

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Federal Enforceable State Operating Permit

for Blastech, Inc.
in Lake County

FESOP No.: F 089-14468-00100

Notice is hereby given that the above-mentioned company, located at 411 Blaine Street, Gary Indiana 46406, has made an application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP) for the operation of a steel plate conditioning and painting plant. The potential to emit volatile organic compounds (VOCs) and particulate matter with aerodynamic diameter less than ten microns (PM₁₀) are 743 tons per year and 870 tons per year, respectively. This permit limits VOC emissions to less than 25 tons per year and PM₁₀ emissions to less than 100 tons per year. The source will use a regenerative thermal oxidizer to control VOC emissions and a baghouse and dry filters to control PM₁₀ emissions.

Notice is hereby given that there will be a period of thirty (30) days from the date of publication of this notice during which any interested person may comment on why this proposed permit should or should not be issued. Appropriate comments should be related to any air quality issues, interpretation of the state and federal rules, calculations made, technical issues, or the effect that the operation of this source would have on any aggrieved individuals. IDEM, OAQ does not have jurisdiction in specifying and implementing requirements for zoning, odor or noise. For such issues, please contact your local officials.

A copy of the application and draft permit is available for examination at the City of Gary Public Library - Main Branch, 220 West 5th Avenue, Gary, Indiana, 46402, and at Gary Air and Land Pollution Control, Suite 1012, 504 Broadway, Gary, Indiana 46402, and the Northwest Regional Office, NBD Bank Building, 504 N. Broadway, Suite 418, Gary, Indiana 46402-1942. A copy of the draft permit is also available for examination at: www.IN.gov/idem/air/permits/. All statements, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015. If adverse comments concerning the **air pollution impact** of this draft source are received, together with a request for a public hearing, such a hearing may be held to give further consideration to this application.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the OAQ, at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have fifteen (15) days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, P.O. Box 2010, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/AB

**NEW SOURCE CONSTRUCTION
and
FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY
and
GARY AIR AND LAND POLLUTION CONTROL**

**Blastech, Inc.
411 Blaine Street
Gary, Indiana 46406**

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

| | |
|--|----------------|
| Operation Permit No.: F089-14468-00100 | |
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: |

TABLE OF CONTENTS

| | | |
|------------------|---|----|
| SECTION A | SOURCE SUMMARY | 5 |
| A.1 | General Information [326 IAC 2-8-3(b)] | |
| A.2 | Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] | |
| A.3 | Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)] | |
| A.4 | FESOP Applicability [326 IAC 2-8-2] | |
| A.5 | Prior Permit Conditions | |
| SECTION B | GENERAL CONDITIONS | 7 |
| B.1 | Permit No Defense [IC 13] | |
| B.2 | Definitions [326 IAC 2-8-1] | |
| B.3 | Permit Term [326 IAC 2-8-4(2)] | |
| B.4 | Enforceability [326 IAC 2-8-6] | |
| B.5 | Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)] | |
| B.6 | Severability [326 IAC 2-8-4(4)] | |
| B.7 | Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)] | |
| B.8 | Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] | |
| B.9 | Compliance Order Issuance [326 IAC 2-8-5(b)] | |
| B.10 | Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)] | |
| B.11 | Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)] | |
| B.12 | Annual Compliance Certification [326 IAC 2-8-5(a)(1)] | |
| B.13 | Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)] | |
| B.14 | Emergency Provisions [326 IAC 2-8-12] | |
| B.15 | Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)] | |
| B.16 | Permit Modification, Reopening, Revocation and Reissuance, or Termination | |
| B.17 | Permit Renewal [326 IAC 2-8-3(h)] | |
| B.18 | Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1] | |
| B.19 | Operational Flexibility [326 IAC 2-8-15] | |
| B.20 | Permit Revision Requirement [326 IAC 2-8-11.1] | |
| B.21 | Inspection and Entry [326 IAC 2-8-5(a)(2)] [I13-14-2-2] | |
| B.22 | Transfer of Ownership or Operational Control [326 IAC 2-8-10] | |
| B.23 | Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16] | |
| B.24 | Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9] | |
| SECTION C | SOURCE OPERATION CONDITIONS | 19 |
| | Emission Limitations and Standards [326 IAC 2-8-4(1)] | |
| C.1 | Overall Source Limit [326 IAC 2-8] | |
| C.2 | Opacity [326 IAC 5-1] | |
| C.3 | Open Burning [326 IAC 4-1][IC 13-17-9] | |
| C.4 | Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)] | |
| C.5 | Fugitive Dust Emissions [326 IAC 6-4] | |
| C.6 | Operation of Equipment [326 IAC 2-8-5(a)(4)] | |
| C.7 | Stack Height [326 IAC 1-7] | |
| C.8 | Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140] | |
| | Testing Requirements [326 IAC 2-8-4(3)] | |
| C.9 | Performance Testing [326 IAC 3-6] | |
| | Compliance Requirements [326 IAC 2-1.1-11] | |
| C.10 | Compliance Requirements [326 IAC 2-1.1-11] | |

TABLE OF CONTENTS (Continued)

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

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-8-4(3)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test

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

- C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Contingency Measures

- C.22 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

SECTION D.1 FACILITY OPERATION CONDITIONS 28

General Construction Conditions (D.1.1 - D.1.4)

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.5 FESOP Limit [326 IAC 2-8]
- D.1.6 Particulate Matter
- D.1.7 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.9 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

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

- D.1.10 Particulate Matter (PM)
- D.1.11 Visible Emissions Notations
- D.1.12 Parametric Monitoring
- D.1.13 Baghouse Inspections
- D.1.14 Broken or Failed Bag Detection

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

- D.1.15 Record Keeping Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS 31

General Construction Conditions (D.2.1 - D.2.4)

TABLE OF CONTENTS (Continued)

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.5 Volatile Organic Compounds (VOC) Limitations
- D.2.6 FESOP Limits [326 IAC 2-8] [326 IAC 2-3]
- D.2.7 Particulate Matter [326 IAC 2-3]
- D.2.8 Particulate Matter (PM) [326 IAC 6-1-2(a)]
- D.2.9 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.2.10 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]
- D.2.11 Volatile Organic Compounds (VOC)
- D.2.12 Regenerative Thermal Oxidizer

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

- D.2.13 Parametric Monitoring (PM)
- D.2.14 Monitoring
- D.2.15 Parametric Monitoring

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

- D.2.16 Record Keeping Requirements
- D.2.17 Reporting Requirements

| | |
|---|-----------|
| FESOP Certification Form | 36 |
| FESOP Emergency Occurrence Form | 37 |
| FESOP Quarterly Report Form | 39 and 40 |

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Gary Air and Land Pollution Control. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a steel plate conditioning and painting plant.

| | |
|-------------------------|--|
| Authorized individual: | David Johnson, Manager |
| Source Address: | 411 Blaine Street, Gary Indiana 46406 |
| Mailing Address: | 57 Old Onondago Road, Brantford, Ontario, N3T 5W4 Canada |
| SIC Code: | 3479 |
| Source Location Status: | Lake |
| County Status: | Nonattainment for PM ₁₀ , Ozone, and SO ₂ Attainment for all other criteria pollutants |
| Source Status: | Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act |

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

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

- (a) One (1) enclosed blasting chamber with a maximum throughput of 534.55 tons per hour. Emissions of particulate matter are controlled using a baghouse (identified as CD-1), which exhausts through stack SS-1.
- (b) One (1) spray paint booth (identified as PB-1), equipped with four (4) airless spray guns, with emissions controlled using dry filters and a regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2. Steel plates are painted in the spray booth.
- (c) One (1) paint mixing room with emissions controlled using a regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal Units per hour, including:
 - (1) One (1) natural gas-fired infrared heater (identified as H-1) having a maximum heat input capacity of 2.58 MMBtu per hour.
 - (2) One (1) natural gas-fired curing oven (identified as OV-1), having a maximum heat input capacity of 1.4 MMBtu per hour, with emissions controlled using a regenerative thermal oxidizer (identified as CD-2), which exhausts through stack SS-2.

- (b) Unpaved roads and parking lots with fugitive PM₁₀ emissions less than five (5) tons per year.

A.4 FESOP Applicability [326 IAC 2-8-2]

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

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, and Gary Air and Land Pollution Control shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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 FESOP under 326 IAC 2-8.

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

-
- (a) 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, Gary Air and Land Pollution Control, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Gary Air and Land Pollution Control.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

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

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

-
- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, and Gary Air and Land Pollution Control within a reasonable time, any information that IDEM, OAQ, and Gary Air and Land Pollution Control 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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and Gary Air and Land Pollution Control copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Condition B.14, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

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

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Air and Land Pollution Control on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and Gary Air and Land Pollution Control may require to determine the compliance status of the source.

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

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

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

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and Gary Air and Land Pollution Control upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and Gary Air and Land Pollution Control. IDEM, OAQ, and Gary Air and Land Pollution Control, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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 and Gary Air and Land Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Gary Air and Land Pollution Control within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and Gary Air and Land Pollution Control, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

IDEM, OAQ
Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Gary Air and Land Pollution Control
Telephone No.: 219-882-3007
Facsimile No.: 219-882-3012

Northwest Regional Office
Telephone No.: 1-888-209-8892
Telephone No.: 219-881-6712
Facsimile No.: 219-881-6745

Failure to notify IDEM, OAQ, Gary Air and Land Pollution Control, and the Northwest Regional Office, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and Gary Air and Land Pollution Control may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and Gary Air and Land Pollution Control by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

- (1) That this permit contains a material mistake.

- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, and Gary Air and Land Pollution Control to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, and Gary Air and Land Pollution Control at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, and Gary Air and Land Pollution Control may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and Gary Air and Land Pollution Control and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "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, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Air and Land Pollution Control on or before the date it is due.
 - (2) If IDEM, OAQ, and Gary Air and Land Pollution Control upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the

expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, and Gary Air and Land Pollution Control 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, and Gary Air and Land Pollution Control, any additional information identified as needed to process the application.

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

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

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

and

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

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

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

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

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

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

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

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

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, Gary Air and Land Pollution Control, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
 - (2) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;
 - (3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-3 (Emission Offset), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 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 twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

The notifications do not require a certification by the "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 14-10-4 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) **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 that the inspector be accredited is federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 the "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, and Gary Air and Land Pollution Control not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and Gary Air and Land Pollution Control if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

within 180 days from the date on which this source commences operation.

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ, and Gary Air and Land Pollution Control, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ and Gary Air and Land Pollution Control, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document,

consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, and Gary Air and Land Pollution Control upon request and shall be subject to review and approval by IDEM, OAQ, and Gary Air and Land Pollution Control. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326

IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement 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, and Gary Air and Land Pollution Control on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information 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 kept 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 or Gary Air and Land Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Gary Air and Land Pollution Control 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.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Division of Air Pollution Control
504 North Broadway, Suite 1012
Gary, Indiana 46402

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Air and Land Pollution Control on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The

report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Contingency Measures

C.22 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

Upon notification from OAQ, that the source has likely to have caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM₁₀, the source shall implement any reduction measures required by 326 IAC 6-1-11.2 within one hundred eighty (180) days of the initial notification.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) enclosed blasting chamber with a maximum throughput of 534.55 tons per hour. Emissions of particulate matter are controlled using a baghouse (identified as CD-1), which exhausts through stack SS-1.

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

Construction Conditions

General Construction Conditions

- D.1.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- D.1.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.1.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.
- D.1.4 The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration and Development Section, verifying that the emission units were constructed as proposed in the application.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.5 FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the PM_{10} emissions from the shot blasting facility shall not exceed an outlet grain loading of 0.0023 gr/dscf. This limit is equivalent to 2.5 tons per year at a flow rate of 29,000 dscfm. In conjunction with Condition D.2.6, this condition limits PM_{10} emissions from the entire source to less than one hundred (100) tons per year. Compliance with this condition makes 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-3 (Emissions Offset) not applicable.

D.1.6 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter (PM) emissions from the shot blasting facility shall not exceed an outlet grain loading of 0.0023 gr/dscf. This limit is equivalent to 2.5 tons per at a flow rate of 29,000 dscfm. In conjunction with D.2.7, this condition limits PM emissions from the entire source to less than one hundred (100) tons per year. Compliance with this condition makes 326 IAC 2-3 (Emissions Offset) not applicable.

D.1.7 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the plate blasting facility shall not exceed 69.8 pounds per hour when operating at a process weight rate of 534.55 tons per hour.

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

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.9 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

Within 60 days after achieving maximum rate, but no less than 180 days after initial start-up, the Permittee shall perform PM and PM₁₀ testing on the baghouse, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.10 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2(a), the baghouse for PM and PM₁₀ control shall be in operation and control emissions from the shot blasting facility at all times that the shot blaster is in operation.

D.1.11 Visible Emissions Notations

- (a) Once per shift visible emission notations of the shot blasting facility stack exhaust (identified as SS-1) 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (identified as CD-1) used in conjunction with the shot blasting facility, at least once per shift when the shot blasting facility is in operation, when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned

range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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

D.1.13 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the plate blasting facility when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.15 Record Keeping Requirements

- (a) To document compliance with Condition D.1.11, the Permittee shall maintain records of once per shift visible emission notations of the shot blaster stack exhaust.
- (b) To document compliance with Condition D.1.13 the Permittee shall maintain records of the results of the inspections required under Condition D.1.13 and the dates the vents are redirected.
- (c) To document compliance with Condition D.1.12, the Permittee shall maintain records of the once per shift total static pressure drop measurements made at the plate blaster baghouse.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (b) One (1) spray paint booth (identified as PB-1), equipped with four (4) airless spray guns, with emissions controlled using dry filters and a regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2. Steel plates are painted in the spray booth.
- (c) One (1) paint mixing room with emissions controlled using a regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2.

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

Construction Conditions

General Construction Conditions

- D.2.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- D.2.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.2.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.
- D.2.4 The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration and Development Section, verifying that the emission units were constructed as proposed in the application.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.5 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating emission rate to the atmosphere for coatings applied to steel plates shall be limited to 3.5 pounds of VOC per gallon of coating less water, as delivered to the applicator for any calendar day, for extreme performance coatings.
- (b) The overall efficiency of the capture system and control device shall be no less than the equivalent overall efficiency calculated using the following equation:

$$0 = \frac{V - E}{V} \times 100$$

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line in units of pounds of VOC per gallon of coating solids as applied.

- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied (i.e., 3.5 pounds per gallon).
- 0 = Equivalent overall efficiency of the capture system and control device as a percentage.
- (c) Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 96 %, the VOC content of the coating shall not exceed 87.5 pounds per gallon of coating solids delivered to the applicator.
- (d) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.2.6 FESOP Limits [326 IAC 2-8][326 IAC 2-3]

The Permittee shall:

- (a) Use dry filters, with an outlet grain loading of 0.03 grains/dscf, at all times the spray booth is in operation (this limit is equivalent to 16.1 tons of PM₁₀ year);
- (b) Not use more than 142,785 gallons of mixed paint per twelve (12) consecutive month period, having a maximum VOC content as applied of 5.4 pounds per gallon and a maximum HAP content as applied of 3.5 pounds per gallon of any single HAP and 8.75 pounds per gallon of any combination of HAPs;
- (c) Not use more than 5,326 gallons of solvent per twelve (12) consecutive month period, having a maximum VOC content of 7.0 pounds per gallon and containing no HAPs; and
- (d) Use a regenerative thermal oxidizer, with a minimum overall efficiency of at least 96%, to control emissions from the paint mixing room, spray paint booth and cure oven.

These limits in conjunction with the limits specified in Condition D.1.5, are required to limit the PM₁₀ emissions from the entire source to less than 100 tons per twelve (12) consecutive month period. These limits including the use of the regenerative thermal oxidizer with a minimum overall efficiency of 96% limits the VOC emissions for the entire source to less than twenty-five (25) tons per twelve (12) consecutive month period. These limits also limit HAP emissions for the entire source to less than ten (10) tons per twelve (12) consecutive months for any single HAP and less than twenty-five (25) tons per twelve (12) consecutive months for any combination of HAPs.

Compliance with these limits make 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-3 (Emission Offset) not applicable.

D.2.7 Particulate Matter (PM) [326 IAC 2-3]

The particulate matter (PM) emissions from the spray paint booth shall not exceed an outlet grain loading of 0.03 gr/dscf. This limit is equivalent to 16.1 tons per year at a flow rate of 14,300 dscfm. In conjunction with D.2.7, this condition limits PM emissions from the entire source to less than one hundred (100) tons per year. Compliance with this condition makes 326 IAC 2-3 (Emissions Offset) not applicable.

D.2.8 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the paint booth (PB-1) shall not exceed 69.8 pounds per hour when operating at a process weight rate of 534.55 tons per hour. The pounds per hour limitation was calculated with the following equation:

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.9 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.10 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

Within 60 days after achieving maximum rate, but no less than 180 days after initial start-up, the Permittee shall perform VOC and PM₁₀ testing of the regenerative thermal oxidizers, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.11 Volatile Organic Compounds (VOC)

Compliance with the VOC and HAP content and usage limitations contained in Condition D.2.5 and D.2.6 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.12 Regenerative Thermal Oxidizer

- (a) The regenerative thermal oxidizer shall operate at all times that the process is in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400 °F during operation until a temperature and fan amperage has been determined from the most recent compliant stack test, as approved by IDEM. The temperature correlates to an overall VOC control efficiency of 96% based on the stack design capture and destruction efficiency.
- (b) When operating the thermal oxidizer to achieve compliance with the FESOP limits in Condition D.2.5 and 326 IAC 8-2-9, the thermal oxidizer shall maintain a minimum 98% capture efficiency and 98% destruction efficiency. The use of the thermal oxidizer is required by 326 IAC 8-1-2(a)(2). The efficiencies are required by Condition D.2.6(d).

D.2.13 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2(a), the dry filters used for PM control shall be in operation at all times the spray paint booth is in operation.

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

D.2.14 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack while the booth is in operation.

The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.2.15 Parametric Monitoring

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to 1400 degrees F or the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) The duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained in the range established in most recent compliant stack test.
- (c) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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

D.2.16 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.5 and D.2.6, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.5 and D.2.6.
 - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.
 - (3) Weekly records of the duct pressure or fan amperage.

- (4) The total VOC and HAP usage for each month; and
- (5) The weight of VOCs and HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.2.15 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.17 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.5 and D.2.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
and
GARY AIR AND LAND POLLUTION CONTROL**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Blastech, Inc.
Source Address: 411 Blaine Street, Gary Indiana 46406
Mailing Address: 57 Old Onondago Road, Brantford, Ontario N3T 5W4, Canada
FESOP No.: F 089-14468-00100

| | |
|--|--|
| This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. | |
| Please check what document is being certified: | |
| 9 | Annual Compliance Certification Letter |
| 9 | Test Result (specify) _____ |
| 9 | Report (specify) _____ |
| 9 | Notification (specify) _____ |
| 9 | Affidavit (specify) _____ |
| 9 | Other (specify) _____ |

| | |
|---|--|
| I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. | |
| Signature: | |
| Printed Name: | |
| Title/Position: | |
| Date: | |

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
Gary Air and Land Pollution Control**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Blastech, Inc.
Source Address: 411 Blaine Street, Gary Indiana 46406
Mailing Address: 57 Old Onondago Road, Brantford, Ontario N3T 5W4, Canada
FESOP No.: F 089-14468-00100

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

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

Page 2 of 2

| |
|---|
| Date/Time Emergency started: |
| Date/Time Emergency was corrected: |
| Was the facility being properly operated at the time of the emergency? Y N Describe: |
| Type of Pollutants Emitted: TSP, PM ₁₀ , SO ₂ , VOC, NO _x , CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

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

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
and
Gary Air and Land Pollution Control**

FESOP Quarterly Report

Source Name: Blastech, Inc.
Source Address: 411 Blaine Street, Gary Indiana 46406
Mailing Address: 57 Old Onondago Road, Brantford, Ontario N3T 5W4, Canada
FESOP No.: F 089-14468-00100
Facility: Spray paint booth
Parameter: VOCs and HAPs
Limit: 142,785 gallons of paint per twelve (12) consecutive month period.

YEAR: _____

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

Note: Maximum VOC content of paint, as applied, is 5.4 pounds per gallon. Maximum HAP content of paint, as applied is 3.5 pounds of a single HAP per gallon of paint and 8.75 pounds of any combination of HAPs per gallon of paint.

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

Blastech, Inc.
Gary, Indiana
Permit Reviewer: ERG/AB

41 of 42
OP No. 089-14468-00100

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE BRANCH
 and
 Gary Air and Land Pollution Control**

FESOP Quarterly Report

Source Name: Blastech, Inc.
 Source Address: 411 Blaine Street, Gary Indiana 46406
 Mailing Address: 57 Old Onondago Road, Brantford, Ontario N3T 5W4, Canada
 FESOP No.: F 089-14468-00100
 Facility: Spray paint booth
 Parameter: VOCs
 Limit: 5,326 gallons of solvent per (12) consecutive month period.

YEAR: _____

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

Note: Maximum VOC content of paint, as applied, is 5.4 pounds per gallon. Maximum HAP content of paint, as applied is 3.5 pounds of a single HAP per gallon of paint and 8.75 pounds of any combination of HAPs per gallon of paint.

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name: Blastech, Inc.
Source Location: 411 Blaine Street, Gary, Indiana 46406
County: Lake
SIC Code: 3479
Operation Permit No.: F 089-14468-00100
Permit Reviewer: ERG/AB

On July 30, 2001, the Office of Air Quality (OAQ) had a notice published in the Gary Post Tribune in Merrillville, Indiana, stating that Blastech, Inc., had applied for a Federally Enforceable State Operating Permit (FESOP) to construct and operate a steel plate conditioning and painting 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.

1. The postal code for Blastech's head office in Ontario, Canada was incorrectly stated in the draft permit as N3T 5WA. The correct postal code is N3T 5W4. The mailing address in Section A, Condition A.1 (General Information) and the forms included at the back of the permit have been corrected.
2. IDEM, OAQ, made the following correction to B.10 Compliance with Permit Conditions. This section has been revised to clarify that noncompliance with any requirement of this permit may result in an enforcement action against the permittee, an action to modify, revoke, reissue or terminate the source's permit, and/or a denial of the permittee's application to renew the permit.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit ~~except those specifically designated as not federally enforceable,~~ is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; and
- (3) Denial of a permit renewal application.

3. IDEM, OAQ, made the following corrections to B.11 and B.20:

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by **a 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.20 Permit Revision Requirement [326 IAC 2-8-11.1]

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

**Indiana Department of Environmental Management
Office of Air Quality
and
Gary Air and Land Pollution Control**

**Technical Support Document (TSD) for a
New Source Construction and
Federally Enforceable Operating Permit (FESOP)**

Source Background and Description

| | |
|-----------------------|--|
| Source Name: | Blastech, Inc. |
| Source Location: | 411 Blaine Street, Gary, Indiana 46406 |
| County: | Lake |
| SIC Code: | 3479 |
| Operation Permit No.: | F 089-14468-00100 |
| Permit Reviewer: | ERG/AB |

The Office of Air Quality (OAQ) has reviewed a FESOP application from Blastech, Inc. relating to the construction and operation of a steel plate conditioning and painting plant.

New Emission Units and Pollution Control Equipment

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

- (a) One (1) enclosed blasting chamber with a maximum throughput of 534.55 tons per hour. Emissions of particulate matter are controlled using a baghouse (identified as CD-1), which exhausts through stack SS-1.
- (b) One (1) spray paint booth (identified as PB-1), equipped with four (4) airless spray guns, with emissions controlled using dry filters and a regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2. Steel plates are painted in the spray booth.
- (c) One (1) paint mixing room with emissions controlled using the same regenerative thermal oxidizer (identified as CD-2), exhausting at stack SS-2.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process.

Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal Units per hour, including:
 - (1) One (1) natural gas-fired infrared heater (identified as H-1) having a maximum heat input capacity of 2.58 MMBtu per hour.
 - (2) One (1) natural gas-fired curing oven (identified as OV-1), having a maximum heat input capacity of 1.4 MMBtu per hour, with emissions controlled using a regenerative thermal oxidizer (identified as CD-2), which exhausts through stack SS-2.
- (b) Unpaved roads and parking lots with fugitive PM₁₀ emissions less than five (5) tons per year.

Existing Approvals

There are no existing approvals issued to this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively complete FESOP application for the purposes of this review was received on May 29, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Pages 1 through 9)

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source 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.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|-----------|-------------------------------|
| PM | 934 |
| PM-10 | 934 |

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| SO ₂ | 0.011 |
| VOC | 743 |
| CO | 1.46 |
| NO _x | 1.74 |

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

| HAP's | Potential To Emit (tons/year) |
|--------------|-------------------------------|
| Ethylbenzene | 76.87 |
| Xylenes | 76.87 |
| TOTAL | 153.7 |

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀ is equal to or greater than 100 tons per year and the potential to emit VOC is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) 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 emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

| Process/facility | Potential to Emit (tons/year) | | | | | | |
|-----------------------|-------------------------------|--------------|-----------------|--------------|-------|-----------------|---|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Shot Blaster (CD-1) | Less than 33 | Less than 33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Spray Booth (CD-2) | Less than 34 | Less than 34 | 0.00 | Less than 24 | 0.00 | 0.00 | Single HAP - Less than 10 Combination of HAPs - Less than 25 |
| Infrared Heater (H-1) | 0.086 | 0.086 | 0.007 | 0.062 | 0.949 | 1.13 | Negligible |
| Cure Oven (OV-1) | 0.047 | 0.047 | 0.004 | 0.034 | 0.515 | 0.613 | Negligible |

| Process/facility | Potential to Emit (tons/year) | | | | | | |
|------------------|----------------------------------|---------------|-----------------|--------------|------|-----------------|---|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Total Emissions | less than 100 | Less than 100 | 0.011 | Less than 25 | 1.46 | 1.74 | Single HAP - Less than 10 Combination of HAPs - Less than 25 |

County Attainment Status

The source is located in Lake County.

| Pollutant | Status |
|-----------------|------------------------|
| PM-10 | Moderate nonattainment |
| SO ₂ | Primary nonattainment |
| NO ₂ | Attainment |
| Ozone | Severe nonattainment |
| CO | Attainment |
| Lead | Attainment |

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-8 (FESOP Limits)

- (a) The PM₁₀ emissions from the shot blasting facility shall be controlled using a baghouse with an outlet grain loading of 0.00231 gr/dscf. This is equivalent to 2.5 tons per year of PM10 or 0.57 pounds per hour. The PM₁₀ emissions from the spray booth shall be controlled using dry filters with an outlet grain loading of 0.03 grains/dscf. This is equivalent to 16.1 tons per year or 3.68 pounds per hour. The baghouse and dry filters

shall be used at all times the shot blasting facility and spray booth are in operation. Compliance with these conditions limits PM₁₀ emissions for the entire source to less than one hundred (100) tons per twelve (12) consecutive month period and make 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-3 (Emission Offset) not applicable.

| Facility | Maximum Emissions | | |
|---|-------------------|---------------------|------------------------|
| | Grains/dscf | lbs/hr | tons/yr ⁽³⁾ |
| Plate Blasting Cartridge Filter (CD-01) | 0.0023 | 0.57 ⁽¹⁾ | 2.5 |
| Paint Booth Overspray Filters | 0.03 | 3.68 ⁽²⁾ | 16.1 |

- (1) Based on design value of 29,000 scfm.
- (2) Based on design value of 14,300 scfm.
- (3) Assumes 8,760 operating hours per year.

(b) The Permittee shall:

- (1) Use no more than 142,785 gallons of mixed paint per twelve (12) consecutive month period, having a maximum VOC content as applied of 5.4 pounds per gallon and a maximum HAP content as applied of 3.5 pounds per gallon of any single HAP and 8.75 pounds per gallon of any combination of HAPs;
- (2) Use no more than 5,326 gallons of solvent per twelve (12) consecutive month period, having a maximum VOC content of 7.0 pounds per gallon and containing no HAPs; and
- (3) Use a regenerative thermal oxidizer, with a minimum overall efficiency of no less than 96%, to control emissions from the paint mixing room, spray paint booth and cure oven.

These limits will limit VOC emissions for the entire source to less than twenty-five (25) tons per twelve (12) consecutive month period. These limits also limit HAP emissions for the entire source to less than ten (10) tons per twelve (12) consecutive months for any single HAP and less than twenty-five (25) tons per twelve (12) consecutive months for any combination of HAPs.

Compliance with these limits make 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 2-3 (Emission Offset)

- (a) The PM emissions from the shot blasting facility shall be controlled using a baghouse with an outlet grain loading of 0.00231 gr/dscf. This is equivalent to 2.5 tons per year of PM or 0.57 pounds per hour. The PM emissions from the spray booth shall be controlled using dry filter with an outlet grain loading of 0.03 grains/dscf. This is equivalent to 16.1 tons per year or 3.68 pounds per hour. The baghouse and dry filters shall be used at all times the shot blasting facility and spray booth are in operation. Compliance with these conditions limits PM emissions for the entire source to less than one hundred (100) tons per twelve

(12) consecutive month period. These limits in conjunction with the FESOP limits make 326 IAC 2-3 (Emission Offset) not applicable.

(b) The Permittee shall:

- (1) Not use more than 142,785 gallons of mixed paint per twelve (12) consecutive month period, having a maximum VOC content as applied of 5.4 pounds per gallon and a maximum HAP content as applied of 3.5 pounds per gallon of any single HAP and 8.75 pounds per gallon of any combination of HAPs;
- (2) Not use more than 5,336 gallons of solvent per twelve (12) consecutive month period, having a maximum VOC content of 7.0 pounds per gallon and containing no HAPs; and
- (3) Use a regenerative thermal oxidizer, with a minimum overall efficiency of 96%, to control emissions from the paint mixing room, spray paint booth and cure oven.

These limits including the use of the regenerative thermal oxidizer with a minimum overall efficiency of 96% limits the VOC emissions for the entire source to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with these limits make 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 5-1 (Visible Opacity Limitations)

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

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

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

The operation of the spray paint booth (PB-1) will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations)

This source is not subject to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations) because the potential to emit of PM is less than one hundred (100) tons per year, and the actual emissions are anticipated to be much lower than ten (10) tons per year.

326 IAC 6-1-10 (Lake County PM₁₀ Emission Requirements)

This source is not subject to 326 IAC 6-1-10 (Lake County PM₁₀ Emission Requirements) because it is not a source that is specifically listed in this rule.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

326 IAC 6-1-11.1 is not applicable to this source because the total uncontrolled fugitive PM₁₀ is less than 5 tons per year.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The source is subject to 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures) because it has potential emissions of PM₁₀ greater than ten (10) tons per year.

326 IAC 6-3-2 (Process Operations)

Since this source is not subject to 326 IAC 6-1, the source shall comply with the provisions of 326 IAC 6-3-2 (Process Operations). Pursuant to this rule, the allowable PM emission rate from the blasting chamber shall not exceed 69.8 pounds per hour when operating at a process weight rate of 534.55 tons per hour.

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The PM from the paint booth (PB-1) shall not exceed 69.8 pounds per hour when operating at a process weight rate of 534.55 tons per year:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The baghouse and dry filters shall be in operation at all times the blasting chamber and spray booth are in operation, in order to comply with this limit.

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

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators used in the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, determined after use of the regenerative thermal oxidizer and including clean-up solvents.

This limit includes the evaporation of VOC from paint mixing and clean-up solvents; therefore, it is necessary to keep paint and solvent containers covered when not in use to prevent solvent evaporation.

The overall efficiency of any capture system and control device shall be no less than the equivalent overall efficiency calculated using the following equation:

$$\eta = \frac{V - E}{V} \times 100$$

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line in units of pounds of VOC per gallon of coating solids as applied.

E = Equivalent emission limit in pounds of VOC per gallon of coating as applied (i.e., 3.5 pounds per gallon).

0 = Equivalent overall efficiency of the capture system and control device as a percentage.

Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 96%, the VOC content of the coating shall not exceed 87.5 pounds per gallon of coating delivered to the applicator.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source for the highest VOC content coating anticipated to be used, and calculations made, the spray booth will be in compliance with this rule provided a regenerative thermal oxidizer having a minimum overall efficiency of not less than 35%. The source stated in their permit application that they will install a regenerative thermal oxidizer with an overall efficiency (i.e., taking into account the capture efficiency) of 96%. Use of the regenerative thermal oxidizer also assumes the VOC emissions are less than twenty-five (25) tons per year, which makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-7 (Part 70 Permit Program) not applicable.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

This source is not subject to 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) because the only source of VOC at the source are subject to 326 IAC 8-2-9.

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

Although the potential to emit VOC is greater than 25 tons per year, 326 IAC 8-1-6 is not applicable to the spray paint booth because the booth is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).

Testing Requirements

- (a) Within 60 days after achieving maximum rate, but no less than 180 days after initial start-up, the Permittee shall perform PM and PM₁₀ testing on the baghouse and dry filters, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

This testing is required under 326 IAC 2-8-5(a)(1), because the source will use the baghouse and dry filters to comply with the FESOP limit for PM-10 emissions.

- (b) Within 60 days after achieving maximum rate, but no less than 180 days after initial start-up, the Permittee shall perform VOC testing on the thermal oxidizer utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

This testing is required under 326 IAC 2-8-5(a)(1), because the source will use a control device with a claimed control efficiency of greater than 90% to comply with the FESOP limits for VOCs and HAPs.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal

rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

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

1. The shot blasting facility has applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emissions notations of the shot blasting stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across the baghouse controlling the shot blasting system, at least once per shift when the shot blasting system is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
 - (c) The Permittee shall record the total static pressure drop across the baghouse (identified as CD-1) used in conjunction with the shot blasting facility, at least once per shift when the shot blasting facility is in operation, when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The instrument used for determining the pressure shall comply with the pressure gauge specifications, shall be subject to approval by IDEM, OAQ,

and Gary Air And Land Pollution Control, and shall be calibrated at least once every six (6) months.

- (d) An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.
- (e) In the event that bag failure has been observed:

For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because the baghouse for the shot blasting facility must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) and 326 IAC 2-8 (FESOP).

- 2. The spray booth has applicable compliance monitoring conditions as specified below:
 - (a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to 1400 degrees F or the temperature used to demonstrate compliance during the most recent compliance stack test. The duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained in the range established in most recent compliant stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading.
 - (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.
 - (c) These monitoring conditions are necessary because the regenerative thermal oxidizer and dry filters used to control emissions from the spray booth must operate properly to

ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), 326 IAC 8-2-9 (Miscellaneous Metal Coating) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this steel plate conditioning and painting plant shall be subject to the conditions of the attached proposed (FESOP No.: F089-14468-00100).

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Infrared Heater (H-1)

Company Name: Blastech, Inc.
Address City IN Zip: 411 Blaine Street, Gary, IN 46406
CP: 089-14468
Plt ID: 00100
Reviewer: ERG/AB
Date: 06/15/01

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.6

22.6

| Emission Factor in lb/MMCF | Pollutant | | | | | |
|-------------------------------|-----------|-------|-------|-------------|-------|-------|
| | PM* | PM10* | SO2 | NOx | VOC | CO |
| | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.086 | 0.086 | 0.007 | 1.130 | 0.062 | 0.949 |

*PM emission factor is filterable and condensable PM.

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

MM BTU/HR <100

Infrared Heater (H-1)

HAPs Emissions

Company Name: Blastech, Inc.

Address City IN Zip: 411 Blaine Street, Gary, IN 46406

CP: 089-14468

Plt ID: 00100

Reviewer: ERG/AB

Date: 06/15/01

HAPs - Organics

| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 2.373E-05 | 1.356E-05 | 8.475E-04 | 2.034E-02 | 3.842E-05 |

HAPs - Metals

| | Lead | Cadmium | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 5.650E-06 | 1.243E-05 | 1.582E-05 | 4.294E-06 | 2.373E-05 |

Methodology is the same as page 1.

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

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Cure Oven (OV-1)

Company Name: Blastech, Inc.

Address City IN Zip: 411 Blaine Street, Gary, IN 46406

CP: 089-14468

Plt ID: 00100

Reviewer: ERG/AB

Date: 06/15/01

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.4

12.3

Pollutant

| | PM* | PM10* | SO2 | NOx | VOC | CO |
|-------------------------------|-------|-------|-------|----------------------|-------|-------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 **see below | 5.5 | 84.0 |
| Potential Emission in tons/yr | 0.047 | 0.047 | 0.004 | 0.613 | 0.034 | 0.515 |

*PM emission factor is filterable and condensable PM.

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

MM BTU/HR <100

Cure Oven (OV-1)

HAPs Emissions

Company Name: Blastech, Inc.

Address City IN Zip: 411 Blaine Street, Gary, IN 46406

CP: 089-14468

Plt ID: 00100

Reviewer: ERG/AB

Date: 06/15/01

HAPs - Organics

| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 1.288E-05 | 7.358E-06 | 4.599E-04 | 1.104E-02 | 2.085E-05 |

HAPs - Metals

| | Lead | Cadmium | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 3.066E-06 | 6.745E-06 | 8.585E-06 | 2.330E-06 | 1.288E-05 |

Methodology is the same as page 1.

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

**Appendix A: Emissions Calculations
Shot Blasting Operations**

Company Name: Blastech, Inc.
Address City IN Zip: 411 Blaine Street, Gary, IN 46406
CP: 089-14468
Plt ID: 00100
Reviewer: ERG/AB
Date: 06/15/01

| Unit | Air Flow (dscfm) | Grain Loading at Inlet (gr/dscfm) | Grain Loading at outlet (gr/dscfm) | PTE (lbs/hr) | PTE (tons/yr) | Maximum Controlled Emissions (lbs/yr) | Maximum Controlled Emissions (tons/yr) |
|--------------|-------------------------|--|---|---------------------|----------------------|--|---|
| Shot Blaster | 29,000 | 0.4621 | 0.00231 | 114.86 | 503.11 | 0.57 | 2.51 |

Methodology:

PTE Before Controls (tons/yr) = Air Flow (dscfm) * Grain loading at inlet (gr/dscfm) * 1lb/7000gr * 8760 hrs/yr * 1 ton/2000lbs.

PTE After Controls (tons/yr) = Air Flow (dscfm) * Grain loading at outlet (gr/dscfm) * 1lb/7000gr * 8760 hrs/yr * 1 ton/2000lbs.

**Appendix A: Emission Calculations
VOC and PM Emissions
From Surface Coating Operations**

Company Name: Blastech, Inc.
Address City IN Zip: 411 Blaine Street, Gary, IN 46406
CP: 089-14468
Plt ID: 00100
Reviewer: ERG/AB
Date: 06/15/01

| Material | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Maximum (gal/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|-----------------|------------------|------------------------------------|----------------|-------------------|----------------|---------------------------------|--------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------------|-------------------|---------------------|
| Surface Coating | 11.7 | 46.12% | 0.0% | 46.1% | 0.0% | 23.00% | 30.00 | 5.40 | 5.40 | 161.88 | 3885.15 | 709.04 | 430.74 | 23.46 | 48% |
| Solvent | 7.0 | 100.00% | 0.0% | 100.0% | 0.0% | 0.00% | 1.08 | NA | 7.00 | 7.56 | 181.44 | 33.11 | NA | NA | 100% |

State Potential Emissions

169.44 4066.59 742.15 430.74

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations
Surface Coating Operations
Company Name: Blastech, Inc.
Address City IN Zip: 411 Blaine Street, Gary, IN 46406
CP#: 089-14468
Pit ID: 00100
Permit Reviewer: ERG/AB
Date: 06/15/01

| Material | Density (Lb/Gal) | Maximum (gal/hour) | Weight % Xylene | Weight % Ethylbenzene | Xylene Emissions (ton/yr) | Ethylbenzene Emissions (ton/yr) |
|-----------------|------------------|--------------------|-----------------|-----------------------|---------------------------|---------------------------------|
| Surface Coating | 11.70 | 30.00 | 5.00% | 5.00% | 76.87 | 76.87 |
| Solvent | 7.00 | 1.08 | 0.00% | 0.00% | 0.00 | 0.00 |

Total State Potential Emissions 76.87 76.87

METHODOLOGY

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

Hapcalc.wk4 9/95

**Appendix A: Emission Calculations
PM, PM-10 Emissions from Unpaved Roads**

Company Name: Blastech, Inc.
Address City IN Zip: 411 Blaine Street, Gary, IN 46406
CP#: 089-14468
Plt ID: 00100
Permit Reviewer: ERG/AB
Date: 06/18/01

Maximum distance driven by all vehicles in one complete loop (ft): 1298.9
 Number of trips per year: 17520

Maximum vehicle miles traveled per year (VMT): 4310

% of VMT made by small vehicles: 0.00
 Maximum gross vehicle weight of small vehicles (tons): 110

% of VMT made by medium vehicles: 0.00
 Maximum gross vehicle weight of medium vehicles (tons): 60

% of VMT made by large vehicles: 1.00
 Maximum gross vehicle weight of large vehicles (tons): 49

Mean gross vehicle weight (tons) 49

Surface material silt content (%): 3
 Surface material moisture content under worst-case dry conditions: 0.2 0.2=DEFAULT
 Number of days with at least 0.254 mm of precipitation: 116

PM-30 Emission Factor (lbs/VMT): 9.094858

PM-30 Emissions (tons/yr): 19.59936

PM-10 Emission Factor (lbs/VMT): 1.788388

PM-10 Emissions (tons/yr): 3.853964

Methodology:

source: AP-42, chapter 13.2.2 (equation (2))

PM Emission Factor = $k \cdot (s/12)^a \cdot (W/3)^b / (M_{dry}/0.2)^c \cdot [(365-p)/365]$

where: k, a, b, and c are empirical constants

s = surface material silt content (%)

W = mean vehicle weight (tons)

M_{dry} = surface material moisture content under dry, uncontrolled conditions (%)

p = number of days with at least 0.254 mm (0.01 in) of precipitation per year

and:

| constant | PM-30 | PM-10 |
|----------|-------|-------|
| k | 10 | 2.6 |
| a | 0.8 | 0.8 |
| b | 0.5 | 0.4 |
| c | 0.4 | 0.3 |

Appendix A: Emissions Calculations
Required Efficiency for Compliance with
326 IAC 8-2-9

Company Name: Blastech, Inc.
 Address City IN Zip: 411 Blaine Street, Gary, IN 46406
 Permit Number: 089-14468
 Plt ID: 00100
 Reviewer ERG/AB
 Date: 06/25/01

| Material/Coating | Density (Lb/Gal) | Weight % Volatile (H2O& Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/hour) | Pounds VOC per gal of coating less water | Pounds VOC per gal of coating less water | Pounds VOC per gallon of coating | Potential VOC lbs per hour | Potential VOC lbs per day | Potential VOC tons per year | Particulate Potential ton/yr | lb VOC /gal Solids | Actual Control Efficiency | integral control- required efficiency to comply with 8-2-9 |
|------------------|------------------|-----------------------------------|----------------|-------------------|----------------|---------------------------|-----------------------|--|--|----------------------------------|----------------------------|---------------------------|-----------------------------|------------------------------|--------------------|---------------------------|---|
| Surface Coating | 11.70 | 46.1% | 0.0% | 46.1% | 0.0% | 23.00% | 30.0 | 5.40 | 5.40 | 5.40 | 161.88 | 3885.15 | 709.04 | 178.79 | 23.46 | 96% | 35.2% |

Methodology

Required efficiency = (lb VOC/gal solids -E)/lb VOC/gal solids * 100
 E= (3.5 lb VOC/gal of coating) * (1gal of coating/.23 gal of solids) = 15.2 lb VOC/gal of solids