



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: August 2, 2011

RE: Bare Metal, Inc / 043-30686-00044

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

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER-AM.dot12/3/07



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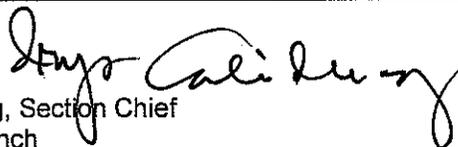
100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
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## REGISTRATION OFFICE OF AIR QUALITY

**Bare Metal, Inc.**  
**4160 Capital Drive**  
**New Albany, IN 47150**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 043-29060-00044	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issued Date: April 08, 2010

First Registration Revision No.: 043-30686-00044	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date:  August 2, 2011

## SECTION A

## SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

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The Registrant owns and operates a stationary metal paint stripping and allied services operation.

Source Address:	4160 Capital Drive, New Albany, IN 47150
General Source Phone Number:	(812) 948-1313
SIC Code:	3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)
County Location:	Floyd County
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas-fired paint burn-off oven, ID #1 with two (2) burners with a total heat input capacity of 0.5 million British thermal units per hour (MMBtu/hr);
- (b) One (1) natural gas-fired paint burn-off oven, ID #2 with two (2) burners with a total heat input capacity of 0.9 MMBtu/hr;
- (c) One (1) natural gas-fired paint burn-off oven, ID #3 with two (2) burners with a total heat input capacity of 1.5 MMBtu/hr;
- (d) One (1) natural gas-fired paint burn-off oven, ID #4 with three (3) burners with a total heat input capacity of 3.0 MMBtu/hr;
- (e) One (1) rinse tank, using soap and water solution with one (1) burner fired by natural gas, rated at 0.25 MMBtu/hr.
- (f) Three (3) blast cabinets and two (2) blast booths utilizing various media (black beauty, plastic, glass bead, and aluminum oxide). The blast operation is capable of using a total of 18,000 pounds of media per year (2.05 lbs/hr). The particulate matter (PM) emissions from each cabinet/booth are controlled by its dedicated baghouse or filter system.
- (g) One (1) side down draft spray booth, constructed in 2006, coating metal parts, with a maximum capacity of 1.875 gallons per hour, using fabric filters as particulate control, and exhausting through two (2) stacks.
- (h) One (1) Powder coating spray booth, identified as STPC 4000, approved for construction in 2011, coating fork lift parts, maximum capacity of 6.25 lbs per hour of powder coating, particulates controlled by three stage filters, and exhausting inside the building.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Definitions [326 IAC 2-1.1-1]**

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Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

### **B.2 Effective Date of Registration [IC 13-15-5-3]**

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Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

### **B.3 Registration Revocation [326 IAC 2-1.1-9]**

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

### **B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to Registration No. 043-29060-00044 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

### **B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]**

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Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

Indianapolis, IN 46204-2251

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

**B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

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Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

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Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**B.8 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit.
- (c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**C.1 Opacity [326 IAC 5-1]**

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

- (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.2 Fugitive Dust Emissions [326 IAC 6-4]**

The Registrant 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).

## SECTION D.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) natural gas-fired paint burn-off oven, ID #1 with two (2) burners with a total heat input capacity of 0.5 million British thermal units per hour (MMBtu/hr);
- (b) One (1) natural gas-fired paint burn-off oven, ID #2 with two (2) burners with a total heat input capacity of 0.9 MMBtu/hr;
- (c) One (1) natural gas-fired paint burn-off oven, ID #3 with two (2) burners with a total heat input capacity of 1.5 MMBtu/hr;
- (d) One (1) natural gas-fired paint burn-off oven, ID #4 with three (3) burners with a total heat input capacity of 3.0 MMBtu/hr;

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

### Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.1.1 Incinerator [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2, the four (4) paint burn-off ovens shall comply with the following requirements:

- (a) All incinerators shall comply with the following requirements:
  - (1) Consist of primary and secondary chambers or the equivalent.
  - (2) Be equipped with a primary burner unless burning only wood products.
  - (3) Comply with 326 IAC 5-1 and 326 IAC 2.
  - (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection 326 IAC 4-2-2(c).
  - (5) Not emit particulate matter in excess of one (1) of the following:
    - (A) Three-tenths (0.3) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with a maximum solid waste capacity of greater than or equal to two hundred (200) pounds per hour.
    - (B) Five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.
  - (6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.
- (b) An owner or operator developing an operation and maintenance plan pursuant to subsection (a)(4) must comply with the following:

- (1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in subsection (a)(5) and include the following:
    - (A) Procedures for receiving, handling, and charging waste.
    - (B) Procedures for incinerator startup and shutdown.
    - (C) Procedures for responding to a malfunction.
    - (D) Procedures for maintaining proper combustion air supply levels.
    - (E) Procedures for operating the incinerator and associated air pollution control systems.
    - (F) Procedures for handling ash.
    - (G) A list of wastes that can be burned in the incinerator.
  - (2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
  - (3) The operation and maintenance plan must be readily accessible to incinerator operators.
  - (4) The owner or operator of the incinerator shall notify the department, in writing, thirty (30) days after the operation and maintenance plan is initially developed pursuant to this section.
- (c) The owner or operator of the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

## SECTION D.2

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (g) One (1) side down draft spray booth, constructed in 2006, coating metal parts, with a maximum capacity of 1.875 gallons per hour, using fabric filters as particulate control, and exhausting through two (2) stacks.
- (h) One (1) Powder coating spray booth, identified as STPC 4000, approved for construction in 2011, coating fork lift parts, maximum capacity of 6.25 lbs per hour of powder coating, particulates controlled by three stage filters, and exhausting inside the building.

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

### Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the painting operations shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer (s) specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) Pursuant to 326 IAC 6-3-2, particulate emissions from the powder coating booth shall not exceed 0.551 pounds per hour at a process weight rate of 100 pounds per hour.

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements

#### D.2.3 Particulate

In order to comply with Condition D.2.1(b), the dry filters for particulate control shall be in operation at all times when the powder spray booth is in operation.

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

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Bare Metal, Inc.
<b>Address:</b>	4160 Capital Drive
<b>City:</b>	New Albany, IN 47150
<b>Phone Number:</b>	(812)
<b>Registration No.:</b>	043-29060-00044

I hereby certify that Bare Metal, Inc. is:

- still in operation.
- no longer in operation.
- in compliance with the requirements of Registration No. 043-29060-00044.
- not in compliance with the requirements of Registration No. 043-29060-00044.

I hereby certify that Bare Metal, Inc. is:

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Phone Number:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Registration Revision

#### Source Description and Location

<b>Source Name:</b>	<b>Bare Metal, Inc.</b>
<b>Source Location:</b>	<b>4160 Capital Drive, New Albany, IN 47150</b>
<b>County:</b>	<b>Floyd</b>
<b>SIC Code:</b>	<b>3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)</b>
<b>Registration No.:</b>	<b>043-29060-00044</b>
<b>Registration Revision No.:</b>	<b>043-30686-00044</b>
<b>Permit Reviewer:</b>	<b>Swarna Prabha</b>

On July 06, 2011, the Office of Air Quality (OAQ) received an application from the source relating to construction and operation of new spray powder equipment. The addition of this unit to the registration is considered a Registration Revision, since the potential emissions of regulated criteria pollutants and hazardous air pollutants are less than the ranges specified in 326 IAC 2-5.5-6(d)(10) and 326 IAC 2-5.5-6(d)(12), respectively (see PTE Appendix A).

#### Existing Approvals

The source was issued Registration No. 043-29060-00044 on April 08, 2010.

#### County Attainment Status

The source is located Floyd County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Floyd County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.  Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .	

- (a) Ozone Standards  
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Floyd County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM<sub>2.5</sub>**  
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd County as nonattainment for PM<sub>2.5</sub>. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM<sub>2.5</sub> promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
 Floyd County has been classified as attainment or unclassifiable in Indiana for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

**Status of the Existing Source**

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)									
	PM	PM10	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Natural gas Combustion	0.05	0.20	0.20	0.02	2.69	0.15	2.26	-	0.05	0.05 (Hexane)
Paint Burn-Off Ovens	0.71	0.71	0.71	-	-	-	-	-	-	-
Shotblasting	0.09	0.09	0.09	-	-	-	-	-	-	-
Spray Coating	16.57	16.57	16.57	-	-	1.92	-	-	0.06	0.03 (Xylene)
<b>Total PTE of Entire Source</b>	<b>17.42</b>	<b>17.57</b>	<b>17.57</b>	<b>0.02</b>	<b>2.69</b>	<b>2.07</b>	<b>2.26</b>	<b>-</b>	<b>0.11</b>	<b>0.05</b>
Exemptions Levels**	5	5	5	10	10	5 or 10	25	100,000	25	10
Registration Levels**	25	25	25	25	25	25	100	100,000	25	10
- = negligible These emissions are based upon Registration No.: 043-29060-00044. **The 100,000 CO <sub>2</sub> e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.										

**Description of Proposed Revision**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Bare Metal, Inc. on July 06, 2011, relating to construction and operation of a new spray powder equipment. The addition of this unit to the registration is considered a Registration Revision, since the potential emissions of regulated criteria

pollutants and hazardous air pollutants are less than the ranges specified in 326 IAC 2-5.5-6(d)(10) and 326 IAC 2-5.5-6(d)(12), respectively (see PTE Appendix A,). The uncontrolled/unlimited potential to emit of the entire source will continue to be within the threshold levels specified in 326 IAC 2-5.5-1(b)(1). No new state rules are applicable to this source. There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this notice-only change.

The following is a list of the new emission unit and pollution control device:

- (a) One (1) Powder coating spray booth, identified as STPC 4000, approved for construction in 2011, coating fork lift parts, maximum capacity of 6.25 lbs per hour of powder coating, particulates controlled by three stage filter, and exhausting inside the building.

NOTE: The maximum capacity is based on the capacity of the atomized spray gun.

**Enforcement Issues**

There are no pending enforcement actions related to this revision.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination – Registration Revision**

The following table is used to determine the appropriate permit level under 326 IAC 2-5.5-6. This table reflects the PTE before controls of the proposed revision.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)									
	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
<b>Powder Coating</b>	<b>6.84</b>	<b>6.84</b>	<b>6.84</b>	-	-	-	-	-	-	-
Total PTE of Proposed Revision	<b>6.84</b>	<b>6.84</b>	<b>6.84</b>	-	-	-	-	-	-	-

negl. = negligible

This Registration is being revised through a Registration Revision pursuant to 326 IAC 2-5.5-6(g), because the revision involves the construction of emission unit with potential to emit (PTE) VOC greater than the thresholds in 326 IAC 2-5.5.6(d)(10) and 326 IAC 2-5.5.6(d)(12).

**PTE of the Entire Source After Issuance of the Registration Revision**

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units.

Process/ Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Natural gas Combustion	0.05	0.20	0.20	0.02	2.69	0.15	2.26	<b>3,252.11</b>	0.05	0.05 (Hexane)
Pant Burn-Off Ovens	0.71	0.71	0.71	-	-	-	-	-	-	-
Shotblasting	0.09	0.09	0.09	-	-	-	-	-	-	-
Spray Coating	16.57	16.57	16.57	-	-	1.92	-	-	0.06	0.03 (Xylene)
<b>Powder Coating</b>	<b>6.84</b>	<b>6.84</b>	<b>6.84</b>	-	-	-	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>17.42</b> <b>24.26</b>	<b>17.57</b> <b>24.42</b>	<b>17.57</b> <b>24.42</b>	<b>0.02</b>	<b>2.69</b>	<b>2.06</b>	<b>2.26</b>	<b>3,252.11</b>	<b>0.11</b>	<b>0.05</b>
Exemptions Levels	5	5	5	10	10	5 or 10	25	100,000	25	10
Registration Levels	25	25	25	25	25	25	100	100,000	25	10

- = negligible  
 \*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  
 \*\*The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. (Note: the table below was generated from the above table, with bold text un-bolded)

Process/ Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Natural gas Combustion	0.05	0.20	0.20	0.02	2.69	0.15	2.26	3,252.11	0.05	0.05 (Hexane)
Pant Burn-Off Ovens	0.71	0.71	0.71	-	-	-	-	-	-	-
Shotblasting	0.09	0.09	0.09	-	-	-	-	-	-	-
Spray Coating	16.57	16.57	16.57	-	-	1.92	-	-	0.06	0.03 (Xylene)
Powder Coating	6.84	6.84	6.84	-	-	-	-	-	-	-
Total PTE of Entire Source	24.26	24.42	24.42	0.02	2.69	2.06	2.26	3,252.11	0.11	0.05
Exemptions Levels	5	5	5	10	10	5 or 10	25	100,000	25	10
Registration Levels	25	25	25	25	25	25	100	100,000	25	10

- = negligible  
 \*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  
 \*\*The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) This revision will not change the registration status of the source, because the uncontrolled/unlimited potential to emit of pollutants from the entire source will still be within the ranges listed in 326 IAC 2-5.5-1(b)(1) and the PTE of all other regulated criteria pollutants will still be less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source will still be subject to the provisions of 326 IAC 2-5.5 (Registrations).
- (b) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- (c) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit greenhouse gases (GHGs) will still be less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2e</sub>) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

#### **Federal Rule Applicability Determination**

The federal rules applicable to the existing emission units at this source will not change as a result of this revision.

- (d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

#### Compliance Assurance Monitoring (CAM)

- (f) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

#### **State Rule Applicability Determination**

The state rules applicable to the existing emission units at this source will not change as a result of this revision.

#### State Rule Applicability- Existing Combustion Units:

Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gases (GHGs) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO<sub>2</sub> equivalent emissions (CO<sub>2e</sub>). Therefore, CO<sub>2e</sub> emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO<sub>2e</sub> per year (see ATSD Appendix A for detailed calculations). This did not require any changes to the permit.

#### State Rule Applicability- Powder Coating Booth:

##### 326 IAC 6-3-2 (Particulates)

Pursuant to 326 IAC 6-3-2, particulate emissions from the powder coating booth shall not exceed 0.551 pounds per hour at a process weight rate of 100 pounds per hour.

The filtration system, must be in operation at all times when the powder spray booth is in operation

in order to comply with this limit. The Permittee shall operate the control device in accordance with manufacturer's specifications.

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-5.5 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
  - (1) 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.
  - (2) 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.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
Due to this revision, the source is not subject to the requirements of 326 IAC 6-5, because there are no potential fugitive particulate emissions greater than 25 tons per year.

<b>Proposed Changes</b>
-------------------------

- (a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

A.2 Emission Units and Pollution Control Equipment Summary

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

...

- (g) One (1) side down draft spray booth, constructed in 2006, coating metal parts, with a maximum capacity of 1.875 gallons per hour, using fabric filters as particulate control, and exhausting through two (2) stacks.
- (h) **One (1) Powder coating spray booth, identified as STPC 4000, approved for construction in 2011, coating fork lift parts, maximum capacity of 6.25 lbs per hour**

**of powder coating, particulates controlled by three stage filters, and exhausting inside the building.**

...  
**SECTION D.2**

**OPERATION CONDITIONS**

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (g) One (1) side down draft spray booth, constructed in 2006, coating metal parts, with a maximum capacity of 1.875 gallons per hour, using fabric filters as particulate control, and exhausting through two (2) stacks.
- (h) One (1) Powder coating spray booth, identified as STPC 4000, approved for construction in 2011, coating fork lift parts, maximum capacity of 6.25 lbs per hour of powder coating, particulates controlled by three stage filter, and exhausting inside the building.**

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

**Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

**D.2.1 Particulate [326 IAC 6-3-2]**

- (a)** Pursuant to 326 IAC 6-3-2(d), particulate from the painting operations shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer (s) specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) Pursuant to 326 IAC 6-3-2, particulate emissions from the powder coating booth shall not exceed 0.551 pounds per hour at a process weight rate of 100 pounds per hour.**

**Compliance Determination Requirements**

**D.2.3 Particulate**

**In order to comply with Condition D.2.1(b), the dry filters for particulate control shall be in operation at all times when the powder spray booth is in operation.**

- (b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strike through~~ text and new language appears as **bold** text:
  1. IDEM, OAQ has decided to remove all references to the source mailing address. IDEM, OAQ will

continue to maintain records of the mailing address. Section A.1 of the registration and the reporting forms has been revised as follows:

Mailing Address: 4160 Capital Drive, New Albany, IN 47150

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on July 06, 2011.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed Registration Revision No. 043-30686-00044. The staff recommends to the Commissioner that this Registration Revision be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Swarna Prabha at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5376) or toll free at 1-800-451-6027 extension (45376).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.in.gov/idem](http://www.in.gov/idem)

**Appendix A: Emissions Calculations  
Emissions Summary**

**Company Name: Bare Metal, Inc.**  
**Address: 4160 Capital Drive, New Albany, IN 47150**  
**Permit Number: 043-29060-00044**  
**Registration Revision No.: 043-30686-00044**  
**Permit Reviewer: Swarna Prabha**

Uncontrolled Emissions (Tons/Yr)						
Pollutant	Nat. Gas Combustion	Paint Burn-Off Ovens	Shot Blasting	Spray Coating	Powder Coating	Total
PM	0.05	0.71	0.09	16.57	<b>6.84</b>	24.26
PM10	0.20	0.71	0.09	16.57	<b>6.84</b>	24.42
PM2.5	0.20	0.71	0.09	16.57	<b>6.84</b>	24.42
VOC	0.15	-	-	1.92	-	2.06
NOx	2.69	-	-	-	-	2.69
SO2	0.02	-	-	-	-	0.02
CO	2.26	-	-	-	-	2.26
<b>GHGs as CO2e</b>	<b>3,252.11</b>	-	-	-	-	<b>3,252.11</b>
Single HAP (Hexane)	0.05	-	-	-	-	0.05
Combined HAPs	0.05	-	-	0.06	-	0.11

Controlled Emissions (Tons/Yr)						
Pollutant	Nat. Gas Combustion	Paint Burn-Off Ovens	Shot Blasting	Spray Coating	Powder Coating	Total
PM	0.05	0.71	0.00	0.48	<b>0.34</b>	1.58
PM10	0.20	0.71	0.00	0.48	<b>0.34</b>	1.73
PM2.5	0.20	0.71	0.00	0.48	<b>0.34</b>	1.73
VOC	0.15	-	-	1.92	-	2.06
NOx	2.69	-	-	-	-	2.69
SO2	0.02	-	-	-	-	0.02
CO	2.26	-	-	-	-	2.26
<b>GHGs as CO2e</b>	<b>3,252.11</b>	-	-	-	-	<b>3,252.11</b>
Single HAP (Hexane)	0.05	-	-	-	-	0.05
Combined HAPs	0.05	-	-	0.06	-	0.11

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

**Company Name:** Bare Metal, Inc.  
**Address:** 4160 Capital Drive, New Albany, IN 47150  
**Permit Number:** 043-29060-00044  
**Registration Revision No.:** 043-30686-00044  
**Permit Reviewer:** Swarna Prabha

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
0.50	4.38	ID #1
0.90	7.88	ID#2
1.50	13.14	ID #3
3.00	26.28	ID #4
0.25	2.19	Rinse Tank
<b>6.15</b>	<b>53.87</b>	

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100	5.5	84
				**see below		
Potential Emission in tons/yr	0.05	0.20	0.02	2.69	0.15	2.26

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

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

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 3 for HAPs emissions calculations.

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

**Company Name:** Bare Metal, Inc.  
**Address:** 4160 Capital Drive, New Albany, IN 47150  
**Permit Number:** 043-29060-00044  
**Registration Notice Only Change:** 043-30686-00044  
**Permit Reviewer:** Swarna Prabha

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.657E-05	3.232E-05	2.020E-03	4.849E-02	9.159E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.347E-05	2.963E-05	3.771E-05	1.024E-05	5.657E-05

Methodology is the same as page 2.

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

**Greenhouse Gas Emissions**

Greenhouse Gas			
Emission Factor in lb/MMcf	CO2 120000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	3,232.44	0.06	0.06
Summed Potential Emissions in tons/yr	3,232.56		
CO2e Total in tons/yr	3,252.11		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
 Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O  
 Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations  
Paint Burn-Off Emissions**

**Company Name:** Bare Metal, Inc.  
**Address:** 4160 Capital Drive, New Albany, IN 47150  
**Permit Number:** 043-29060-00044  
**Registration Revision No.:** 043-30686-00044  
**Permit Reviewer:** Swarna Prabha

Four (4) Paint Burn-Off Ovens

Emission Unit ID	Maximum Paint Waste Combusted		Stack Flow Rate (dscf)	Outlet Grain Loading (gr/dscf)	PTE PM/PM10/PM2.5	
	(lbs/yr)	(lbs/hr)			(lbs/hr)	(ton/yr)
ID #1	161200	18.40	104	0.0452	0.04	0.18
ID #2	161200	18.40	104	0.0452	0.04	0.18
ID #3	161200	18.40	104	0.0452	0.04	0.18
ID #4	161200	18.40	104	0.0452	0.04	0.18

**Total PTE: 0.71**

**Note:**

This information was used in the permit level determination of Exemption No. 043-12805-00044, issued January 22, 2001.

**Methodology:**

PTE (lbs/hr) = Stack Flow Rate (dscf) \* Outlet Grain Loading (gr/dscf) \* 60 min / 1 hr \* 1lb / 7,000 grains  
PTE (ton/yr) = PTE (lbs/hr) \* 8,760 hrs / 1 yr \* 1 ton / 2,000 lbs

**Appendix A: Emission Calculations  
Abrasive Blasting**

**Company Name:** Bare Metal, Inc.  
**Address:** 4160 Capital Drive, New Albany, IN 47150  
**Permit Number:** 043-29060-00044  
**Registration Revision No.:** 043-30686-00044  
**Permit Reviewer:** Swarna Prabha

**Table 1 - Emission Factors for Abrasives**

Abrasive	Emission Factor (EF)	
	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	

<b>Potential to Emit Before Control</b>			
FR = Flow rate of actual abrasive (lb/hr) =	2.05	lb/hr (per nozzle)	
w = fraction of time of wet blasting =	0	%	
N = number of nozzles =	1		
EF = PM emission factor for actual abrasive from Table 1 =	0.010	lb PM/ lb abrasive	
PM10 emission factor ratio for actual abrasive from Table 1 =	1.00	lb PM10 / lb PM	
<b>Potential to Emit (before control) =</b>	<b>0.02</b>	<b>0.02</b>	<b>lb/hr</b>
=	<b>0.49</b>	<b>0.49</b>	<b>lb/day</b>
=	<b>0.09</b>	<b>0.09</b>	<b>ton/yr</b>

<b>Potential to Emit After Control</b>			
<b>Emission Control Device Efficiency =</b>	<b>95.0%</b>	<b>95.0%</b>	
<b>Potential to Emit (after control) =</b>	<b>0.00</b>	<b>0.00</b>	<b>lb/hr</b>
=	<b>0.02</b>	<b>0.02</b>	<b>lb/day</b>
=	<b>0.005</b>	<b>0.005</b>	<b>ton/yr</b>

**Note:**

The Blast Operation consists of three (3) blast cabinets and two (2) blast booths. However, the combined maximum capacity for all units is 18,000 pounds of media per year. Assume PM10 = PM2.5

**Methodology:**

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)  
 Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))  
 Potential to Emit (after control) = [Potential to Emit (before control)] \* [1 - control efficiency]  
 Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]

**Appendix A: Emissions Calculations  
Spray Coating VOC and Particulate Emissions**

**Company Name: Bare Metal, Inc.  
Address: 4160 Capital Drive, New Albany, IN 47150  
Permit Number: 043-29060-00044  
Registration Revision No.: 043-30686-00044  
Permit Reviewer: Swarna Prabha**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water / Exempt	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/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	Control Efficiency
TUFFGRIP 21-90 Resin	9.01	0.00%	0.00%	0.00%	0.00%	100.00%	1.000	0.00	0.00	0.00	0.00	0.00	9.86	0.00	75%	97.12%
TUFFGRIP 21-90 Iso	9.92	0.00%	0.00%	0.00%	0.00%	100.00%	0.500	0.00	0.00	0.00	0.00	0.00	5.43	0.00	75%	97.12%
PPG ALK-300	5.59	53.65%	32.78%	20.87%	0.00%	13.57%	0.375	1.17	1.17	0.44	10.50	1.92	1.28	8.59	70%	97.12%
<b>Uncontrolled PTE:</b>										<b>0.44</b>	<b>10.50</b>	<b>1.92</b>	<b>16.57</b>			
<b>Controlled PTE:</b>										<b>0.44</b>	<b>10.50</b>	<b>1.92</b>	<b>0.48</b>			

**Methodology:**

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

Material	Density (Lb/Gal)	Maximum (gal/hr)	Weight % Xylene	Weight % Toluene	Weight % Ethyl Benzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
PPG ALK-300	5.59	0.125	5.00%	5.00%	1.00%	0.03	0.03	0.01
<b>Total PTE:</b>						<b>0.03</b>	<b>0.03</b>	<b>0.01</b>
<b>Combined HAPs:</b>						<b>0.06</b>		

**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: Revised Emission Calculations  
Powder Coating**

**Company Name: Bare Metal, Inc.**  
**Address City IN Zip: 4160 Capital Drive, New Albany, IN 47150**  
**Registration NO.: 043-29060-00044**  
**Registration Revision No.: 043-30686-00044**  
**Reviewer: Swarna Prabha**

Emission Unit	Maximum Powder Use (lbs/hr)	Maximum Powder Use (tons/yr)	Transfer Efficiency (%)	Bag filter Efficiency	PTE before controls PM/PM10/PM2.5 (lbs/hr)	PTE before controls PM/PM10/PM2.5 (tons/yr)	PTE after controls PM/PM10/PM2.5 (lbs/hr)	PTE after controls PM/PM10/Pm2.5 (tons/yr)	PM/PM10 Allowable PM lbs/hr
Powder Spray Booth-STPC 4000	6.250	27.375	75.0%	95.0%	1.56	6.8	0.078	0.34	7.78
<b>Total</b>					<b>1.56</b>	<b>6.8</b>	<b>0.078</b>	<b>0.34</b>	

Metal fork lifts parts are spray coated, which are flat metal sheets. Based on this the transfer efficiency is determined to be 75%.

**Methodology**

Potential Emissions (lbs/hr) = Powder usage rate (lb/hr) \* (1- transfer efficiency)

Emissions (tons/yr) = Emissions (lbs/hr) \* 8760 hrs/yr / 2000 lbs/ton

PM2.5 emissions are assumed to equal PM10.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

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

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

TO: Robert Burton  
Bare Metal, Inc  
4160 Capital Drive  
New Albany, IN 47150

DATE: August 2, 2011

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

SUBJECT: Final Decision  
Notice-Only Change  
043-30686-00044

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

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

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

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

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	MIDENNEY 8/2/2011 Bare Metal, Inc. 043-30686-00044 (final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Robert E Burton Bare Metal, Inc. 4160 Capital Dr New Albany IN 47150 (Source CAATS) via confirm delivery										
2		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)										
3		Floyd County Commissioners 311-319 West 1st St, Rm 214 New Albany IN 47150 (Local Official)										
4		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 (Local Official)										
5		Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 (Health Department)										
6		Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 (Affected Party)										
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Total number of pieces Listed by Sender  <b>5</b>	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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