Payment [326 IAC 2-1.1-7]
B.21 Credible Evidence [326 IAC 1-1-6]

C SOURCE OPERATION CONDITIONS 10

C.1 Particulate Emission Limitation 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 Fugitive Dust Emissions [326 IAC 6-4]
C.5 Stack Height [326 IAC 1-7]
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 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
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
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 2-6.1-5] [IC 13-14-1-13]

D.1 EMISSIONS UNIT OPERATION CONDITIONS – Three (3) pneumatic blasters (#12, #13, and #14) **16**

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

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]
D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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 Bag Detection

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

D.1.7 Record Keeping Requirements

Annual Notification **19**
Malfunction Report **20**
Affidavit of Construction **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, small hard chromium electroplating operation.

Authorized Individual:	Ted Bates (C.E.O.)
Source Address:	9059 Technology Drive, Fishers, Indiana, 46038
Mailing Address:	9059 Technology Drive, Fishers, Indiana, 46038
General Source Phone:	(317) 841-2400
SIC Code:	3541 and 3599
County Location:	Hamilton
Source Location Status:	Basic nonattainment area for 8-hour ozone Nonattainment area for $PM_{2.5}$ Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source under PSD, Emission Offset Rules, and Nonattainment NSR; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) Three (3) pneumatic blasters identified as blaster #12, #13, and #14, each with particulate matter emissions controlled by an individual vacuum system baghouse (grain loading of less than 0.01 grains per dry standard cubic feet of air each);

(b) One (1) tabletop-scale nickel electroplating process, using a maximum of four (4) cold plating tanks with a current of 10 ampere for each tank; and

(c) Masking and solvent cleaning operations with a capacity of 4 wheels per shift.

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 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 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, 057-21799-00066, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date 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.5 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.6 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.7 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.8 Property Rights or Exclusive Privilege

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

B.9 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.10 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 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:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue,
Indianapolis, 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.12 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) All terms and conditions of permits established prior to 057-21799-00066 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.14 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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.15 Permit Renewal [326 IAC 2-6.1-7]

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

Request for renewal shall be submitted to:

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

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

(1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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

B.16 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

B.17 Source Modification Requirement

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

B.18 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][IC13-17-3-2][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 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 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 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.19 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

B.20 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing.

(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.21 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of 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 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.5 Stack Height [326 IAC 1-7]

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

C.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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited 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) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.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

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

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

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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.

(e) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Three (3) pneumatic blasters identified as blaster #12, #13, and #14, each with particulate matter emissions controlled by an individual vacuum system baghouse (grain loading of less than 0.01 grains per dry standard cubic feet of air each).

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of three (3) pneumatic blasters shall not exceed 1.83 pounds per hour when each operating at a process weight rate of 600 pounds per hour.

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

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

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

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for pneumatic blasters #12, #13, and #14 and any control devices.

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 baghouse for particulate control shall be in operation and control emissions from the three (3) pneumatic blasters (#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) Daily visible emission notations of the stack exhaust (for pneumatic blasters #12, #13, and #14) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the pressure drop across the vacuum system baghouse used in conjunction with the pneumatic blasters #12, #13, and #14, at least once daily when the pneumatic blasters are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the vacuum system 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 steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.6 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line.

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 Requirement [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the stack exhaust (for pneumatic blasters #12, #13, and #14).

(b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:

(1) Daily records of the pressure drop during normal operation when venting to the atmosphere.

(2) Documentation of the dates vents are redirected.

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE 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, Inc.**
Address:	**9059 Technology Drive, Fishers, Indiana, 46038**
City:	**Fishers, Indiana 46038**
Phone #:	**(317) 841-2400**
MSOP #:	**057-21799-00066**

I hereby certify that Bates Technologies, Inc**.** is

☐ still in operation.
☐ no longer in operation.

I hereby certify that Bates Technologies, Inc. is
☐ in compliance with the requirements of MSOP 057-21799-00066.
☐ not in compliance with the requirements of MSOP 057-21799-00066.

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
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 ?_____, 100TONS/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 PERMI 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:

_____

_____

Mail to: Permit Administration & Development Section

Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Bates Technologies, Inc.
9059 Technology Drive
Fishers, Indiana 46038

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that Bates Technologies, Inc, 9059 Technology Drive, Fishers, Indiana, 46038, completed construction of the pneumatic blaster #14 on _____in conformity with the requirements and intent of the Minor Source Operating Permit application received by the Office of Air Quality on September 16, 2005 and as permitted pursuant to MSOP **Permit No. 057-21799-00066, Plant ID No. 057-00066.** issued on _____.

Further Affiant said not.
I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____ , 20 _____.

My Commission expires:

Signature

Name (typed or printed)

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Bates Technologies, Inc.
9059 Technology Drive
Fishers, Indiana 46038

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that Bates Technologies, Inc, 9059 Technology Drive, Fishers, Indiana, 46038, completed construction of the pneumatic blaster #14 on _____in conformity with the requirements and intent of the Minor Source Operating Permit application received by the Office of Air Quality on September 16, 2005 and as permitted pursuant to MSOP **Permit No. 001-21799-00062, Plant ID No. 001-00062.** issued on _____.

Further Affiant said not.
I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____.

My Commission expires:

Signature

Name (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for New Source Construction and
Minor Source Operating Permit

Source Name:	**Bates Technologies, Inc.**
Source Location:	**9059 Technology Drive, Fishers, Indiana 46038**
County:	**Hamilton**
SIC Code:	**3541 and 3599**
Operation Permit No.:	**057-21799-00066**
Permit Reviewer:	**Tanya White/EVP**

On August 30, 2006, the Office of Air Quality (OAQ) had a notice published in the Noblesville Ledger, Northern Hamilton County, Indiana, stating that Bates Technologies, Inc. had applied for a New Source Construction and Minor Source Operating Permit (MSOP) to construct and operate a metal anodizing and metal finishing plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review IDEM, OAQ has made the following changes to the MSOP (additions in **bold**, deletions in ~~strikeout~~):

1. Reason: Hamilton County has been redesignated as a basic nonattainment area for the 8-hour ozone standard. As such, permit Condition A.1 has been revised.

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, small hard chromium electroplating operation.

Authorized Individual:	Ted Bates (C.E.O.)
Source Address:	9059 Technology Drive, Fishers, Indiana, 46038
Mailing Address:	9059 Technology Drive, Fishers, Indiana, 46038
General Source Phone:	(317) 841-2400
SIC Code:	3541 and 3599
County Location:	Hamilton
Source Location Status:	~~Moderate~~**Basic** nonattainment area for 8-hour ozone Nonattainment area for $PM_{2.5}$ Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source under PSD, Emission Offset Rules, and Nonattainment NSR; Minor Source, Section 112 of the Clean Air Act

2. Reason: Permit Condition A.2 has been revised since it is not necessary to indicate in the facility description that Pneumatic Blaster #14 is in storage.

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) Three (3) pneumatic blasters identified as blaster #12, #13, and #14, each with particulate matter emissions controlled by an individual vacuum system baghouse (grain loading of less than 0.01 grains per dry standard cubic feet of air each)~~.~~**;** ~~Pneumatic blaster #14 is currently in storage at Bates Technologies, Inc.'s Angola plant. However, the source intends to install it at their Fishers, Indiana plant within eighteen months of issuance of the permit;~~

(b) One (1) tabletop-scale nickel electroplating process, using a maximum of four (4) cold plating tanks with a current of 10 ampere for each tank; and

(c) Masking and solvent cleaning operations with a capacity of 4 wheels per shift.

3. Reason: The facility description in permit Section D.1 has been revised since it is not necessary to indicate that Pneumatic Blaster #14 is in storage.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Three (3) pneumatic blasters identified as blaster #12, #13, and #14, each with particulate matter emissions controlled by an individual vacuum system baghouse (grain loading of less than 0.01 grains per dry standard cubic feet of air each). ~~Pneumatic blaster #14 is currently in storage at Bates Technologies, Inc.'s Angola plant. However, the source intends to install it at their Fishers, Indiana plant within eighteen months of issuance of the permit.~~

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

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	**Bates Technologies, Inc.**
Source Location:	**9059 Technology Drive, Fishers, Indiana 46038**
County:	**Hamilton**
SIC Code:	**3541 and 3599**
Operation Permit No.:	**057-21799-00066**
Permit Reviewer:	**Tanya White/EVP**

The Office of Air Quality (OAQ) has reviewed an application from Bates Technologies, Inc. relating to the operation of a stationary metal anodizing and metal finishing plant.

History

On August 26, 2005 Micromatic Operations, Inc. (currently owned and operated by Micromatic, LLC) sold its honing tool product line (including two hard chromium electroplating tanks, two pneumatic blasters, one tabletop-scale nickel electroplating process, and masking and solvent cleaning operations) to Bates Technologies, Inc. These units were operated by Bates Technologies, Inc. at the existing Micromatic, LLC plant located at 525 Berne Street until March, 2006. In March 2006, Bates Technologies sold the two hard chromium electroplating tanks and one of the two pneumatic blasters back to Micromatic, LLC. The other equipment including one of the two pneumatic blasters, one tabletop-scale nickel electroplating process, and masking and solvent cleaning operations are no longer located at the Micromatic's plant at 525 Berne Street, but are operated by Bates Technologies, Inc. at their Fishers, Indiana plant, which does not have an operating permit. Pneumatic blaster #14 is currently in storage at Bates Technologies, Inc.'s Angola plant. However, the source intends to install it at their Fishers, Indiana plant within eighteen (18) months of issuance of the permit.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) One (1) tabletop-scale nickel electroplating process, using a maximum of four (4) cold plating tanks with a current of 10 ampere for each tank;

(b) Masking and solvent cleaning operations with a capacity of 4 wheels per shift.

(c) Two (2) pneumatic blasters, identified as blasters #12 and # 13, with particulate matter emissions controlled by two (2) individual vacuum system baghouses (grain loading of less than 0.01 grains per dry standard cubic feet of air each).

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(a) One (1) pneumatic blaster identified as blaster #14, with particulate matter emissions controlled by one (1) vacuum system baghouse (grain loading of less than 0.01 grains per dry standard cubic feet of air each). Pneumatic blaster #14 is currently in storage at Bates Technologies, Inc.'s Angola plant. However, the source intends to install it at their Fishers, Indiana plant within eighteen (18) months of issuance of the permit.

Existing Approvals

This is the first air approval issued to this source.

Enforcement Issue

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

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

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (in)	Flow Rate (acfm)	Temperature (^oF)
6"	Small Nickel Plating Tanks	3 (1 Stack)	6	210	72
6"	Plating and Masking Area				
4"	Rinse and Strip Area				

Recommendation

The staff recommends to the Commissioner that the construction and operation 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 September 16, 2005, with additional information received on April 10, 2006.

Emission Calculations

See Appendix A, (pages 1 through 5) of this document for detailed emission calculations.

Potential to Emit Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	82.30
PM-10	57.62
SO_2	0.00
VOC	1.27
CO	0.00
NO_x	0.00

HAPs	Potential to Emit (tons/yr)
Nickel Compounds	Less than 10
Methyl Ethyl Ketone	Less than 10
Total HAPs	Less than 25

(a) The potential to emit of all criteria pollutants are less than 100 tons per year and the potential to emit of PM and PM-10 are greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. 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. An MSOP will be issued.

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

County Attainment Status

The source is located in Hamilton County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Nonattainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Moderate Nonattainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Hamilton County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Hamilton County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

(c) Hamilton 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. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD and Emission Offset Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.84
PM-10	0.59
SO_2	0.00
VOC	1.27
CO	0.00
NO_x	0.00
Single HAP	0.89
Combination HAPs	0.91

(a) This existing source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements, do not apply.

(b) These emissions are based on calculations in Appendix A.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

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

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

State Rule Applicability – Entire Source

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 2-3 (Emission Offset)
This source is not subject to the requirements of 326 IAC 2-3 because the source is located in Hamilton County, which is classified as a moderate ozone nonattainment area and the source has the potential to emit less than 100 tons per year for each of VOC and NOx.

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 2-4.1-1 (New Source Toxics Control)
The operation of this facility will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1-1 does not apply.

326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), the source is located in Lake county but does not emit VOC or NOx equal to or greater than twenty-five (25) tons per year, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary 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 1-2-33.5 (Hazardous Air Pollutants)

On December 19, 2005 the U.S.EPA amended 70 FR 75047 to delist Methyl Ethyl Ketone (MEK) as a Hazardous Air Pollutant. The source will no longer be required to limit or report MEK usage once 326 IAC 1-2-33.5 is amended to reflect the delisting. The delisting of MEK (LSA document #06-19) from the HAP list was proposed for March 10, 2006.

State Rule Applicability – Individual Facilities

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

(a) Pursuant to 326 IAC 6-3-2, the potential emissions of particulate matter from each of the three (3) pneumatic blasters (#12, #13 and #14) shall be limited to 1.83 pounds per hour or less when each operating at a maximum process weight rate of 600 pounds per hour.

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

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

$E = 4.10\ (0.3)^{0.67} = 1.83$ lbs PM/hr

The maximum process weight rate for each of the three (3) pneumatic blasters is 600 lbs/hr (0.3 tons/hr). Therefore P = 0.3 tons/hr and E = 1.83 lbs PM/hr.

<u>Compliance calculation:</u>
(27.43 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 6.26 lbs PM/hr for each blaster

<u>Controlled Compliance calculation:</u>
(0.28 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 0.06 lbs PM/hr for each blaster

The pneumatic blasters are each equipped with a vacuum system baghouse for particulate control with 99.97% control efficiency. Utilizing the vacuum system baghouses for PM control, the maximum controlled particulate emission rate of the three blasters 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 vacuum system baghouses. The vacuum system baghouses shall be in operation at all times that pneumatic blasters #12, #13, and #14 are in operation, in order to comply with this limit.

(b) The nickel electroplating operations have a PM potential to emit of 0.02 pounds per hour. 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.

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.

Conclusion

The operation of this metal anodizing and metal finishing plant shall be subject to the conditions of the Minor Source Operating Permit 057-21799-00066.

Appendix A: Emission Calculations

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Drive, Fishers, Indiana, 46038
Permit Number: MSOP 001-21799-00062
Reviewer: Tanya White/EVP
Date: April-06

Uncontrolled Potential to Emit (tons/year)

	Emissions Generating Activity				
Pollutant	Nickel Electroplating Operation	Masking Operation	Solvent Cleaning Operation	Three Pneumatic Blasters	**TOTAL**
PM	0.02	0.00	0.00	82.29	82.30
PM-10	0.02	0.00	0.00	57.60	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	0.89	0.38	0.00	1.27
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	0.02	0.00	0.00	0.00	0.02
worst case single HAP	0.02	0.00	0.00	0.00	

Total emissions based on rated capacity at 8,760 hours/year without controls and limitations.

Controlled Potential to Emit (tons/year)

	Emissions Generating Activity				
Pollutant	Nickel Electroplating Operation	Masking Operation	Solvent Cleaning Operation	Three Pneumatic Blasters	**TOTAL**
PM	0.02	0.00	0.00	0.82	0.84
PM-10	0.02	0.00	0.00	0.58	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	0.89	0.38	0.00	1.27
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	0.02	0.00	0.00	0.00	0.02
worst case single HAP	0.02	0.00	0.00	0.00	

Total emissions based on rated capacity at 8,760 hours/year, after enforceable controls and limitations.

PM set equal to PM-10 (except for pneumatic blasting where PM-10 = 0.70% * PM)

Appendix A: Emission Calculations
Nickel Electroplating

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Drive, Fishers, Indiana, 46038
Permit Number: MSOP 001-21799-00062
Reviewer: Tanya White/EVP
Date: April-06

Uncontrolled total particulate matter emissions from nonchromium electroplating tanks

(1) Emissions = EF * Capacity *8,760 hrs/yr * lbs/7000 grains * ton/2000 lbs
= **0.0158** tons/yr

Where:

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

Uncontrolled nickel emissions from nonchromium electroplating tanks

(3) Emissions = EF * Capacity *8,760 hrs/yr * lbs/7000 grains * ton/2000 lbs
= **0.0158** tons/yr

Where:

EF =	0.63	Uncontrolled emission factor for nickel, grains/A-hr
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 Drive, Fishers, Indiana, 46038
Permit Number: MSOP 001-21799-00062
Reviewer: Tanya White/EVP
Date: April-06

Uncontrolled VOC emissions from Red Stop-Off Masking

VOC Emissions = 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

Appendix A: Emission Calculations
Solvent Cleaning Operation

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Drive, Fishers, Indiana, 46038
Permit Number: MSOP 001-21799-00062
Reviewer: Tanya White/EVP
Date: April-06

Uncontrolled VOC emissions from the Solvent Cleaning Operation

VOC Emissions	=	0.1 gal/shift * 3 shift/day * 365 days/yr * 6.885 lbs/gal * 100% * ton/2000 lbs	
	=	**0.377**	tons/yr

Appendix A: Emission Calculations
Abrasive Blasting - Confined

Company Name: Bates Technologies, Inc.
Source Location: 9059 Technology Drive, Fishers, Indiana, 46038
Permit Number: MSOP 001-21799-00062
Reviewer: Tanya White/EVP
Date: April-06

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	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

	Nozzle Pressure (psig)							
Internal diameter, in	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 =	420
D = Density of abrasive (lb/ft3) From Table 2 =	150
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.31
ID1 = Nozzle internal diameter (in) from Table 3 =	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 =	0.010
EF = emission factor (lb PM10/ lb PM) From Table 1 =	0.700
FR = Flow Rate (lb/hr) =	626.223
w = fraction of time of wet blasting =	0 %
N = number of nozzles =	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. 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)

Blaster No. 16 Allowable Emission Rate Pursuant to 326 IAC 6-3-2(e):

Allowable emission limit, pursuant to 326 IAC 6-3-2 = $4.10 * P^{0.67}$ lb/hour, for process weight rates, P, expressed in tons/hour, up to 30 tons
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: 3.82 lb/hour * 4.38 lb/hr / ton/yr = 16.73 ton/yr (equivalent allowable annual emission rate) *