

**CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR MANAGEMENT**

**Creative Coatings, Inc.  
7505 Freedom Way  
Fort Wayne, Indiana 46818**

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

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

Operation Permit No.: MSOP 003-10783-00297	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a plastic and metal parts coating operation.

Authorized Individual: Richard Lain  
Source Address: 7505 Freedom Way, Fort Wayne, IN 46818  
Mailing Address: 7505 Freedom Way, Fort Wayne, IN 46818  
Phone Number: (219) 489-3580  
SIC Code: 3479  
County Location: Allen  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source, under PSD or Emission Offset Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

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

- a) one (1) existing metal parts powder coating operation consisting of:
  - (1) one (1) 0.95 MMBtu/hr natural gas fired cure oven, identified as EU02, with emissions exhausted to Stack 4,
  - (2) one (1) primary and one (1) backup closed powder coating booths, identified as EU03A and B, respectively, both with emissions controlled by a cyclone/filter cartridge system, with emissions exhausted inside the building,
  - (3) one (1) ancillary electric oven, identified as EU05, with emissions exhausted to Stack 8, and
  - (4) one (1) 0.5 MMBtu/hr natural gas fired gas oven, identified as EU06, with emissions exhausted to Stack 8,
  
- b) one (1) new Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07, equipped with a 0.559 MMBtu/hr natural gas fired curing oven, identified as EU01, with emissions controlled by a dry filter system and exhausted to Stack 5,
  
- c) the following existing general combustion units:
  - (1) three (3) 0.12 MMBtu/hr natural gas fired space heaters,
  - (2) one (1) 0.1 MMBtu/hr natural gas fired space heater,
  - (3) one (1) 3.33 MMBtu/hr natural gas fired air makeup unit, identified as EU09, and
  - (4) one (1) 0.003 MMBtu/hr natural gas fired pretreatment powerwasher, identified as EU01, with emissions exhausted to Stacks 1, 2, and 3, and

- d) one (1) 0.5 MMBtu/hr natural gas fired pyrolysis bake-off oven, identified as EU08, with emissions exhausted to Stacks 6 and 7,

**A.3 Part 70 Permit Applicability [326 IAC 2-7-2]**

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This stationary source is not required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

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

**SECTION B GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

**B.1 Permit No Defense [IC 13]**

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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.

**B.2 Definitions**

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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 2-1.1-1 shall prevail.

**B.3 Effective Date of the Permit [IC13-15-5-3]**

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

**B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]**

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

**B.5 Modification to Permit [326 IAC 2]**

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Notwithstanding Condition B.7, all requirements and conditions of this construction permit 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).

**B.6 Minor Source Operating Permit [326 IAC 2-6.1]**

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This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the Construction 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 document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. 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. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of [326 IAC 2-6.1-6] whenever the Permittee seeks to 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 "authorized individual" as defined by 326 IAC 2-1.1-1.

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

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

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 permitted 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 this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.

- (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]

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (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.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

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

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

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

C.7 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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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.

**Testing Requirements**

**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 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 "authorized individual" as defined by 326 IAC 2-1.1-1.

**Compliance Monitoring Requirements**

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

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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 the compliance schedule 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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (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]

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 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (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.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate 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 emissions unit 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 emissions unit.

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

## Record Keeping and Reporting Requirements

### C.15 Malfunctions Report [326 IAC 1-6-2]

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

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

### C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

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- (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 stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

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- (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.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

- (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. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance 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. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.

**SECTION D.1**

**EMISSIONS UNIT OPERATION CONDITIONS**

one (1) existing metal parts powder coating operation consisting of:

- (a) one (1) 0.95 MMBtu/hr natural gas fired cure oven, identified as EU02, with emissions exhausted to Stack 4,
- (b) one (1) primary and one (1) backup closed powder coating booths, identified as EU03A and B, respectively, both with emissions controlled by a cyclone/filter cartridge system, with emissions exhausted inside the building,
- (c) one (1) ancillary electric oven, identified as EU05, with emissions exhausted to Stack 8, and
- (e) one (1) 0.5 MMBtu/hr natural gas fired gas oven, identified as EU06, with emissions exhausted to Stack 8.

## Emission Limitations and Standards

### D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM from the equipment of the powder coating operation, for a process weight rate of 7.13 tons per hour, shall be limited to 15.29 pounds per hour.

The recovery equipment associated with the powder coating operation shall be in operation at all times the powder coating operation is in operation, in order to comply with this limit.

## Compliance Determination Requirements

### D.1.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the particulate matter (PM) limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

one (1) new Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07, equipped with a 0.559 MMBtu/hr natural gas fired curing oven, identified as EU01, with emissions controlled by a dry filter system and exhausted to Stack 5.

## Emission Limitations and Standards

### D.2.1 Volatile Organic Compounds (VOC)

The plastic parts surface coating spray booth, identified as EU07 shall use less than 25 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period, rolled on a monthly basis. During the first 12 months of operation, the input VOC shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 2.08 tons per month. Compliance with this limit makes 326 IAC 8-1-6 (General Reduction Requirements) not applicable.

### D.2.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the plastic parts surface coating spray booth, identified as EU07, 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:

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

### D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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

## Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

### D.2.4 Testing Requirements [326 IAC 2-1.1-11]

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

#### D.2.5 Volatile Organic Compounds (VOC)

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Compliance with the VOC content and usage limitations contained in Conditions D.2.1 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.2.6 VOC Emissions

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Compliance with Condition D.2.1 shall be demonstrated within 30 days of 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 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### D.2.7 Particulate Matter (PM)

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The dry filter system shall be in operation at all times the plastic parts surface coating spray booth, identified as EU07 is in operation, in order to comply with the limit of Condition D.2.2.

#### D.2.8 Monitoring

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- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters of the plastic parts coating spray booth. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack 5 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### D.2.9 Record Keeping Requirements

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- (a) To document compliance with Condition D.2.1, 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.2.1.
  - (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 cleanup solvent usage for each month;
  - (4) The total VOC usage for each month; and

- (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.2.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 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.3 EMISSIONS UNIT OPERATION CONDITIONS

one (1) 0.5 MMBtu/hr natural gas fired pyrolysis bake-off oven, identified as EU08, with emissions exhausted to Stacks 6 and 7.

#### Emission Limitations and Standards

##### D.3.1 Incinerator Limitations [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2, the pyrolysis bake-off oven, identified as EU08, shall be designed, constructed, and operated such that the incinerator:

- (a) has primary and secondary chambers;
- (b) is equipped with a primary burner unless burning wood products;
- (c) complies with the requirements of 326 IAC 5-1 and 326 IAC 2;
- (d) is maintained properly as specified by the manufacturer and approved by the Commissioner;
- (e) is operated according to the manufacturer's recommendations and only burn waste approved by the Commissioner;
- (f) complies with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (g) is operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- (h) particulate matter (PM) emissions do not exceed five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- (i) does not create a nuisance or a fire hazard.

#### Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

##### D.3.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **SECTION D.4**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

the following existing general combustion units:

- (a) three (3) 0.12 MMBtu/hr natural gas fired space heaters,
- (b) one (1) 0.1 MMBtu/hr natural gas fired space heater,
- (c) one (1) 3.33 MMBtu/hr natural gas fired air makeup unit, identified as EU09, and
- (d) one (1) 0.003 MMBtu/hr natural gas fired pretreatment powerwasher, identified as EU01, with emissions exhausted to Stacks 1, 2, and 3.

#### **Emission Limitations and Standards**

There are no standards or limitations associated with the combustion units of this section.

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

### Part 70 Quarterly Report

Source Name: Creative Coatings, Inc.  
Source Address: 7505 Freedom Way, Fort Wayne, IN 46818  
Mailing Address: 7505 Freedom Way, Fort Wayne, IN 46818  
Part 70 Permit No.: T003-10783-00297  
Facility: Plastic Parts Surface Coating Spray Booth, Identified as EU07  
Parameter: Input VOC  
Limit: less than 25 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period, rolled on a monthly basis.

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

Month	Column 1	Column 2	Column 1 + Column 2
	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: \_\_\_\_\_



**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for a Minor Source Operating Permit

#### Source Background and Description

Source Name: Creative Coatings, Inc.  
Source Location: 7505 Freedom Way, Ft. Wayne, Indiana 46818  
County: Allen  
SIC Code: 3479  
Operation Permit No.: 003-10783-00287  
Permit Reviewer: SDF

The Office of Air Management (OAM) has reviewed an application from Creative Coatings, Inc. relating to the construction and operation of the following equipment:

- a) one (1) existing metal parts powder coating operation\* consisting of:
  - 1) one (1) 0.95 MMBtu/hr natural gas fired cure oven, identified as EU02, with emissions exhausted to Stack 4,
  - 2) one (1) primary and one (1) backup closed powder coating booths, identified as EU03A and B, respectively, both with emissions controlled by a cyclone/filter cartridge system, with emissions exhausted inside the building,
  - 3) one (1) ancillary electric oven, identified as EU05, with emissions exhausted to Stack 8, and
  - 4) one (1) 0.5 MMBtu/hr natural gas fired gas oven, identified as EU06, with emissions exhausted to Stack 8,
  
- b) one (1) new Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07, equipped with a 0.559 MMBtu/hr natural gas fired curing oven, identified as EU01, with emissions controlled by a dry filter system and exhausted to Stack 5,
  
- c) the following existing general combustion units\*:
  - 1) three (3) 0.12 MMBtu/hr natural gas fired space heaters,
  - 2) one (1) 0.1 MMBtu/hr natural gas fired space heater,
  - 3) one (1) 3.33 MMBtu/hr natural gas fired air makeup unit, identified as EU09, and
  - 4) one (1) 0.003 MMBtu/hr natural gas fired pretreatment powerwasher, identified as EU01, with emissions exhausted to Stacks 1, 2, and 3, and
  
- d) one (1) 0.5 MMBtu/hr natural gas fired pyrolysis bake-off oven, identified as EU08, with emissions exhausted to Stacks 6 and 7.

\* These existing units are not currently permitted permit because the emissions from the equipment are at exempt levels and are not required to be permitted. It is the new proposed surface coating spray booth that increases the source emission levels such that a permit is required. Thus, the existing equipment are not in violation of any permit rules. The source shall be granted a Minor Source Operating Permit (MSOP).

#### Unpermitted Emission Units and Pollution Control Equipment

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

### Existing Approvals

The existing equipment associated with this source generates emissions at levels that were exempt from review. Thus there are no existing approvals associated with this source.

### Air Pollution Control Justification as an Integral Part of the Process:

The company owns and operates a powder coating operation which is equipped with a pneumatically conveyed cyclone / filter system that recycles and recovers 97% of the fugitive powder (PM/PM10) lost when powder coating. Said equipment is determined to be integral to the process with the PM/PM10 emissions generated being estimated using emissions after controls.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	EU01	30	1	1200	500
2	EU01	30	1	1200	<200
3	EU01	30	1	7000	ambient
4	EU02	20	1	2850	<200
5	EU07	20	2	1000	<200
6	EU08	21	1	400	1500
7	EU08	21	1	400	1500
8	EU05, EU06	22	1	400	<200

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

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

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

A complete application for the purposes of this review was received on March 22, 1999.

### Emission Calculations

See the following and Appendix A of this document for detailed emissions calculations.

**Unrestricted Potential to Emit (PTE):**

**1. Primary and Secondary Powder Coating Booths:**

The following calculations determine the unrestricted PTE from the primary and secondary powder coating booths based on 8,760 hours of operation, a maximum powder use of 208 lb/hr, 99% control efficiency, and emissions after controls.

All powder used is determined to be equal to PM(PM10).

$$208 \text{ lb PM(PM10)/hr} * 1/2000 \text{ ton PM(PM10)/ lb PM(PM10)} * 8760 \text{ hr/yr} * (1 - 0.99) = 9.11 \text{ ton PM(PM10)/yr}$$

**2. Bake-Off Oven PM/PM10 Emissions:**

The following calculations determine the unrestricted PM(PM10) PTE from the bake-off oven based on a maximum air flow rate of 500 dscfm, 0.01 gr/dscf, emissions before controls, 7000 gr/lb, and 8760 hours per year.

$$0.01 \text{ gr/dscf} * 1/7000 \text{ lb/gr} * 1/2000 \text{ ton/lb} * 1000 \text{ dscf/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} = 0.38 \text{ ton PM(PM10)/yr}$$

**3. Remaining Unit Emissions:**

The following lists the remaining unit unrestricted PTE, as estimated using the OAM standardized spreadsheets. The above estimated unrestricted PTE from the powder coating booths and bake-off oven are included to summarize the source emissions.

Unit	Type of Emissions	Unit ID	PM	PM10	SO2	NOx	VOC	CO
Powdercoaters	PM/PM10	EU03 A, B	9.11	9.11	-	-	-	-
spray booth	PM/PM10, VOC Combustion	EU07	4.72 neg.	4.72 neg.	- neg.	- 0.20	49.43 neg.	- 0.20
cure oven	Combustion	EU02	neg.	neg.	neg.	0.40	neg.	0.30
bakeoff oven	Combustion PM/PM10	EU08	neg. 0.38	neg. 0.38	neg. -	0.40 -	neg. -	0.30 -
gas oven	Combustion	EU06	-	-	-	0.20	-	0.20
3 ng heaters	Combustion	None	-	-	-	0.20	-	0.10
1 ng heater	Combustion	None	neg.	neg.	neg.	neg.	neg.	neg.
air makeup	Combustion	EU09	0.10	0.10	neg.	1.4	0.1	1.2
powerwash	Combustion	EU01	neg.	neg.	neg.	neg.	neg.	neg.
<b>Total</b>			<b>14.31</b>	<b>14.31</b>	<b>neg.</b>	<b>2.80</b>	<b>49.44</b>	<b>2.30</b>

**Potential Emissions After Controls:**

The following calculations determine the potential emissions after controls. The surface coating spray booth PM/PM10 overspray emissions are controlled by a dry filter system with a 95% efficiency.

**Spray Booth PM/PM10 Emissions After Controls = ( 1 - 0.95) \* Emissions Before Controls**  
**Spray Booth PM/PM10 Emissions After Controls = ( 1 - 0.95) \* 4.72 = 0.236 ton PM/PM10/yr**

The powder coating emissions are reduced using a cyclone/filter cartridge system. However, the unrestricted PM/PM10 PTE emissions are already based on emissions after controls. Thus, the emissions after controls from this equipment is equal to the unrestricted PTE.

All other emissions are uncontrolled and thus the unrestricted PTE these units is equal to the potential emissions after controls. The following lists the potential emissions after controls:

Unit	Type of Emissions	Unit ID	PM	PM10	SO2	NOx	VOC	CO
Powdercoaters	PM/PM10	EU03 A, B	9.11	9.11	-	-	-	-
spray booth	PM/PM10, VOC Combustion	EU07	0.24 neg.	0.24 neg.	- neg.	- 0.20	49.43 neg.	- 0.20
cure oven	Combustion	EU02	neg.	neg.	neg.	0.40	neg.	0.30
bakeoff oven	Combustion PM/PM10	EU08	neg. 0.38	neg. 0.38	neg. -	0.40 -	neg. -	0.30 -
gas oven	Combustion	EU06	-	-	-	0.20	-	0.20
3 ng heaters	Combustion	None	-	-	-	0.20	-	0.10
1 ng heater	Combustion	None	neg.	neg.	neg.	neg.	neg.	neg.
air makeup	Combustion	EU09	0.10	0.10	neg.	1.4	0.1	1.2
powerwash	Combustion	EU01	neg.	neg.	neg.	neg.	neg.	neg.
<b>Total</b>			<b>9.83</b>	<b>9.83</b>	<b>neg.</b>	<b>2.80</b>	<b>49.44</b>	<b>2.30</b>

**Potential To Emit**

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

Pollutant	Potential To Emit (tons/year)
PM	9.83
PM-10	9.83
SO <sub>2</sub>	neg.
VOC	49.44
CO	2.30
NO <sub>x</sub>	2.80

HAP's	Potential To Emit (tons/year)
Ethylbenzene	1.31
MEK	1.31
MIK	0.06
Toluene	4.73
Xylene	6.09
<b>TOTAL</b>	<b>13.50</b>

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

**Actual Emissions**

No previous emission data has been received from the source.

**County Attainment Status**

The source is located in Allen County.

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

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

**Proposed Modification**

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	4.72	4.72	neg.	49.43	0.20	0.20
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

**Source Status**

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited) including the equipment associated with the proposed modification:

Pollutant	Emissions (ton/yr)
PM	9.83
PM10	9.83
SO <sub>2</sub>	neg.
VOC	49.44
CO	2.30
NO <sub>x</sub>	2.80
Single HAP	6.09
Combination HAPs	13.50

This existing source, including the equipment of the modification, is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

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

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

This status is based on all the air approvals issued to the source.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 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 the potential to emit of carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NO<sub>x</sub>), PM<sub>10</sub>, and sulfur dioxide (SO<sub>2</sub>) are less than one hundred (100) tons per year.

326 IAC 5-1 (Visible Emissions Limitations)

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

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

### State Rule Applicability - Individual Facilities

#### 326 IAC 4-2-1 (Incineration):

The proposed pyrolysis bake-off oven, identified as EU08, is subject to 326 IAC 4-2, incineration rules because the incinerator is not an incinerator in a residential unit consisting of four or fewer families or an incinerator for which streamlined requirements have been established in accordance with 326 IAC 2-7-24.

Pursuant to 326 IAC 4-2-2, the incinerator shall be designed, constructed and operated such that the incinerator:

- 1) has primary and secondary chambers;
- 2) is equipped with a primary burner unless burning wood products;
- 3) complies with the requirements of 326 IAC 5-1 and 326 IAC 2;
- 4) is maintained properly as specified by the manufacturer and approved by the Commissioner;
- 5) is operated according to the manufacturer's recommendations and only burn waste approved by the Commissioner;
- 6) complies with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- 7) is operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- 8) particulate matter (PM) emissions do not exceed five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- 9) does not create a nuisance or a fire hazard.

The following calculations determine if the cleaner meets the PM limit of 326 IAC 4-2-2 by determining the PM emissions corrected to 50% excess air, based on "Summary of F Factor Methods for Determining Emissions from Combustion Sources".

The first step in determining the PM emission rate in lb/MMBtu corrected to 50% excess air, is determining the natural gas products of combustion (POC) at 50% excess air. The POC at 50% excess air is determined using the following equation:

$$\text{Natural Gas POC at 50\% Excess Air} = F_d + F_n + F_o$$

where:  $F_d$  = ratio of total effluent gas (dry) to heat content of fuel (8740 dscf/MMBtu)  
 $F_n$  = ratio of  $N_2$  in excess air to heat content of fuel (3850 dscf/MMBtu)  
 $F_o$  = ratio of  $O_2$  to heat content of fuel (dscf/MMBtu)

$F_d$  for natural gas is obtained from Table I of the guidance.  $F_n$  is determined by taking one half of the effluent gas value of 7700 dscf/MMBtu (3850 dscf/MMBtu).  $F_o$  is determined as follows:

**3. O<sub>2</sub> Fraction in Excess Air (F<sub>o</sub>):**

The products in air that contribute to combustion of natural gas are N<sub>2</sub> and O<sub>2</sub>. Air contains 20.9% O<sub>2</sub> and 79.1% N<sub>2</sub>. Utilizing these fractions and the N<sub>2</sub> in the excess air (3850 dscf/MMBtu) determined above, the fraction of O<sub>2</sub> in the excess air (F<sub>o</sub>) can be determined.

$$F_o = \frac{FN_2}{[\%N_2/\%O_2]} = \frac{3850 \text{ dscf/MMBtu}}{[79.1/20.9]} = 1019 \text{ dscf/MMBtu}$$

**2. Emission Rate Corrected to 50% Excess Air:**

**a) Natural Gas POC at 50% Excess Air:**

$$\begin{aligned} \text{Natural Gas POC at 50\% Excess Air} &= F_d + F_N + F_o \\ &= [8740 \text{ dscf/MMBtu}] + [3850 \text{ dscf/MMBtu}] + [1019 \text{ dscf/MMBtu}] = 13609 \text{ dscf/MMBtu} \end{aligned}$$

**b) POC at 50% Excess Air (lb air/MMBtu):**

$$\begin{aligned} \text{POC at 50\% Excess Air (lb air/MMBtu)} &= 13609 \text{ dscf/MMBtu} * 0.075 \text{ lb dry exhaust gas/dscf} \\ &= 1021 \text{ lb dry exhaust gas/MMBtu} \end{aligned}$$

**c) PM Emission Rate Not Corrected to 50% Excess Air (E):**

The following calculations determine the PM emission rate not corrected to 50% excess air (E) based on a grain loading of 0.01 gr/dscf as supplied by the applicant and percent O<sub>2</sub> of 13.7%:

$$E = C_d * F_d * [20.9] / [20.9 - \%O_{2d}]$$

- where: E = PM emission rate not corrected to 50% excess air (lb PM/MMBtu)  
 C<sub>d</sub> = lb PM/dscf of effluent gas, [0.01 gr/dscf \* 1 lb/7000 gr = 0.0000014 lb/dscf]  
 F<sub>d</sub> = ratio of total effluent gas (dry) to heat content of fuel (8740 dscf/MMBtu) from Table I of Guidance  
 %O<sub>2d</sub> = percent oxygen (standard value of 13.7%)

$$E = \frac{[0.0000014 \text{ lb PM/dscf}] * [8740 \text{ dscf/MMBtu}] * [20.9]}{[20.9 - 13.7]} = 0.036 \text{ lb PM/MMBtu}$$

**d) Emission Rate Corrected to 50% Excess Air (E<sub>50</sub>):**

$$E_{50} = 0.036 \text{ lb PM/MMBtu} / [1020 \text{ lb air/MMBtu}] = [X \text{ lb PM/MMBtu}] / [1000 \text{ lb air/MMBtu}]$$

X = 0.035 lb PM/MMBtu, corrected to 50% excess air

The PM emissions per thousand pounds of dry exhaust gas, corrected to 50% excess air, is estimated to be 0.035 lb/MMBtu which is less than the limit of 0.5 lb PM/MMBtu. Thus, compliance is determined to be achieved.

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

The existing metal parts powder coating operation is subject to 326 IAC 6-3-2. Pursuant to this rule, the particulate matter (PM) from the equipment of the powder coating operation, for a process weight rate of 7.13 tons per hour shall be limited to 15.29 pounds per hour.

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

$$E = 4.10 P^{0.67} = 4.10 * [7.13 \text{ tons/hr}]^{0.67} = 15.29 \text{ pounds per hour}$$

The PM emissions from this source are determined to be 2.08 pounds per hour which is the less than the applicable level of 15.29 pounds per hour. Thus, compliance is determined to be achieved.

The recovery equipment associated with the powder coating operation shall be in operation at all times the powder coating operation is in operation, in order to comply with this limit.

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

The new proposed Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07 is subject to 326 IAC 6-3-2. Pursuant to this rule, the particulate matter (PM) from the equipment 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:

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

The dry filter system shall be in operation at all times the surface coating booth is in operation, in order to comply with this limit.

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

The new proposed Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07 is not subject to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), because the surface coating booth coats plastic parts, not metal parts.

### 326 IAC 8-1-6 (General Reduction Requirements)

The new proposed Garnat air assisted airless plastic parts surface coating spray booth, identified as EU07 is subject to 326 IAC 8-1-6 because the potential emissions (49.43 tons per year) are greater than the applicable level of 25 tons per year and no other Article 8 rules apply.

Creative Coatings has opted to accept a VOC input limit of less than 25 tons per year to avoid the requirements of 326 IAC 8-1-6.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) 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) Construction Permit Application Form Y.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

**Conclusion**

The construction and operation of this source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 003-10783-00297.

# Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for the Minor Source Operating Permit

Source Name: Creative Coatings, Inc.  
Source Location: 7505 Freedom Way, Fort Wayne, Indiana 46818  
County: Allen  
Construction Permit No.: CP-003-10783-00297  
SIC Code: 3479  
Permit Reviewer: Scott Fulton/DRP

On July 7, 1999, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal Gazette in Fort Wayne, Indiana, stating that Creative Coatings, Inc. had applied for a construction permit to construct and operate a surface coating booth. The source would be issued a minor source operating permit due to this change. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The Office of Air Management (OAM) made the following changes to the permit:

Condition D.2.9 has been deleted. All conditions after this one have been renumbered.

- ~~D.2.9 Visible Emissions Notations~~
- ~~(a) Daily visible emission notations of the plastic parts surface coating booth (EU07) 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.~~

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

**Company Name:** Creative Coatings, Inc.  
**Address City IN Zip:** 7505 Freedom Way, Ft. Wayne, Indiana 46818  
**CP:** 003-10783-00297  
**Pit ID:** 003-00297  
**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.0	0.0

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				*see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.0	0.0	0.0

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

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Natural Gas Combustion Only  
MM BTU/HR <100  
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**CP:** 003-10783-00297  
**Pit ID:** 003-00297  
**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
1.0	8.3

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.4	0.0	0.3

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

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Natural Gas Combustion Only  
MM BTU/HR <100  
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**Pit ID:** 003-00297  
**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.6	4.9

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.2	0.0	0.2

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

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**Address City IN Zip:** 7505 Freedom Way, Ft. Wayne, Indiana 46818  
**CP:** 003-10783-00297  
**Pit ID:** 003-00297  
**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.5	4.4

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.2	0.0	0.2

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

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Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

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**Pit ID:** 003-00297  
**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.3	28.9

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.1	0.0	1.4	0.1	1.2

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

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**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.8	7.0

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.4	0.0	0.3

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.



**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

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**Reviewer:** SDF  
**Date:** 3-28-99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.4	3.2

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				*see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.2	0.0	0.1

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.

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Natural Gas Combustion Only  
MM BTU/HR <100  
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Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.1	0.9

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.0	0.0	0.0

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PM emission factors are condensable and filterable.

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

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

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

See page 2 for HAPs emissions calculations.