

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**Rittal-Electromate  
3065 East Water Street  
Fremont, Indiana 46737**

(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 and 326 IAC 2-1-3.2, 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.: F/ENSR151-9421-00042	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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)]

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The Permittee owns and operates a stationary electrical enclosures fabrication, assembly, and surface coating plant.

Responsible Official: David Meade  
Source Address: 3065 East Water St., Fremont, Indiana 46737  
Mailing Address: P.O. BOX 709, Fremont, Indiana 46737  
SIC Code: 3644  
County Location: Steuben  
County Status: Attainment for all criteria pollutants  
Source Status: Enhanced New Source Review; and  
Federally Enforceable State Operating Permit (FESOP);  
Minor Source, under PSD 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)]

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

- (1) one (1) manual powder coating spray booth, identified as P-1, using an electrostatic air atomized application system with a baghouse (BH4) for particulate control, and exhausting through one (1) stack (S/V ID: NV17);
- (2) one (1) Binks liquid spray booth, identified as P-2, using four (4) air atomization spray guns with dry filters for overspray control, processing a maximum of 50 metal enclosures per hour, and exhausting at one (1) stack (S/V ID MB-37);
- (3) one (1) automatic powder coating cabinet, identified as P-A, utilizing sixteen (16) automatic electrostatic air atomized spray guns, with a reclaim baghouse for overspray control, processing a maximum of 303 metal enclosures per hour;
- (4) one (1) high-volume electrostatic powder surface coating booth, identified as P-B, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH2) for particulate control and exhausting through one (1) stack (S/V ID: NV12);

- (5) one (1) high-volume electrostatic powder surface coating booth, identified as P-C, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH9) for particulate control and exhausting through one (1) stack (S/V ID: NV20);
- (6) one (1) low-volume electrostatic powder surface coating booth, identified as P-3, equipped with two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH3) for particulate control and exhausting through one (1) stack (S/V ID: NV3);
- (7) one (1) liquid spray booth, identified as P-4, consisting of two (2) high volume-low pressure (HVLP) spray guns, with a maximum capacity of coating nine (9) electrical enclosures per hour, utilizing dry filters for particulate control, and exhausting through one (1) stack (S/V ID: NV5);

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

This stationary source consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21).

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (a) one (1) air makeup unit rated at 5.39 mmBtu/hr;
  - (b) one (1) pretreatment process water heater rated at 0.938 mmBtu/hr;
  - (c) one (1) pretreatment process water heater rated at 0.789 mmBtu/hr;
  - (d) one (1) pretreatment dry-off oven rated at 2.50 mmBtu/hr;
  - (e) four (4) area heaters each rated at 0.4 mmBtu/hr;
  - (f) one (1) carrier burn-off oven rated at 0.30 mmBtu/hr;
  - (g) sixteen (16) infrared hanging heaters with a total rating of 0.96 mmBtu/hr;
  - (h) two (2) cure ovens each rated at 1.65 mmBtu/hr;
  - (i) one (1) dry off oven rated at 1.65 mmBtu/hr;
  - (j) one (1) HV cure oven rated at 3.10 mmBtu/hr;
  - (k) one (1) cure oven rated at 3.00 mmBtu/hr; and
  - (l) one (1) HVAC unit rated at 0.45 mmBtu/hr.
- (2) Fuel oil-fired combustion sources with heat input equal to or less than two million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
  - (a) one (1) waste-oil fired heater rated at 0.225 mmBtu/hr.
- (3) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (a) spot welding of metal enclosures.
- (5) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (6) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

- (7) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations
  - (a) one (1) fully enclosed sand blasting cabinet, identified as SB1, utilizing a baghouse (BH7) for particulate control;
  - (b) fifteen (15) hand grinders utilizing a baghouse (BH5) for particulate control;
  - (c) fifteen (15) hand polishers utilizing a baghouse (BH5) for particulate control;
  - (d) two (2) belt grinders utilizing a baghouse (BH5) for particulate control;
  - (e) one (1) wheel grinder utilizing a baghouse (BH6) for particulate control;
  - (f) fifteen (15) hand grinders utilizing a baghouse (BH5) for particulate control;
  - (g) fifteen (15) hand polishers utilizing a baghouse (BH5) for particulate control;
  - (h) one (1) fully enclosed sand blasting cabinet, identified as SB2, utilizing a baghouse (BH8) for particulate control;
  - (i) seven (7) six-inch belt sanders utilizing a baghouse (BH5) for particulate control;
  - (j) one (1) inert gas laser cutter utilizing a baghouse (BH5) for particulate control; and
  - (k) two (2) wheel grinders utilizing a baghouse (BH5) for particulate control.
- (8) The following emission units with VOC emissions below 5 pounds per hour or 15 pounds per day:
  - (a) one (1) three stage washer system utilizing non-VOC detergents; and
  - (b) one (1) pretreatment wash booth utilizing non-VOC detergents.
- (9) The following emission units with PM emissions below 5 pounds per hour or 25 pounds per day:
  - (a) seventeen (17) Metal Inert Gas (MIG) welding stations, controlled by a baghouse (BH5);
  - (b) fourteen (14) Tungsten Inert Gas (TIG) welding stations, controlled by a baghouse (BH5);
- (10) The following emission units emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP:
  - (a) one (1) gasket applicator robot identified as G-1; and
  - (b) one (1) gasket applicator robot identified as G-2.

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

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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 Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permit Conditions

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- (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, OAM, 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 [326 IAC 2-1-10] [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, any applicable definitions found in 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 effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

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

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

### **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)]**

- (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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM 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 constitutes a violation of the Clean Air Act and 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.

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

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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 certification 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 July 1 of each year to:

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

- (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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (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, OAM, 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 "responsible official" as defined by 326 IAC 2-7-1(34).

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

If due to circumstances beyond its control, the PMP 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 Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, .

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, OAM , within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Failure to notify IDEM, OAM , 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 notice either in writing or facsimile, of the emergency to:

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

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 "responsible official" as defined by 326 IAC 2-7-1(34).

- (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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM , 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, OAM , by telephone or facsimile of an emergency lasting more than one (1) hour in compliance 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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (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) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

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

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

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)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM 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, OAM , 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, OAM , at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM , 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, OAM 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).

Request for renewal shall be submitted to:

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

- (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, OAM, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM 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, OAM 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, OAM , any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(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 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(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 condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

B.21 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 2-1 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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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, OAM , in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (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 "responsible official" as defined by 326 IAC 2-7-1(34).

- (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, OAM or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, 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.  
[326 IAC 2-8-5(a)(4)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.

- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

**B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]**

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- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM 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 OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.26 Enhanced New Source Review [326 IAC 2]**

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The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and such facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

## **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]**

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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 any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per three hundred sixty-five (365) consecutive day period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period.
- (b) 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 that the source's potential to emit does not exceed the above specified limits.

- (c) 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 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) 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.

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)]

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 is are in operation.

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

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

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the 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 mandatory 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]**

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- (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 methods approved by the IDEM,OAM.

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

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

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

##### **C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

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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 no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notify:

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

in writing, prior to the end of the ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

##### **C.11 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**C.13 Pressure Gauge Specifications**

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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.

**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]**

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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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days from the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, 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, OAM, 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]**

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

- (a) Submit:

- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the 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
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5]  
[326 IAC 1-6]

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- (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. This compliance monitoring plan is comprised of:
- (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, OAM upon request and shall be subject to review and approval by IDEM, OAM, . 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) Response steps that will 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 such 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, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. 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 or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned 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.

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

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- (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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

### C.18 Monitoring Data Availability

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

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

- (a) Records of all required monitoring data 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 and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.

- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) 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)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (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 Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

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

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**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.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

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

- (1) one (1) Binks liquid spray booth, identified as P-2, using an air atomized application system with dry filters for overspray control, processing a maximum of 50 metal enclosures per hour, and exhausting at one (1) stack (S/V ID MB-37);
- (2) one (1) liquid surface coating booth, identified as P-4, consisting of two (2) high volume-low pressure (HVLP) spray guns, with a maximum capacity of coating nine (9) electrical enclosures per hour, utilizing dry filters for particulate control, and exhausting through one (1) stack (S/V ID: NV5);

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

**D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9] [326 IAC 2-8] [326 IAC 2-2] [326 IAC 2-7]**

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to metal enclosures at booths P-2 and P-4 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day, for forced warm air (less than 90EC or 194 EF) dried coatings.

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.

- (b) These spray booth facilities (P-2 and P-4) shall use no more than 88.4 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period. This usage limit is required to limit the source-wide potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period.

Compliance with this VOC limit shall render the source in compliance with 326 IAC 2-8 (FESOP), and makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) not applicable.

**D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

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Pursuant to 326 IAC 6-3-2(c), the PM from the two (2) liquid spray booths, P-2 and P-4 shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

**D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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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.1.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]**

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.1.5 Volatile Organic Compounds (VOC)**

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Compliance with the VOC content and usage limitations contained in Condition D.1.1 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, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.1.6 VOC Emissions**

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Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

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

**D.1.7 Particulate Matter (PM)**

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The dry filters on booths P-2 and P-4 for PM control shall be in operation at all times when the spray booths are in operation.

#### D.1.8 Monitoring

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- (a) Weekly inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks (MB-37 and NV5) while one or more of the booths are 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) Weekly 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.

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

##### D.1.9 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (6) 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.1.1.
  - (1) The amount and VOC 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) A log of the dates of use;
  - (3) The volume weighted VOC content of the coatings used for each day;
  - (4) The cleanup solvent usage for each day month;
  - (5) The total VOC usage for each month; and
  - (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.7 and D.1.8, the Permittee shall maintain a log of daily overspray observations, daily and weekly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 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.

### SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (1) one (1) manual powder coating spray booth, identified as P-1, using an electrostatic air atomized application system with a baghouse (BH4) for particulate control, and exhausting through one (1) stack (S/V ID: NV17);
- (2) one (1) automatic powder coating cabinet, identified as P-A, utilizing sixteen (16) automatic electrostatic air atomized spray guns, with a reclaim baghouse (BH1) for overspray control, processing a maximum of 303 metal enclosures per hour;
- (3) one (1) high-volume electrostatic powder surface coating booth, identified as P-B, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH2) for particulate control and exhausting through one (1) stack (S/V ID: NV12);
- (4) one (1) high-volume electrostatic powder surface coating booth, identified as P-C, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH9) for particulate control and exhausting through one (1) stack (S/V ID: NV20);
- (5) one (1) low-volume electrostatic powder surface coating booth, identified as P-3, equipped with two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH3) for particulate control and exhausting through one (1) stack (S/V ID: NV3); and
- (6) The following baghouses which control particulate emissions from insignificant activities:
  - (a) baghouse BH5, controlling miscellaneous machining, welding, laser cutting, sanding, grinding, and polishing;
  - (b) baghouse BH6, controlling the portable dual wheel grinder;
  - (c) baghouse BH7, controlling sand blasting cabinet (SB1); and
  - (d) baghouse BH8, controlling sand blasting cabinet (SB2).

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

##### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each powder coating operation P-A, P-B, and P-C shall each not exceed 2.22 pounds per hour when operating at a process weight flow rate of 800 pounds of powder per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the powder coating operations P-1 and P-3 shall each not exceed 0.55 pounds per hour when operating at a process weight flow rate of less than 100 pounds of powder per hour.

- (c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the the shotblasters identified as SB1 and SB2 shall each not exceed 1.28 pounds per hour when operating at an individual process weight flow rate of 354 pounds abrasive per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the laser cutter, welding, grinding operations, and other miscellaneous machining operations (see insignificant activities) controlled by BH5 shall not exceed 8.51 pounds per hour when operating at a process weight flow rate of 5950 pounds of raw materials per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the portable dual grinder controlled by BH6 (see insignificant activities) shall not exceed 1.02 pounds per hour when operating at a process weight flow rate of 250 pounds of raw materials per hour.

The pounds per hour limitations were calculated with the following equation:

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

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

#### D.2.2 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 the powder coating booths P-A, P-B, P-C, P-1, and P-3 (baghouses BH1, BH2, BH3, BH4, BH9 and baghouses BH5, BH7, and BH8). A Preventive Maintenance Plan is not required for the portable dual grinder controlled by BH6.

### **Compliance Determination Requirements**

#### D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

#### D.2.4 Particulate Matter (PM)

The baghouses (BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, and BH9) for PM control shall be in operation at all times when the shotblasting units SB1 and SB2, machining, welding and grinding units, and the powder coating booths P-A, P-B, P-C, P-1, and P-3 are in operation and exhausting to the outside atmosphere.

#### D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shotblasting units SB1 and SB2, machining, welding and grinding units, and the powder coating booths P-A, P-B, P-C, P-1, and P-3 (baghouses BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, and BH9) stack exhaust 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.

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, and BH9) used in conjunction with the shotblasting units SB1 and SB2, machining, welding, and grinding units, and the powder coating booths P-A, P-B, P-C, P-1, and P-3, at least once weekly when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each 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 Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### D.2.7 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
- (b) Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion

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

#### D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the stack exhausts.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:

- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (1) one (1) high-volume electrostatic powder surface coating booth, identified as P-B, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH2) for particulate control and exhausting through one (1) stack (S/V ID: NV12);
- (2) one (1) high-volume electrostatic powder surface coating booth, identified as P-C, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH9) for particulate control and exhausting through one (1) stack (S/V ID: NV20);
- (3) one (1) low-volume electrostatic powder surface coating booth, identified as P-3, equipped with two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH3) for particulate control and exhausting through one (1) stack (S/V ID: NV3);
- (4) one (1) powder recovery baghouse (BH4) to be installed on the existing powder surface coating booth P-1, exhausting through one (1) stack (S/V ID: NV17);
- (5) one (1) liquid surface coating booth, identified as P-4, consisting of two (2) high volume-low pressure (HVLP) spray guns, with a maximum capacity of coating nine (9) electrical enclosures per hour, utilizing dry filters for particulate control, and exhausting through one (1) stack (S/V ID: NV5); and
- (6) The application also includes information relating to the construction and operation of the following insignificant activities, as defined in 326 IAC 2-7-1(21):
  - (a) The following natural gas-fired combustion sources:
    - i. two (2) cure ovens rated each rated at 1.65 mmBtu/hr;
    - ii. one (1) dry off oven rated at 1.65 mmBtu/hr; and
    - iii. one (1) HV cure oven rated at 3.10 mmBtu/hr;
    - iv. one (1) HVAC unit rated at 0.45 mmBtu/hr;
  - (b) The following grinding and machining operations:
    - i. fifteen (15) hand grinders utilizing a baghouse (BH5) for particulate control;
    - ii. fifteen (15) hand polishers utilizing a baghouse (BH5) for particulate control;
    - iii. one (1) fully enclosed sand blasting cabinet, identified as SB2, utilizing a baghouse (BH8) for particulate control;
    - iv. seven (7) six-inch belt sanders utilizing a baghouse (BH5) for particulate control;
    - v. one (1) inert gas laser cutter utilizing a baghouse (BH5) for particulate control;
    - vi. two (2) wheel grinders utilizing a baghouse (BH5) for particulate control;
  - (c) one (1) pretreatment wash booth utilizing non-VOC detergents;
  - (d) one (1) gasket applicator robot;
  - (e) ten (10) Metal inert gas (MIG) welding stations, controlled by a baghouse (BH5); and
  - (f) eight (8) Tungsten inert gas (TIG) welding stations, controlled by a baghouse (BH5)..

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

## **Construction Conditions [326 IAC 2-1-3.2]**

### **General Construction Conditions**

D.3.1 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.

### **Effective Date of the Permit**

D.3.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.3.3 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.3.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **First Time Operation Permit**

D.3.5 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration & Development Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM .

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

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

Source Name: Rittal-Electromate  
Source Address: 3065 East Water Street, Fremont, Indiana 46737  
Mailing Address: P.O. Box 709, Fremont, Indiana 46737  
FESOP No.: F/ENSR151-9421-00042

**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 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 MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

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

Source Name: Rittal-Electromate  
Source Address: 3065 East Water Street, Fremont, Indiana 46737  
Mailing Address: P.O. Box 709, Fremont, Indiana 46737  
FESOP No.: F/ENSR151-9421-00042

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

**9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Management (OAM), 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

**9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)  
CThe Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:

Describe the cause of the Emergency/Deviation:

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

**Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**FESOP Quarterly Report**

Source Name: Rittal-Electromate  
Source Address: 3065 East Water Street, Fremont, Indiana 46737  
Mailing Address: P.O. Box 709, Fremont, Indiana 46737  
FESOP No.: F/ENSR151-9421-00042  
Facility: Booths P-2, P-4  
Parameter: VOC usage  
Limit: 88.4 tons per twelve (12) consecutive month period;

YEAR: \_\_\_\_\_

Month	VOC usage (tons)	VOC usage (tons)	VOC usage (tons/yr)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR MANAGEMENT  
 COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Rittal-Electromate  
 Source Address: 3065 East Water Street, Fremont, Indiana 46737  
 Mailing Address: P.O. Box 709, Fremont, Indiana 46737  
 FESOP No.: F/ENSR151-9421-00042

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for Enhanced New Source Review and a Federally Enforceable State Operating Permit (FESOP)

#### Source Background And Description

Source Name: Rittal-Electromate (changed from Robroy Enclosures)  
Source Location: 3065 East Water St., Fremont, Indiana 46737  
County: Steuben  
SIC Code: 3644  
Operation Permit No.: F/ENSR151-9421-00042  
Permit Reviewer: Jeremy Magliaro / EVP

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Robroy Enclosures relating to the operation of a fabrication, assembling, grinding, welding, and surface coating operation of enclosures for the electrical industries. Robroy Enclosures has been purchased in its entirety by Rittal, Inc. It has therefore been requested that the FESOP and all supporting materials be issued to the new name of Rittal-Electromate.

#### Permitted Emission Units and Pollution Control Equipment

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

- (1) one (1) manual powder coating spray booth, identified as P-1, an air atomized application system with dry filters for overspray control, processing a maximum of 42 metal enclosures per hour, and exhausting at one (1) stack (S/V ID MB-31);
- (2) one (1) Binks liquid spray booth, identified as P-2, using four (4) air atomization spray guns with dry filters for overspray control, processing a maximum of 50 metal enclosures per hour, and exhausting at one (1) stack (S/V ID MB-37); and
- (3) one (1) automatic powder coating cabinet, identified as P-A, utilizing sixteen (16) automatic electrostatic air atomized spray guns, with a reclaim baghouse (BH1) for overspray control, processing a maximum of 303 metal enclosures per hour.

#### Unpermitted Emission Units and Pollution Control Equipment

There are no significant unpermitted emission units at the source during this review process.

#### Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

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

- (1) one (1) high-volume electrostatic powder surface coating booth, identified as P-B, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH2) for particulate control and exhausting through one (1) stack (S/V ID: NV12);
- (2) one (1) high-volume electrostatic powder surface coating booth, identified as P-C, equipped with eighteen (18) automatic powder spray guns and two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH9) for particulate control and exhausting through one (1) stack (S/V ID: NV20);
- (3) one (1) low-volume electrostatic powder surface coating booth, identified as P-3, equipped with two (2) manual powder spray guns, each with a capacity of spraying forty (40) pounds of powder per hour, utilizing a baghouse (BH3) for particulate control and exhausting through one (1) stack (S/V ID: NV3);
- (4) one (1) powder recovery baghouse (BH4) to be installed on the existing powder surface coating booth P-1, exhausting through one (1) stack (S/V ID: NV17);
- (5) one (1) liquid surface coating booth, identified as P-4, consisting of two (2) high volume-low pressure (HVLP) spray guns, with a maximum capacity of coating nine (9) electrical enclosures per hour, utilizing dry filters for particulate control, and exhausting through one (1) stack (S/V ID: NV5);

### Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (a) one (1) air makeup unit rated at 5.39 mmBtu/hr;
  - (b) one (1) pretreatment process water heater rated at 0.938 mmBtu/hr;
  - (c) one (1) pretreatment process water heater rated at 0.789 mmBtu/hr;
  - (d) one (1) pretreatment dry-off oven rated at 2.50 mmBtu/hr;
  - (e) four (4) area heaters each rated at 0.4 mmBtu/hr;
  - (f) one (1) carrier burn-off oven rated at 0.30 mmBtu/hr;
  - (g) sixteen (16) infrared hanging heaters with a total rating of 0.96 mmBtu/hr;The following insignificant natural gas-fired units are being reviewed under ENSR:
  - (h) two (2) cure ovens each rated at 1.65 mmBtu/hr;
  - (i) one (1) dry off oven rated at 1.65 mmBtu/hr;
  - (j) one (1) HV cure oven rated at 3.10 mmBtu/hr;
  - (k) one (1) cure oven rated at 3.00 mmBtu/hr; and
  - (l) one (1) HVAC unit rated at 0.45 mmBtu/hr.
- (2) Fuel oil-fired combustion sources with heat input equal to or less than two million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
  - (a) one (1) waste-oil fired heater rated at 0.225 mmBtu/hr.

- (3) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (a) spot welding of metal enclosures.
- (5) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (6) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (7) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations
  - (a) one (1) fully enclosed sand blasting cabinet, identified as SB1, utilizing a baghouse (BH7) for particulate control;
  - (b) fifteen (15) hand grinders utilizing a baghouse (BH5) for particulate control;
  - (c) fifteen (15) hand polishers utilizing a baghouse (BH5) for particulate control;
  - (d) two (2) belt grinders utilizing a baghouse (BH5) for particulate control;
  - (e) one (1) wheel grinder utilizing a baghouse (BH6) for particulate control;The following insignificant grinding and machining operations are being reviewed under ENSR:
  - (f) fifteen (15) hand grinders utilizing a baghouse (BH5) for particulate control;
  - (g) fifteen (15) hand polishers utilizing a baghouse (BH5) for particulate control;
  - (h) one (1) fully enclosed sand blasting cabinet, identified as SB2, utilizing a baghouse (BH8) for particulate control;
  - (i) seven (7) six-inch belt sanders utilizing a baghouse (BH5) for particulate control;
  - (j) one (1) inert gas laser cutter utilizing a baghouse (BH5) for particulate control; and
  - (k) two (2) wheel grinders utilizing a baghouse (BH5) for particulate control.
- (8) The following emission units with VOC emissions below 5 pounds per hour or 15 pounds per day:
  - (a) one (1) three stage washer system utilizing non-VOC detergents; andThe following insignificant emission unit is being reviewed under ENSR:
  - (b) one (1) pretreatment wash booth utilizing non-VOC detergents.
- (9) Other categories with PM emissions below 5 pounds per hour or 25 pounds per day:
  - (a) seven (7) Metal Inert Gas (MIG) welding stations emitting less 1 ton per year of a single HAP, controlled by a baghouse (BH5);
  - (b) six (6) Tungsten Inert Gas (TIG) welding stations emitting less than 1 ton per year of a single HAP, controlled by a baghouse (BH5);The following insignificant emission units are being reviewed under ENSR:
  - (c) ten (10) MIG welding stations with PM emission less than 25 pounds per day; and
  - (d) eight (8) TIG welding stations with PM emissions less than 25 pounds per day.

- (10) The following emission units emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP:
- (a) one (1) gasket applicator robot identified as G-1; and
  - (b) one (1) gasket applicator robot identified as G-2.
- The following insignificant emission unit is being reviewed under ENSR:

**Existing Approvals**

This source has been operating under the following approval:

- (1) S-151-7898-00042, Source Specific Operating Agreement issued January 26, 1998.

**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 January 28, 1998. Additional information was received on March 18, 1998 and May 25, 1998.

**Emissions Calculations**

See Appendix A: Emissions Calculations for detailed calculations (8 pages, Appendix A).

**Potential and Allowable Emissions for Units reviewed under ENSR:**

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	--	685.1
Particulate Matter (PM10)	--	685.1
Sulfur Dioxide (SO <sub>2</sub> )	--	negligible
Volatile Organic Compounds (VOC)	--	88.32
Carbon Monoxide (CO)	--	negligible
Nitrogen Oxides (NO <sub>x</sub> )	--	negligible
Single Hazardous Air Pollutant (HAP)	--	9.72
Combination of HAPs	--	18.62

- (a) The potential VOC and PM emissions before control are used for the permitting determination.

- (b) Potential emissions (as defined in the Indiana Rule) of VOC and PM are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required. This construction permit is being satisfied under 326 IAC 2-1-3 (Enhanced New Source Review).

**Potential Source-wide Emissions**

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	1,412.5
PM-10	1,412.5
SO <sub>2</sub>	0.1
VOC	112.2
CO	2.2
NO <sub>x</sub>	10.6

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

HAP	Potential Emissions (tons/year)
Xylene	2.5
Toluene	7.3
Cumene	0.3
Ethylbenzene	0.7
Methyl Isobutyl Ketone (MIBK)	1.0
Glycol Ethers	9.7
Formaldehyde	0.5
Methanol	0.0
Manganese	0.5
TOTAL	22.5

See attached spreadsheets for detailed calculations.

- (a) The potential emissions (as defined in the Indiana Rule) of VOC and PM10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter emissions are not counted

toward determination of PSD and Emission Offset applicability.

**Limited Potential To Emit**

- (a) To simplify recordkeeping and to accommodate unpredictable variations in production, the source has accepted federally enforceable production limitations that limit potential to emit VOC to 99 tons per 12 consecutive month period. This limit consists of:
  - (i) 98.5 tons per year for the significant activities; and
  - (ii) 0.5 tons per year for the insignificant activities.
- (b) The source has accepted a limit on potential to emit of 9.4 tons in any consecutive twelve month period for any single HAP and 24 tons in any consecutive twelve month period for any combination of HAPs.
- (c) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

Process/ facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs (total)
Liquid Spray Coating (P-2, P-4)	1.85	1.85	0	88.40 <sup>a</sup>	0	0	17.00
Powder Surface Coating (P-A, P-B P-C, P-1, P-3)	1.60	1.60	0	10.00 <sup>b</sup>	0	0	0
Insignificant Activities	3.19	3.19	0.06	0.61	2.21	10.60	0.53
<b>Total Emissions</b>	<b>6.9</b>	<b>6.9</b>	<b>0.1</b>	<b>99.0<sup>c</sup></b>	<b>2.2</b>	<b>10.6</b>	<b>17.5</b>

- (a) VOC emissions from the booths P-2, and P-4 are also limited by 326 IAC 8-2-9 (Miscellaneous Metal Coatings). (See Appendix A, page 2 of 8 for more detailed calculations).
- (b) Potential VOC emissions from booths P-A, P-B, P-C, P-1, and P-3 are estimated by the applicant to be two (2) tons per booth per year (2.0 tons/yr \* 5 booths = 10.0 tons/yr).
- (c) The source-wide VOC emission limit is 99.0 tons per year.

### County Attainment Status

The source is located in Steuben County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Steuben County has been designated as attainment or unclassifiable for ozone.

### Federal Rule Applicability

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

### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it limits the Potential to Emit of VOC and PM10 to less than 100 tons per year.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions)

The source shall comply with all regulations under 326 IAC 6-4 (Fugitive Dust Emissions). Fugitive dust shall not be seen crossing the boundary or property line of the plant.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-1-3.4 (New Source Toxics Control)

Pursuant to 326 IAC 2-1-3.4 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The surface coating booths being reviewed pursuant to Enhanced New Source Review (ENSR), identified as P-B, P-C, P-3, and P-4 emit less than 10 tons per year of any HAP or 25 tons per year of any combination of HAPs (see page 3 of 8, Appendix A, for more detailed calculations). Therefore, these facilities are not subject to the requirements of 326 IAC 2-1-3.4.

#### 326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations) the particulate matter (PM) overspray from the spray booths identified as P-2 and P-4 shall be limited by the following:

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

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

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the the shotblasters identified as SB1 and SB2 shall each not exceed 1.28 pounds per hour when operating at an individual process weight flow rate of 354 pounds abrasive per hour.

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

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

$$E = 4.10(354/2000)^{0.67} = 1.28 \text{ pounds PM per hour;}$$

The units SB1 and SB2 each have a controlled potential emission rate of 0.05 pounds PM10 per hour (see Appendix A, page 5 of 8 for more detailed calculations). Therefore, the units are in compliance with 326 IAC 6-3-2 (Process Operations).

- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each powder coating operation P-A, P-B, and P-C shall each not exceed 2.22 pounds per hour when operating at a process weight flow rate of 800 pounds of powder per hour.

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

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

$$E = 4.10(800/2000)^{0.67} = 2.22 \text{ pounds PM per hour;}$$

The units P-A, P-B, and P-C each have a controlled potential emission rate of 0.07 pounds PM per hour (see Appendix A, page 4 of 8 for more detailed calculations). Therefore, the units are in compliance with 326 IAC 6-3-2 (Process Operations).

- (d) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each powder coating operation, P-1 and P-3 shall each not exceed 0.55 pounds per hour when operating at a process weight flow rate of less than 100 pounds of powder per hour.

The units P-1 and P-3 each have a controlled potential emission rate of 0.12 pounds PM per hour (see Appendix A, page 4 of 8 for more detailed calculations). Therefore, the units are in compliance with 326 IAC 6-3-2 (Process Operations).

- (e) Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the laser cutter, belt sanders, welding, grinding, and other miscellaneous machining operations (see insignificant activities) shall not exceed 8.51 pounds per hour when operating at a process weight flow rate of 5950 pounds of raw materials per hour.

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

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

$$E = 4.10(5950/2000)^{0.67} = 8.51 \text{ pounds PM per hour;}$$

These units are controlled by a single baghouse (BH5) dedicated to controlling PM emissions from all machining operations. The potential PM emissions from this baghouse are 0.214 pounds per hour (see Appendix A, page 4 of 8 for more detailed calculations). Therefore, the units are in compliance with 326 IAC 6-3-2 (Process Operations).

- (f) Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the portable dual grinder (see insignificant activities) shall not exceed 1.02 pounds per hour when operating at a process weight flow rate of 250 pounds of raw materials per hour.

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

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

$$E = 4.10(250/2000)^{0.67} = 1.02 \text{ pounds PM per hour;}$$

This portable unit is controlled by a single baghouse (BH6). The potential PM emissions from this baghouse are 0.01 pounds per hour (see Appendix A, page 4 of 8 for more detailed calculations). Therefore, the unit is in compliance with 326 IAC 6-3-2 (Process Operations).

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

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the following operations engaged in the surface coating of miscellaneous metal parts shall not discharge into the atmosphere of any volatile organic compound (VOC) in excess of the following:

- (a) The volatile organic compound (VOC) content of coating delivered to the applicator at the booth identified as P-2 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air (less than 90EC or 194 EF) dried coatings.

Based on the MSDS submitted by the source and calculations made (see page 2 of 8, Appendix A), the paint booth P-2 is in compliance with this requirement.

- (b) The volatile organic compound (VOC) content of coating delivered to the applicator at the booth identified as P-4 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air (less than 90EC or 194 EF) dried coatings. Compliance with this limit shall be achieved pursuant to 326 IAC 8-1-2, using a daily volume weighted average of all coatings applied in the paint booth. This shall be calculated as follows:

$$\text{Volume-Weighted Average} = \frac{\sum (\text{individual coating usage (gal/hr)} * E_c)}{\sum (\text{coating usage (gal/hr)})}$$

where:  $E_c$  = pounds of VOC per gallon of coating less water for each coating;  
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water);

The Volume Weighted Average for all coatings delivered to the applicator at P-4 must be less than or equal to 3.5 pounds VOC per gallon. Based on the MSDS submitted by the company and calculations made (see page 2 of 8, Appendix A), the paint booth is in compliance with this requirement.

Solvent sprayed from application equipment of P-2 and P-4 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.

### 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, OAM, 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 permit Section D 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 in permit Section D. 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:

- (1) The baghouses controlling the shotblasting units SB1 and SB2, machining, welding and grinding units (see insignificant activities), and the powder coating booths P-A, P-B, P-C, P-1, and P-3 have applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the baghouses controlling the shotblasting units SB1 and SB2, machining, welding, and grinding units, and the powder coating booths P-A, P-B, P-C, P-1, and P-3 (baghouses BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, and BH9) stack exhausts 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 Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
  - (b) The Permittee shall record the total static pressure drop across each baghouse (Baghouses BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, and BH9) controlling the shotblasting units SB1 and SB2, machining, welding, and grinding units, and the powder coating booths P-A, P-B, P-C, P-1, and P-3, at least once daily when the units are in operation when venting to the atmosphere. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across each 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 Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

(2) The liquid paint booths P-2 and P-4 have applicable compliance monitoring conditions as specified below:

- (a) The volatile organic compound (VOC) content of coating delivered to the applicator at the booths identified as P-2 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air (less than 90EC or 194 EF) dried coatings.
- (b) The volatile organic compound (VOC) content of coating delivered to the applicator at the booth identified as P-4 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air (less than 90EC or 194 EF) dried coatings.

Compliance with this limit shall be achieved pursuant to 326 IAC 8-1-2, using a daily volume weighted average of all coatings applied in the paint booth. This shall be calculated as follows:

$$\text{Volume-Weighted Average} = \frac{3(\text{individual coating usage less water (gal/hr)} * E_c)}{3(\text{coating usage less water (gal/hr)})}$$

where:  $E_c$  = pounds of VOC per gallon of coating less water for each coating;  
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water);

The Volume Weighted Average for all coatings delivered to the applicator at P-4 must be less than or equal to 3.5 pounds VOC per gallon. Pursuant to 326 IAC 8-1-2(a)(7) (Compliance Methods), records of daily usage of gallons solids coating and VOC content of each coating shall be maintained and made available upon request. Also, records of daily emissions in pounds VOC shall be maintained and made available upon request.

Solvent sprayed from application equipment in P-2 and P-4 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.

- (c) The spray booth facilities (P-2 and P-4) shall use no more than 88.4 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period. This usage limit is required to limit the source-wide potential to emit of VOC to less than 99 tons per twelve (12) consecutive month period as follows:

Limited VOC Emissions (P-2, P-4): 88.4 tons per year;  
Potential VOC Emissions (powder coating): 10.0 tons per year;  
Potential VOC Emissions (insignificant activities): 0.6 tons per year;

Total VOC Limited Potential to Emit: 99.0 tons per year;

These monitoring conditions are necessary to ensure compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coatings) and 326 IAC 2-8 (FESOP).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached calculations for detailed air toxic calculations (page 3 of 8, Appendix A).

### **Conclusion**

The operation of this metal enclosure fabrication plant will be subject to the conditions of the attached proposed **FESOP No. F/ENSR 151-9421-00042**.

### Appendix A: Emission Calculations Source Emissions Summary

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

<b>Uncontrolled Potential Emissions (tons/year)</b>					
Emissions Generating Activity					
Pollutant	Natural Gas + Waste Oil Combustion	Insignificant Activities BH5, BH6, BH7, BH8	Liquid Surface Coating Booths P-2, P-4	Powder Surface Coating Booths P-A, P-B, P-C, P-1, P-3	<b>TOTAL</b>
	(1)	(2)	(3)	(4)	
PM	1.75	286.44	185.27	939.04	1,412.5
PM10	1.75	286.44	185.27	939.04	1,412.5
SO2	0.06	0.00	0.00	0.00	0.1
NOx	10.60	0.00	0.00	0.00	10.6
VOC	0.61	0.00	101.58	10.00	112.2
CO	2.21	0.00	0.00	0.00	2.2
total HAPs	0.00	0.53	22.02	0.00	22.6
worst case single HAP	0.00	0.53	9.72	0.00	10.3
Total emissions based on rated capacity at 8,760 hours/year.					
<b>Limited/Controlled Potential Emissions (tons/year)</b>					
Emissions Generating Activity					
Pollutant	Natural Gas + Waste Oil Combustion	Machining/Blasting/Welding BH5, BH6, BH7, BH8	Liquid Surface Coating Booths P-2, P-4	Powder Surface Coating Booths P-A, P-B, P-C, P-1, P-3	<b>TOTAL</b>
	(1)	(2)	(3)	(4)	
PM	1.75	1.44	1.85	1.89	6.9
PM10	1.75	1.44	1.85	1.89	6.9
SO2	0.06	0.00	0.00	0.00	0.1
NOx	10.60	0.00	0.00	0.00	10.6
VOC	0.61	0.00	88.40	10.00	99.0
CO	2.21	0.00	0.00	0.00	2.2
total HAPs	0.00	0.53	17.00	0.00	17.5
worst case single HAP	0.00	0.53	7.10	0.00	7.6
Total emissions based on rated capacity at 8,760 hours/year, after control and compliance with applicable regulations..					
<p>(1) These combustion units are insignificant activities. See page 6 and 7 of 8, Appendix A, for more detailed emissions calculations.</p> <p>(2) Emissions from these insignificant activities include the following:</p> <p style="padding-left: 20px;">a. Grinding, machining, welding, and blasting, are all controlled by baghouses BH5, BH6, BH7, and BH8. See page 4, 5, and 8 of 8, Appendix A, for detailed emissions calculations.</p> <p>(3) Uncontrolled VOC emissions from liquid surface coating are based on worst-case VOC usage. Limited VOC emissions are based on compliance with 326 IAC 2-8 (FESOP). These booths are also limited by 326 IAC 8-2-9 (Misc. Metal Coatings). See page 2 and 3 of 8, Appendix A, for more detailed emissions calculations.</p> <p>(4) Particulate emissions (PM/PM10) from the powder coating are controlled by baghouses (BH1, BH2, BH3, and BH4). See page 4 of 8, Appendix A, for detailed emissions calculations. Potential VOC emissions from powder coating were estimated by the applicant to be 2 tons per booth per year, including VOC content in the powder as well as VOC in cleanup solvents.</p>					

**Appendix A: Emission Calculations  
VOC and Particulate  
From Solvent Based Surface Coating Operations**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

Potential Emissions (uncontrolled):																			
Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency		
White High Gloss Enamel* tint base	P-4	14.17	11.16%	0.00%	11.16%	0.00%	79.76%	0.500	9.00	1.6	1.58	7.12	170.79	31.17	99.25	3.30	60%		
white acrylic base	P-4	7.83	53.01%	0.00%	53.01%	0.00%	38.64%	0.500	9.00	4.2	4.15	18.68	448.27	81.81	29.01	17.90	60%		
<b>Volume Weighted Average</b>	<b>P-4</b>	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.500	9.00	<b>3.5</b>	3.50	15.75	378.00	<b>68.99</b>	n/a	n/a	n/a		
lacquer thinner	cleanup P-4	6.52	100.00%	0.00%	100.00%	0.00%	0.00%	0.002	9.00	6.5	6.52	0.12	2.79	0.51	0.00	n/a	n/a		
FSEP 23331 White	P-2	14.460	9.45%	0.00%	9.45%	0.00%	90.57%	0.060	50	1.4	1.37	4.10	98.39	17.96	86.02	1.51	50%		
457-Lacquer (Gun Cleaner)	P-2	6.600	100.00%	0.00%	100.00%	0.00%	0.00%	0.0009	50	6.6	6.60	0.30	7.13	1.30	0.00	n/a	n/a		
<b>Uncontrolled Potential Emissions:</b>												<b>23.19</b>	<b>556.58</b>	<b>101.58</b>	<b>185.27</b>				
Potential Emissions (limited/controlled)																			
<b>Limited/Controlled Potential Emissions:</b>												Control Efficiency:		Limited VOC lbs per Hour	Limited VOC lbs per Day	Limited VOC tons per Year	Controlled PM tons/yr		
												VOC	PM						
												0.00%	99.00%	<b>20.26</b>	<b>486.30</b>	<b>88.75</b>	<b>1.85</b>		

\* The White High Gloss Enamel in P-4 is applied with 50 mL of Solvent 100 and 25mL of Butyl Carbitol Acetate (BCA), the characteristics above represent the coating "as applied with diluent".  
The three (3) different coatings in booth P-4 are mutually exclusive. To comply with 326 IAC 8-2-9 (Misc. Metal Coatings), a daily Volume Weighted Average of VOC content must not exceed 3.5 lb VOC/gal of coating less water.  
Since the three (3) coatings have the same potential usage rate, the volume weighted average can be calculated as follows: 1.6 lb VOC/gal + 4.2 lb VOC/gal + 2.9 lb VOC/gal = 8.7 lb VOC/gal less water / 3 = 2.9 lb VOC / gal coating less water.  
The source shall perform daily record keeping of the Volume Weighted Average of VOC content delivered to the applicator to ensure compliance with 326 IAC 8-2-9 (Misc. Metal Coatings).  
Total potential VOC emissions represents worst-case VOC usage in Booth P-2 and P-4, and VOC usage in the lacquer thinner as indicated by the shaded boxes.  
Total potential PM emissions represents worst-case PM emissions from overspray in Booth P-2 and P-4, as indicated by the shaded boxes.  
Limited potential VOC emissions based on compliance with 326 IAC 8-2-9 (Misc. Metal Coatings) (3.5 pounds per gallon of coating less water), as indicated under Volume Weighted Average for P-4.  
Total limited potential VOC emissions are equal to the Volume Weighted Average for P-4, and the potential emissions for P-2, including lacquer thinners (68.99+0.51+17.96+1.30 = 88.75 tons VOC/year.)

**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) \* Transfer Efficiency  
Total = Worst Coating + Sum of all solvents used  
Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)

**APPENDIX A  
Hazardous Air Pollutants (HAPs)**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Pit ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Cumene	Weight % Ethylbenzene	Weight % MIBK	Weight % Glycol Ethers	Weight % Formaldehyde	Weight % Methanol	Xylene (ton/yr)	Toluene (ton/yr)	Cumene (ton/yr)	Ethylbenzene (ton/yr)	MIBK (ton/yr)	Glycol Ethers (ton/yr)	Formaldehyde (ton/yr)	Methanol (tons/yr)
White High gloss	14.17	0.500000	9.00	0.00%	0.00%	0.01%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00	0.00	0.02	0.00	0.00	0.94	0.00	0.00
tint base	7.83	0.500000	9.00	0.67%	4.64%	0.00%	0.12%	0.00%	6.30%	0.34%	0.00%	1.03	7.16	0.00	0.19	0.00	9.72	0.52	0.00
white high base	11.21	0.500000	9.00	1.15%	0.00%	0.15%	0.30%	0.43%	0.00%	0.00%	0.00%	2.53	0.00	0.33	0.66	1.00	0.00	0.00	0.00
lacquer thinner	6.52	0.002	9.00	0.00%	20.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Total Potential Emissions** 2.53                    7.26                    0.33                    0.66                    1.00                    9.72                    0.52                    0.00

\* The White High Gloss Enamel is applied with 50 mL of Solvent 100 and 25mL of Butyl Carbitol Acetate (BCA), the characteristics above represent the coating "as applied with diluent".  
 To calculate potential worst-case HAP emissions for each HAP, the worst-case coating in Booth P4 was added to the thinner and solvent usage.  
 The three (3) different coatings in booth P-4 are mutually exclusive. To comply with 326 IAC 8-2-9 (Misc. Metal Coatings), a daily Volume Weighted Average of VOC content must not exceed 3.5 lb VOC/gal of coating less water.  
 To comply with 326 IAC 8-2-9 (Misc. Metal Coatings), the source will have to limit the "tint base" coating to a 70% worst-case usage rate. Therefore, after compliance with 326 IAC 8-2-9, Potential HAP emissions are equal to approximately 7.10 tons/yr for a single HAP (Glycol Ethers), and approximately 17.0 tons/yr for total HAPs.

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

**Appendix A: Process Particulate Emissions**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

<b>Potential Uncontrolled Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total (tons/yr)
BH1 for powder booth P-A	1	0.00100	7.0	1,080	99.80%	142.72
BH2 for powder booth P-B	1	0.00100	7.0	1,080	99.80%	142.72
BH3 for powder booth P-3	1	0.00200	6.3	1,080	99.80%	255.44
BH4 for powder booth P-1	1	0.00200	6.3	1,080	99.80%	255.44
BH5 for welding / machining	1	0.00500	3.5	1,440	99.50%	187.59
BH6 for portable grinder	1	0.00310	16.9	24	99.50%	9.32
BH9 for powder booth P-C	1	0.00100	7.0	1,080	99.80%	142.72
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						<b>1135.97</b>
<b>Potential Controlled Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total (tons/yr)
BH1 for powder booth P-A	1	0.00100	7.0	1,080	99.80%	0.29
BH2 for powder booth P-B	1	0.00100	7.0	1,080	99.80%	0.29
BH3 for powder booth P-3	1	0.00200	6.3	1,080	99.80%	0.51
BH4 for powder booth P-1	1	0.00200	6.3	1,080	99.80%	0.51
BH5 for welding / machining	1	0.00500	3.5	1,440	99.50%	0.94
BH6 for portable grinder	1	0.00310	16.9	24	99.50%	0.05
BH9 for powder booth P-C	1	0.00100	7.0	1,080	99.80%	0.29
Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls						<b>2.86</b>

**Methodology:**

**Potential (uncontrolled):**

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft²) \* Filter Area (ft²) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

**Potential (controlled):**

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft²) \* Filter Area (ft²) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

**Appendix A: Emission Calculations**  
**Natural Gas Combustion**  
**MM Btu/hr 0.3 - < 10**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
24.0	210.0

Heat Input Capacity includes:  
 one (1) dry off oven rated at 2.50 mmBtu/hr;  
 one (1) cure oven rated at 3.10 mmBtu/hr;  
 three (3) ovens each rated at 1.65 mmBtu/hr;  
 one (1) cure oven rated at 3.00 mmBtu/hr;  
 one (1) HVAC rated at 0.45 mmBtu/hr;  
 sixteen (16) infrared hanging heaters with a total rating of 0.96 mmBtu/hr;  
 four (4) heaters each rated at 0.4 mmBtu/hr;  
 one (1) pretreatment process water heater rated at 0.938 mmBtu/hr  
 one (1) pretreatment process water heater rated at 0.789 mmBtu/hr  
 one (1) air makeup unit rated at 5.39 mmBtu/hr;  
 one (1) burnoff oven rated at 0.30 mmBtu/hr;

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
11.9	11.9	0.6	100.0	5.8	21.0	
Potential Emission in tons/yr	1.25	1.25	0.06	10.50	0.61	2.21

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND.

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

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

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

**Appendix A: Emission Calculations**  
**Abrasive Blasting - Shotblaster SB1 and SB2**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:**

**Table 1 - Emission Factors for Abrasives**

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

**Table 2 - Density of Abrasives (lb/ft3)**

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

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

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

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

**Calculations**

*Adjusting Flow Rates for Different Abrasives and Nozzle Diameters*

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)  
 FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =  
 D = Density of abrasive (lb/ft3) From Table 2 =  
 D1 = Density of sand (lb/ft3) =  
 ID = Actual nozzle internal diameter (in) =  
 ID1 = Nozzle internal diameter (in) from Table 3 =

354
99
99
0.3125
0.3125

**Flow Rate (FR) (lb/hr) = 354.000 per nozzle**

**Potential Emissions (E, lb/hr)**

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

0.029
354.000
0 %
2
99.5 %

<b>Uncontrolled Emissions =</b>	<b>20.53 lb/hr PM10</b>
	<b>89.93 ton/yr PM10</b>

<b>Controlled Emissions =</b>	<b>0.10 lb/hr PM10</b>
	<b>0.45 ton/yr PM10</b>

SB1 is controlled by baghouse BH7, and SB2 is controlled by baghouse BH8, each baghouse has a 99.5% collection efficiency.

**METHODOLOGY**

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"

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

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

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

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

Controlled Emissions = EF x FR x (1-w/200) x N x (1-C)

**Appendix A: Emissions Calculations  
Waste Oil Combustion**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

Heat Input Capacity  
MMBtu/hr

0.225

Potential Throughput  
kgals/year

14.1798561

A = Weight % Ash =	1
L = Weight % Lead =	0.003
S = Weight % Sulfur =	0.001

Emission Factor in lb/kgal	Pollutant						
	PM 64.0 (64A)	PM10 57.00 (57A)	SO2 0.1 (107S)	NOx 16.0	TOC 1.0	CO 2.10	Pb 0.1500 (50L)
Potential Emission in tons/yr	0.5	0.4	0.0	0.1	0.0	0.0	0.0011

**Methodology**

Emission Factor Units are lb/1000 gal

A = weight% ash in fuel, L = weight% lead in fuel, S = weight % sulfur in fuel

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.139 MM Btu

Emission Factors from AP-42, Chapter 1.11

Emission (tons/yr) = Throughput kgals per year x Emission Factor (lb/kgal)/2,000 lb/ton

**Appendix A: Emission Calculations**  
**Insignificant Activity Emissions of Pollutants Limited Below Major Thresholds (HAPs)**

**Company Name:** Rittal-Electromate  
**Address City IN Zip:** 3065 East Water Street, Fremont, IN 46737  
**FESOP:** F/ENSR-151-9421  
**Plt ID:** 151-00042  
**Reviewer:** JM/EVP  
**Date:** March 31, 1998

Type of Welding	Maximum Electrode Consumption (lb/hr)	Emission Factors		Emissions	
		PM-10 lb/ lb electrode	Manganese lb/ lb electrode	PM-10 tons/yr	Manganese tons/yr
17 MIG Welders	170.00	0.0055	0.0005	<b>4.0953</b>	<b>0.3723</b>
14 TIG Welders	70.0	0.0055	0.0005	<b>1.6863</b>	<b>0.1533</b>
<b>TOTALS:</b>				<b>5.78</b>	<b>0.53</b>

The welding operations consist of the 17 Metal Inert Gas (MIG) welding stations each with a maximum hourly wire consumption of 10 lb/hr; and 14 Tungsten inert gas (TIG) welding stations each with a maximum hourly metal consumption of 5 pounds per hour.

Emissions from the welding operations are controlled by a baghouse (BH5) and exhausted through stack (S/V ID NV7);

Methodology:

Emissions (tons/yr) = Maximum Consumption (lbs/hr) \* Emission Factor (lb/1,000 lb) \* (8,760 hr/yr) \* (1 ton/2,000 lbs)

Emission Factors from the SARA 313 Reporting Guide. The default MIG welding factors was used to calculate emissions.