INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 25, 2013

RE: Metal Improvement Company, LLC / 151-32268-00054

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

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07

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New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

Metal Improvement Company, LLC
302 McSwain Drive
Fremont, Indiana 46737

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

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

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

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F151-32268-00054	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: April 25, 2013 Expiration Date: April 25, 2018

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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 Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary existing metal finishing operation for automotive parts.

Source Address:	302 McSwain Drive, Fremont, Indiana 46737
General Source Phone Number:	260-495-4445
SIC Code:	3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)
County Location:	Steuben
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) spray line 6, identified as SL-6, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-4.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-6.

(3) One (1) paint booth, identified as paint booth 1C, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-7.

(4) One (1) paint booth, identified as paint booth 2A, using filter bags as control, and exhausting to SV-6-10.

(5) One (1) natural gas fired preheat cure oven, identified as CO-6A, with heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-8.

(6) One (1) natural gas fired high heat cure oven, identified as CO-6B, with heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-6, with heat input rate of 1.35 million British thermal units per hour, using no controls and exhausting to stack SV-6-5.

(b) One (1) spray line 3, identified as SL-3, constructed in 2000, with a maximum capacity of 1,500 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-6.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(5) One (1) natural gas fired preheat curing oven, identified as CO-3A, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-3-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-3B, with a heat input rate of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-3-9.

(c) One (1) spray line 4, identified as SL-4, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-5.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting inside.

(5) One (1) natural gas fired preheat curing oven, identified as CO-4A, with a heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-4B, with a heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-4 with a heat input rate of 1.9 million British thermal units per hour, using no controls, and exhausting to stack SV-4-6.

(d) One (1) spray washer for line 6, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-6-1, with a heat input rate of 2.0 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 5, fired by natural gas and exhausting to stack SV-6-2, with a heat input rate of 2.0 million British thermal units per hour, and using no controls.

(3) One (1) Hot air blow off fired by natural gas and exhausting to stack SV-6-3, with a heat input rate of 1.35 million British thermal units per hour, and using no controls.

(4) Two (2) natural gas fired evaporators, identified as EV-1 and EV-2, processing wash water overflow, with heat input rate of 0.4 million British thermal units per hour and 0.285 million British thermal units per hour, respectively, each using no controls, and exhausting to stack SV-EV-1 and SV-EV-2.

NOTE: These two (2) evaporators are inside the line 6 cell but not directly part of the inline process. These units have alkaline water from SL-3, 4, 6 and alkaline water from the manual wash line pumped to them for evaporation.

(e) One (1) spray washer for line 3, exhausting to stacks SV-3-1, SV -3-2, SV -3-3, SV -3-4, and SV-3-5, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-3-1 and SV-3-2, with a heat input rate of 1.5 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 3, fired by natural gas and exhausting to stack SV-3-3, with a heat input rate of 0.8 million British thermal units per hour and using no controls.

(3) One (1) spray washer stage 4, fired by natural gas, and exhausting to stack SV-3-4, with a heat input rate of 0.8 million British thermal units per hour and using no controls.

(4) One (1) washer blow off burner, fired by natural gas, with a heat input rate of 0.4 million British thermal units per hour and exhausting to SV-3-5 and using no controls.

(5) One (1) natural gas fired evaporator, identified as EV-3 (DAC), with a heat input rate of 0.4 million British thermal units, used for miscellaneous evaporation including floor wash water, using no controls and exhausting to stack EV-3.

(f) One (1) spray washer for line 4, exhausting to SV-4-1, SV-4-2, SV-4-3, and SV-4-4, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-4-1, with a capacity of 1.3 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 2, fired by natural gas and exhausting to stack SV-4-2, with a heat input capacity of 1.3 million British thermal units per hour and using no controls.

(3) One (1) spray washer stage 3, fired by natural gas and exhausting to stack SV-4-3, with a heat input rate of 0.5 million British thermal units per hour and using no controls.

(4) One (1) spray washer stage 5, fired by natural gas and exhausting to stack SV-4-4, with a heat input rate of 0.5 million British thermal units per hour and using no controls.

(g) One (1) natural gas fired air make up unit, identified as SH-1, constructed in 1999, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SH-1.

(h) One (1) spray line, identified as SL-8, approved for construction in 2013, consisting of the following equipment:

(1) One (1) spray booth, identified as paint booth 1, using air atomization spray guns, with a maximum capacity of 1,500 metal parts per hour, using dry filters as control, and exhausting to SV-8-1.

(2) One (1) pre heat cure oven, identified as CO-8A, with a heat input capacity of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-8-2.

(3) One (1) high heat cure oven, identified as CO-8B, with a heat input capacity of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-8-3.

(i) One (1) Wheelabrator shot blast unit, identified as SB-1, constructed in 2001, with a maximum shot usage rate of 33,000 pounds per hour, using a baghouse as control, and exhausting indoors.

(j) Two (2) Goff shot blast units, identified as SB-2 and SB-3, respectively, both constructed in 2000, each with a maximum shot usage rate of 11,400 pounds per hour, each controlled with a baghouse, and both exhausting indoors.

(k) One (1) Empire hand bead blast unit, identified as SB-4, constructed in 2000, with a maximum bead blast rate of 420 pounds per hour, controlled with a baghouse and exhausting indoors.

(l) One (1) cure oven, identified as CO-7, used for low volume large parts, constructed in 2006, with a heat input rate capacity of 0.55 million British thermal units per hour, using no controls , and exhausting to stack SV-CO-7.

(m) One (1) large paint booth, identified as PB-1, constructed in 2006, equipped with air atomization spray guns, with a maximum capacity of 10 units per hour, using filter bags as control, and exhausting to SV-PB-1.

(n) One (1) small dip spin coating machine, identified as DS-1, constructed in 2000, with a maximum capacity of 1,500 parts per hour, using no controls, and exhausting indoors.

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

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

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

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

SECTION B GENERAL CONDITIONS

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

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

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

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

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

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

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

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

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

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F151-32268-00054, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.6 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

B.7 Severability [326 IAC 2-8-4(4)]

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

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

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 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, Indiana 46204-2251

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than 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 Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

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

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F151-32268-00054 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

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

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

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a

certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

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

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

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

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee 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

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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

no later than 180 days from the date on which this source commences operation.

The ERP does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the

remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) spray line 6, identified as SL-6, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-4.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-6.

(3) One (1) paint booth, identified as paint booth 1C, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-7.

(4) One (1) paint booth, identified as paint booth 2A, using filter bags as control, and exhausting to SV-6-10.

(5) One (1) natural gas fired preheat cure oven, identified as CO-6A, with heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-8.

(6) One (1) natural gas fired high heat cure oven, identified as CO-6B, with heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-6, with heat input rate of 1.35 million British thermal units per hour, using no controls and exhausting to stack SV-6-5.

(b) One (1) spray line 3, identified as SL-3, constructed in 2000, with a maximum capacity of 1,500 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-6.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(5) One (1) natural gas fired preheat curing oven, identified as CO-3A, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-3-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-3B, with a heat input rate of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-3-9.

(c) One (1) spray line 4, identified as SL-4, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-5.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting inside.

(5) One (1) natural gas fired preheat curing oven, identified as CO-4A, with a heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-4B, with a heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-4 with a heat input rate of 1.9 million British thermal units per hour, using no controls, and exhausting to stack SV-4-6.

(h) One (1) spray line, identified as SL-8, approved for construction in 2013, consisting of the following equipment:

(1) One (1) spray booth, identified as paint booth 1, using air atomization spray guns, with a maximum capacity of 1,500 metal parts per hour, using dry filters as control, and exhausting to SV-8-1.

(2) One (1) pre heat cure oven, identified as CO-8A, with a heat input capacity of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-8-2.

(3) One (1) high heat cure oven, identified as CO-8B, with a heat input capacity of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-8-3.

(m) One (1) large paint booth, identified as PB-1, constructed in 2006, equipped with air atomization spray guns, with a maximum capacity of 10 units per hour, using filter bags as control, and exhausting to SV-PB-1.

(n) One (1) small dip spin coating machine, identified as DS-1, constructed in 2000, with a maximum capacity of 1,500 parts per hour, using no controls, and exhausting indoors.

(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 2-8-4(1)]

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

Pursuant to 326 IAC 6-3-2(d), particulate from spray lines 6, 3, 4, and 8 shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.2 FESOP Limitation [326 IAC 2-8-4] [326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable, the Permittee shall comply with the following:

(a) The total input of VOC to the spray lines 3, 4, 6, 8, Dip Spin, and PB-1, including coatings, dilutaion solvents, and cleaning solvents, shall not exceed ninety-five (95) tons per twelve (12) consecutive month period.

(b) The total input of each single HAP to the spray lines 3, 4, 6, and 8, including coatings, dilution solvents, and cleaning solvents, shall be less than ten (10) tons per twelve (12) consecutive month period.

(c) The total input of HAP to the spray lines 3, 4, 6, and 8, including coatings, diluation solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period.

Compliance with these limits, combined with the potential to emit each single HAP, total HAP, and VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, the total HAP to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

D.1.3 VOC [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, each of the spray lines, the paint booth, and the dip spin when coating metal parts shall not allow the discharge into the atmosphere of VOC in excess of for clear coats four and three-tenths (4.3), for air dried or forced warm air dried coatings three and five-tenths (3.5), for extreme performance coatings three and five-tenths (3.5), and for all other coatings three (3.0) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.1.4 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 Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC and HAP usage limitations contained in Conditions D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 325 IAC 8-1-4.

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

D.1.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray lines 6, 3, 4, and 8 stacks SV-6-4, SV-6-6, SV-6-7, SV-6-10, SV-3-6, SV-3-7, SV-3-10, SV-4-5, SV-4-7, SV-4-10 and SV-8-1, while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from 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. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.2 and D.1.3, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(b) To document the compliance status with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and single and total HAP input limitations established in Condition D.1.2. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

(1) The VOC and single HAP content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month;

(4) The total VOC and single HAP emitted for each compliance period.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.8 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Condition D.1.2 and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) One (1) Wheelabrator shot blast unit, identified as SB-1, constructed in 2001, with a maximum shot usage rate of 33,000 pounds per hour, using a baghouse as control, and exhausting indoors.

(j) Two (2) Goff shot blast units, identified as SB-2 and SB-3, respectively, both constructed in 2000, each with a maximum shot usage rate of 11,400 pounds per hour, each controlled with a baghouse, and both exhausting indoors.

(k) One (1) Empire hand bead blast unit, identified as SB-4, constructed in 2000, with a maximum bead blast rate of 420 pounds per hour, controlled with a baghouse and exhausting indoors.

(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 2-8-4(1)]

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

Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following emission units shall not exceed the pound per hour limit listed in the table below:

Emission Units	P (tons/hr)	E (lbs/hr)
SB-1	16.5	26.82
SB-2	5.7	13.16
SB-3	5.7	13.16
SB-4	0.21	1.44

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

E = 4.10P^0.67 Where: E= Rate of emission in pounds per hour.
P= Process weight rate in tons per hour.

D.2.2 FESOP Limitation [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following:

(a) PM10 and PM2.5 emissions from shot blasting unit SB1 shall not exceed 6.6 pounds per hour, each.

(b) PM10 and PM2.5 emissions from shot blasting unit SB2 shall not exceed 2.3 pounds per hour, each.

(c) PM10 and PM2.5 emissions from shot blasting unit SB3 shall not exceed 2.3 pounds per hour, each.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) PM emissions from shot blasting unit SB1 shall not exceed 26.4 pounds per hour.

(b) PM emissions from shot blasting unit SB2 shall not exceed 9.2 pounds per hour.

(c) PM emissions from shot blasting unit SB3 shall not exceed 9.2 pounds per hour.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.5 Particulate Control

(a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the baghouses for particulate control shall be in operation and control emissions from the three (3) shot blasting units, identified as SB1, SB2, and SB3 at all times that the emission units are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.6 Baghouse Inspections

The Permittee shall perform semi-annual inspections of the baghouses controlling particulate from SB1, SB2, and SB3 operations to verify that they are being operated and maintained in accordance with the manufacturer's specifications. All defective bags shall be replaced. A record shall be kept of the results of each inspection.

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

D.2.7 Record Keeping Requirement

(a) To document the compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6.

(b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) spray line 6, identified as SL-6, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-4.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-6.

(3) One (1) paint booth, identified as paint booth 1C, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-7.

(4) One (1) paint booth, identified as paint booth 2A, using filter bags as control, and exhausting to SV-6-10.

(5) One (1) natural gas fired preheat cure oven, identified as CO-6A, with heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-8.

(6) One (1) natural gas fired high heat cure oven, identified as CO-6B, with heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-6, with heat input rate of 1.35 million British thermal units per hour, using no controls and exhausting to stack SV-6-5.

(b) One (1) spray line 3, identified as SL-3, constructed in 2000, with a maximum capacity of 1,500 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-6.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(5) One (1) natural gas fired preheat curing oven, identified as CO-3A, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-3-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-3B, with a heat input rate of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-3-9.

(c) One (1) spray line 4, identified as SL-4, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-5.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting inside.

(5) One (1) natural gas fired preheat curing oven, identified as CO-4A, with a heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-4B, with a heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-4 with a heat input rate of 1.9 million British thermal units per hour, using no controls, and exhausting to stack SV-4-6.

(h) One (1) spray line, identified as SL-8, approved for construction in 2013, consisting of the following equipment:

(1) One (1) spray booth, identified as paint booth 1, using air atomization spray guns, with a maximum capacity of 1,500 metal parts per hour, using dry filters as control, and exhausting to SV-8-1.

(2) One (1) pre heat cure oven, identified as CO-8A, with a heat input capacity of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-8-2.

(3) One (1) high heat cure oven, identified as CO-8B, with a heat input capacity of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-8-3.

(m) One (1) large paint booth, identified as PB-1, constructed in 2006, equipped with air atomization spray guns, with a maximum capacity of 10 units per hour, using filter bags as control, and exhausting to SV-PB-1.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants [40 CFR 63, Subpart A]

(a) Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A- General Provisions, except as otherwise specified in 40 CFR 63 Subpart HHHHHH (6H), for the spray lines 6, 3, 4, and 8 (Unit IDs SL-6, SL-3, SL-4, and SL-8).

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Soruces [40 CFR 63, Subpart HHHHHH (6H)]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart HHHHHH (included as Attachement A of this permit), for the spray lines 6, 3, 4, 8, and the large paint booth (Unit IDs SL-6, SL-3, SL-4, SL-8, and PB-1):

This source is subject to the following portions of 40 CFR 63, Subpart HHHHHH:

(1) 40 CFR 63.11169(c)
(2) 40 CFR 63.11170(a)(2), (a)(3), and (b)
(3) 40 CFR 63.11171
(4) 40 CFR 63.11172(b)
(5) 40 CFR 63.11173(e), (f), and (g)
(6) 40 CFR 63.11174
(7) 40 CFR 63.11175(a)
(8) 40 CFR 63.11176
(9) 40 CFR 63.11177(a) through (d) and (g)
(10) 40 CFR 63.11178
(11) 40 CFR 63.11179
(12) 40 CFR 63.11180
(13) Table 1

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FESOP Quarterly Report

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054
Facility: Spray Lines 3, 4, 6, and 8
Parameter: single HAP Input
Limit: The input of any single HAP to the surface coating operation (SL-3,SL-4, SL-6, and SL-8) including coatings, dilution solvents, and cleaning solvents, shall be less than 10 tons per twelve (12) consecutive month period.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054
Facility: Spray Lines 3, 4, 6, and 8
Parameter: Total HAP input
Limit: The input of total HAP to the surface coating operation (SL-3,SL-4, SL-6, and SL-8) including coatings, dilution solvents, and cleaning solvents, shall be less than 25 tons per twelve (12) consecutive month period.

YEAR:_____

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

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

FESOP Quarterly Report

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054
Facility: Surface Coating Operations (SL-3, SL-4, SL-6, SL-8, Dip Spin, and PB1)
Parameter: VOC Input
Limit: The total input of VOC to the spray lines 3, 4, 6, 8, Dip Spin, and PB-1, including coatings, dilutaion solvents, and cleaning solvents, shall not exceed ninety-five (95) tons per twelve (12) consecutive month period.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054
Facility: Shot Blast Units (SB1, SB2, and SB3)
Parameter: PM10 and PM2.5
Limit: PM10 and PM2.5 emissions from shot blasting units SB1, SB2, and SB3 shall not exceed 43 tons per twelve (12) consecutive month period combined.

YEAR:_____

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

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

FESOP Quarterly Report

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054
Facility: Shot Blast Units (SB1, SB2, and SB3)
Parameter: PM
Limit: PM emissions from shot blasting units SB1, SB2, and SB3 shall not exceed 184 tons per twelve (12) consecutive month period combined

YEAR:_____

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Metal Improvement Company, LLC
Source Address: 302 McSwain Drive, Fremont, Indiana 46737
FESOP Permit No.: F151-32268-00054

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Mail to: Permit Administration and Support Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Metal Improvement Company, LLC
302 McSwain Drive
Fremont, Indiana 46737

Affidavit of Construction

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

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

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

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

4. I hereby certify that Metal Improvement Company, LLC 302 McSwain Drive, Fremont, Indiana 46737, completed construction of the existing metal finishing operation for automotive parts on in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on ***Reviewer: Insert date application received at IDEM*** and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F151-32268-00054, Plant ID No. 151-00054 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 ____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Attachment A to
Federally Enforceable State Operting Permit 151-32268-00054

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart HHHHHH—National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

Source: 73 FR 1759, Jan. 9, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11169 What is the purpose of this subpart?

Except as provided in paragraph (d) of this section, this subpart establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in any of the activities in paragraphs (a) through (c) of this section. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards contained herein.

(a) Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes;

(b) Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations;

(c) Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

(d) This subpart does not apply to any of the activities described in paragraph (d)(1) through (6) of this section.

(1) Surface coating or paint stripping performed on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.

(2) Surface coating or paint stripping of military munitions, as defined in §63.11180, manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or equipment directly and exclusively used for the purposes of transporting military munitions.

(3) Surface coating or paint stripping performed by individuals on their personal vehicles, possessions, or property, either as a hobby or for maintenance of their personal vehicles, possessions, or property. This subpart also does not apply when these operations are performed by individuals for others without compensation. An individual who spray applies surface coating to more than two motor vehicles or pieces of mobile equipment per year is subject to the requirements in this subpart that pertain to motor vehicle and mobile equipment surface coating regardless of whether compensation is received.

(4) Surface coating or paint stripping that meets the definition of “research and laboratory activities” in §63.11180.

(5) Surface coating or paint stripping that meets the definition of “quality control activities” in §63.11180.

(6) Surface coating or paint stripping activities that are covered under another area source NESHAP.

§ 63.11170 Am I subject to this subpart?

(a) You are subject to this subpart if you operate an area source of HAP as defined in paragraph (b) of this section, including sources that are part of a tribal, local, State, or Federal facility and you perform one or more of the activities in paragraphs (a)(1) through (3) of this section:

(1) Perform paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates.

(2) Perform spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations, and mobile repair and refinishing operations that travel to the customer's location, except spray coating applications that meet the definition of facility maintenance in §63.11180. However, if you are the owner or operator of a motor vehicle or mobile equipment surface coating operation, you may petition the Administrator for an exemption from this subpart if you can demonstrate, to the satisfaction of the Administrator, that you spray apply no coatings that contain the target HAP, as defined in §63.11180. Petitions must include a description of the coatings that you spray apply and your certification that you do not spray apply any coatings containing the target HAP. If circumstances change such that you intend to spray apply coatings containing the target HAP, you must submit the initial notification required by 63.11175 and comply with the requirements of this subpart.

(3) Perform spray application of coatings that contain the target HAP, as defined in §63.11180, to a plastic and/or metal substrate on a part or product, except spray coating applications that meet the definition of facility maintenance or space vehicle in §63.11180.

(b) An area source of HAP is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year, or emit any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

§ 63.11171 How do I know if my source is considered a new source or an existing source?

(a) This subpart applies to each new and existing affected area source engaged in the activities listed in §63.11170, with the exception of those activities listed in §63.11169(d) of this subpart.

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (6) of this section. Not all affected sources will have all of the items listed in paragraphs (b)(1) through (6) of this section.

(1) Mixing rooms and equipment;

(2) Spray booths, ventilated prep stations, curing ovens, and associated equipment;

(3) Spray guns and associated equipment;

(4) Spray gun cleaning equipment;

(5) Equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint; and

(6) Equipment used for paint stripping at paint stripping facilities using paint strippers containing MeCl.

(c) An affected source is a new source if it meets the criteria in paragraphs (c)(1) and (c)(2) of this section.

(1) You commenced the construction of the source after September 17, 2007 by installing new paint stripping or surface coating equipment. If you purchase and install spray booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or purchase new spray guns to comply with this subpart at an existing source, these actions would not make your existing source a new source.

(2) The new paint stripping or surface coating equipment is used at a source that was not actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

(d) An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

(e) An affected source is an existing source if it is not a new source or a reconstructed source.

General Compliance Requirements

§ 63.11172 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) and (b) of this section.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is after September 17, 2007, the compliance date is January 9, 2008.

(2) If the initial startup of your new or reconstructed affected source occurs after January 9, 2008, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is January 10, 2011.

§ 63.11173 What are my general requirements for complying with this subpart?

(a) Each paint stripping operation that is an affected area source must implement management practices to minimize the evaporative emissions of MeCl. The management practices must address, at a minimum, the practices in paragraphs (a)(1) through (5) of this section, as applicable, for your operations.

(1) Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).

(2) Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.

(3) Reduce exposure of all paint strippers containing MeCl to the air.

(4) Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).

(5) Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, air-tight containers).

(b) Each paint stripping operation that has annual usage of more than one ton of MeCl must develop and implement a written MeCl minimization plan to minimize the use and emissions of MeCl. The MeCl minimization plan must address, at a minimum, the management practices specified in paragraphs (a)(1) through (5) of this section, as applicable, for your operations. Each operation must post a placard or sign outlining the MeCl minimization plan in each area where paint stripping operations subject to this subpart occur. Paint stripping operations with annual usage of less than one ton of MeCl, must comply with the requirements in paragraphs (a)(1) through (5) of this section, as applicable, but are not required to develop and implement a written MeCl minimization plan.

(c) Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times.

(d) Each paint stripping operation with annual usage of more than one ton of MeCl must maintain a copy of their current MeCl minimization plan on site at all times.

(e) Each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation must meet the requirements in paragraphs (e)(1) through (e)(5) of this section.

(1) All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in paragraph (f) of this section. The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in paragraph (f) of this section. The requirements of this paragraph do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph.

(2) All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of paragraph (e)(2)(i) of this section and either paragraph (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv) of this section.

(i) All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, “Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992” (incorporated by reference, see §63.14 of subpart A of this part). The test coating for measuring filter efficiency shall be a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement. The requirements of this paragraph do not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.

(ii) Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains. However, if a spray booth is fully enclosed and has seals on all doors and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.

(iii) Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.

(iv) Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

(3) All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's “Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989” and “Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002” (incorporated by reference, see §63.14 of subpart A of this part). The requirements of this paragraph do not apply to painting performed by students and instructors at paint training centers. The requirements of this paragraph do not apply to the surface coating of aerospace vehicles that involves the coating of components that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; to the application of coatings on aerospace vehicles that contain fillers that adversely affect atomization with HVLP spray guns; or to the application of coatings on aerospace vehicles that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.).

(4) All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used.

(5) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the emission standards in this section after you have requested approval to do so according to §63.6(g)(2).

(f) Each owner or operator of an affected miscellaneous surface coating source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

(1) A list of all current personnel by name and job description who are required to be trained;

(2) Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (f)(2)(i) through (2)(iv) of this section.

(i) Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.

(ii) Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.

(iii) Routine spray booth and filter maintenance, including filter selection and installation.

(iv) Environmental compliance with the requirements of this subpart.

(3) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (f)(2) of this section are not required to provide the initial training required by that paragraph to these painters.

(g) As required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

(1) If your source is a new source, all personnel must be trained and certified no later than 180 days after hiring or no later than July 7, 2008, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(2) If your source is an existing source, all personnel must be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(3) Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years.

[73 FR 1760, Jan. 9, 2008; 73 FR 8408, Feb. 13, 2008]

§ 63.11174 What parts of the General Provisions apply to me?

(a) Table 1 of this subpart shows which parts of the General Provisions in subpart A apply to you.

(b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

Notifications, Reports, and Records

§ 63.11175 What notifications must I submit?

(a) Initial Notification. If you are the owner or operator of a paint stripping operation using paint strippers containing MeCl and/or a surface coating operation subject to this subpart, you must submit the initial notification required by §63.9(b). For a new affected source, you must submit the Initial Notification no later than 180 days after initial startup or July 7, 2008, whichever is later. For an existing affected source, you must submit the initial notification no later than January 11, 2010. The initial notification must provide the information specified in paragraphs (a)(1) through (8) of this section.

(1) The company name, if applicable.

(2) The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;

(3) The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location, such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;

(4) An identification of the relevant standard (i.e., this subpart, 40 CFR part 63, subpart HHHHHH);

(5) A brief description of the type of operation as specified in paragraph (a)(5)(i) or (ii) of this section.

(i) For all surface coating operations, indicate whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, and include the number of spray booths and preparation stations, and the number of painters usually employed at the operation.

(ii) For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal).

(6) Each paint stripping operation must indicate whether they plan to annually use more than one ton of MeCl after the compliance date.

(7) A statement of whether the source is already in compliance with each of the relevant requirements of this subpart, or whether the source will be brought into compliance by the compliance date. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d) of this subpart. For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g) of this subpart.

(8) If your source is a new source, you must certify in the initial notification whether the source is in compliance with each of the requirements of this subpart. If your source is an existing source, you may certify in the initial notification that the source is already in compliance. If you are certifying in the initial notification that the source is in compliance with the relevant requirements of this subpart, then include also a statement by a responsible official with that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification, a statement that the source has complied with all the relevant standards of this subpart, and that this initial notification also serves as the notification of compliance status.

(b) Notification of Compliance Status. If you are the owner or operator of a new source, you are not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided you were able to certify compliance on the date of the

initial notification, as part of the initial notification, and your compliance status has not since changed. If you are the owner or operator of any existing source and did not certify in the initial notification that your source is already in compliance as specified in paragraph (a) of this section, then you must submit a notification of compliance status. You must submit a Notification of Compliance Status on or before March 11, 2011. You are required to submit the information specified in paragraphs (b)(1) through (4) of this section with your Notification of Compliance Status:

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d). For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g).

(3) The date of the Notification of Compliance Status.

(4) If you are the owner or operator of an existing affected paint stripping source that annually uses more than one ton of MeCl, you must submit a statement certifying that you have developed and are implementing a written MeCl minimization plan in accordance with §63.11173(b).

§ 63.11176 What reports must I submit?

(a) Annual Notification of Changes Report. If you are the owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, you are required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. This includes notification when paint stripping affected sources that have not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) used more than one ton of MeCl in the previous calendar year. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

(b) If you are the owner or operator of a paint stripping affected source that has not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) of this subpart, you must submit a report for any calendar year in which you use more than one ton of MeCl. This report must be submitted no later than March 1 of the following calendar year. You must also develop and implement a written MeCl minimization plan in accordance with §63.11173(b) no later than December 31. You must then submit a Notification of Compliance Status report containing the information specified in

§63.11175(b) by March 1 of the following year and comply with the requirements for paint stripping operations that annually use more than one ton of MeCl in §§63.11173(d) and 63.11177(f).

§ 63.11177 What records must I keep?

If you are the owner or operator of a surface coating operation, you must keep the records specified in paragraphs (a) through (d) and (g) of this section. If you are the owner or operator of a paint stripping operation, you must keep the records specified in paragraphs (e) through (g) of this section, as applicable.

(a) Certification that each painter has completed the training specified in §63.11173(f) with the date the initial training and the most recent refresher training was completed.

(b) Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in §63.11173(e)(3)(i).

(c) Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in §63.11173(e)(4).

(d) Copies of any notification submitted as required by §63.11175 and copies of any report submitted as required by §63.11176.

(e) Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations).

(f) If you are a paint stripping source that annually uses more than one ton of MeCl you are required to maintain a record of your current MeCl minimization plan on site for the duration of your paint stripping operations. You must also keep records of your annual review of, and updates to, your MeCl minimization plan.

(g) Records of any deviation from the requirements in §63.11173, §63.11174, §63.11175, or §63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.

(h) Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.

§ 63.11178 In what form and for how long must I keep my records?

(a) If you are the owner or operator of an affected source, you must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period.

Other Requirements and Information

§ 63.11179 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(c) The authority in §63.11173(e)(5) will not be delegated to State, local, or tribal agencies.

§ 63.11180 What definitions do I need to know?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Administrator means, for the purposes of this rulemaking, the Administrator of the U.S. Environmental Protection Agency or the State or local agency that is granted delegation for implementation of this subpart.

Aerospace vehicle or component means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

Airless and air-assisted airless spray mean any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint before it leaves the paint nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.

Appurtenance means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

Architectural coating means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, or oil, from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means, for the purposes of this subpart, a material spray-applied to a substrate for decorative, protective, or functional purposes. For the purposes of this subpart, coating does not include the following materials:

(1) Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances.

(2) Paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer.

(3) Adhesives, sealants, maskants, or caulking materials.

(4) Temporary protective coatings, lubricants, or surface preparation materials.

(5) In-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts.

Compliance date means the date by which you must comply with this subpart.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart.

Dry media blasting means abrasive blasting using dry media. Dry media blasting relies on impact and abrasion to remove paint from a substrate. Typically, a compressed air stream is used to propel the media against the coated surface.

Electrostatic application means any method of coating application where an electrostatic attraction is created between the part to be coated and the atomized paint particles.

Equipment cleaning means the use of an organic solvent to remove coating residue from the surfaces of paint spray guns and other painting related equipment, including, but not limited to stir sticks, paint cups, brushes, and spray booths.

Facility maintenance means, for the purposes of this subpart, surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity. *Facility maintenance* also includes surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities. *Facility maintenance* includes the application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. *Facility maintenance* also includes the refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items, such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility. *Facility maintenance* does not include surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

High-volume, low-pressure (HVLP) spray equipment means spray equipment that is permanently labeled as such and used to apply any coating by means of a spray gun which is designed and operated between 0.1 and 10 pounds per square inch gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

Initial startup means the first time equipment is brought online in a paint stripping or surface coating operation, and paint stripping or surface coating is first performed.

Materials that contain HAP or *HAP-containing materials* mean, for the purposes of this subpart, materials that contain 0.1 percent or more by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4), or 1.0 percent or more by mass for any other individual HAP.

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

Miscellaneous parts and/or products means any part or product made of metal or plastic, or combinations of metal and plastic. Miscellaneous parts and/or products include, but are not limited to, metal and plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; automobiles and light duty trucks at automobile and light duty truck assembly plants; boats; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products.

Miscellaneous surface coating operation means the collection of equipment used to apply surface coating to miscellaneous parts and/or products made of metal or plastic, including applying cleaning solvents to prepare the surface before coating application, mixing coatings before application, applying coating to a surface, drying or curing the coating after application, and cleaning coating application equipment, but not plating. A single surface coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating material is applied to a given part. A surface coating operation includes all other steps (such as surface preparation with solvent and equipment cleaning) in the affected source where HAP are emitted from the coating of a part. The use of solvent to clean parts (for example, to remove grease during a mechanical repair) does not constitute a miscellaneous surface coating operation if no coatings are applied. A single affected source may have multiple surface coating operations. Surface coatings applied to wood, leather, rubber, ceramics, stone, masonry, or substrates other than metal and plastic are not considered miscellaneous surface coating operations for the purposes of this subpart.

Mobile equipment means any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels).

Motor vehicle means any self-propelled vehicle, including, but not limited to, automobiles, light duty trucks, golf carts, vans, and motorcycles.

Motor vehicle and mobile equipment surface coating means the spray application of coatings to assembled motor vehicles or mobile equipment. For the purposes of this subpart, it does not include the surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant.

Non-HAP solvent means, for the purposes of this subpart, a solvent (including thinners and cleaning solvents) that contains less than 0.1 percent by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and less than 1.0 percent by mass for any other individual HAP.

Paint stripping and/or miscellaneous surface coating source or facility means any shop, business, location, or parcel of land where paint stripping or miscellaneous surface coating operations are conducted.

Paint stripping means the removal of dried coatings from wood, metal, plastic, and other substrates. A single affected source may have multiple paint stripping operations.

Painter means any person who spray applies coating.

Plastic refers to substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites.

Protective oil means organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Quality control activities means surface coating or paint stripping activities that meet all of the following criteria:

(1) The activities associated with a surface coating or paint stripping operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation, and comparing the samples against specific performance criteria.

(2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are surface coated or stripped are not sold and do not leave the facility.

(3) The activities are not a normal part of the surface coating or paint stripping operation; for example, they do not include color matching activities performed during a motor vehicle collision repair.

(4) The activities do not involve surface coating or stripping of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity; that is, the activities are not facility maintenance.

Research and laboratory activities means surface coating or paint stripping activities that meet one of the following criteria:

(1) Conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, or environmental impact.

(2) Activities conducted to test more efficient production processes, including alternative paint stripping or surface coating materials or application methods, or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit.

(3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit.

Solvent means a fluid containing organic compounds used to perform paint stripping, surface prep, or cleaning of surface coating equipment.

Space Vehicle means vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters).

Spray-applied coating operations means coatings that are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of this subpart, spray-applied coatings do not include the following materials or activities:

(1) Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters).

(2) Surface coating application using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.

(3) Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

Surface preparation or *Surface prep* means use of a cleaning material on a portion of or all of a substrate prior to the application of a coating.

Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).

Target HAP containing coating means a spray-applied coating that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA)–defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual target HAP compound. For the purpose of determining whether materials you use contain the target HAP compounds, you may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS), as long as it represents each target HAP compound in the material that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other target HAP compounds.

Transfer efficiency means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage. Coating solids means the nonvolatile portion of the coating that makes up the dry film.

Truck bed liner coating means any coating, excluding color coats, labeled and formulated for application to a truck bed to protect it from surface abrasion.

Table 1 to Subpart HHHHHH of Part 63—Applicability of General Provisions to Subpart HHHHHH of Part 63

Citation	Subject	Applicable to subpart HHHHHH	Explanation
§63.1(a)(1)–(12)	General Applicability	Yes	
§63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability of subpart HHHHHH is also specified in §63.11170.
§63.1(c)(1)	Applicability After Standard Established	Yes	

§63.1(c)(2)	Applicability of Permit Program for Area Sources	Yes	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.1(c)(5)	Notifications	Yes	
§63.1(e)	Applicability of Permit Program to Major Sources Before Relevant Standard is Set	No	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.2	Definitions	Yes	Additional definitions are specified in §63.11180.
§63.3(a)–(c)	Units and Abbreviations	Yes	
§63.4(a)(1)–(5)	Prohibited Activities	Yes	
§63.4(b)–(c)	Circumvention/Fragmentation	Yes	
§63.5	Construction/Reconstruction of major sources	No	Subpart HHHHHH applies only to area sources.
§63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	
§63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(e)(1)–(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	No startup, shutdown, and malfunction plan is required by subpart HHHHHH.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	
§63.6(f)(2)–(3)	Methods for Determining Compliance	Yes	
§63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart HHHHHH does not establish opacity or visible emission standards.
§63.6(i)(1)–(16)	Extension of Compliance	Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7	Performance Testing Requirements	No	No performance testing is required by subpart HHHHHH.
§63.8	Monitoring Requirements	No	Subpart HHHHHH does not require the use of continuous monitoring systems.

§63.9(a)–(d)	Notification Requirements	Yes	§63.11175 specifies notification requirements.
§63.9(e)	Notification of Performance Test	No	Subpart HHHHHH does not require performance tests.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart HHHHHH does not have opacity or visible emission standards.
§63.9(g)	Additional Notifications When Using CMS	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(h)	Notification of Compliance Status	No	§63.11175 specifies the dates and required content for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	§63.11176(a) specifies the dates for submitting the notification of changes report.
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §63.11177.
§63.10(b)(2)(i)–(xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	No	Subpart HHHHHH does not require startup, shutdown, and malfunction plans, or CMS.
§63.10(b)(2)(xii)	Waiver of recordkeeping requirements	Yes	
§63.10(b)(2)(xiii)	Alternatives to the relative accuracy test	No	Subpart HHHHHH does not require the use of CEMS.
§63.10(b)(2)(xiv)	Records supporting notifications	Yes	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	
§63.10(c)	Additional Recordkeeping Requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.11176.
§63.10(d)(2)–(3)	Report of Performance Test Results, and Opacity or Visible Emissions Observations	No	Subpart HHHHHH does not require performance tests, or opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	Subpart HHHHHH does not require startup, shutdown, and malfunction reports.

§63.10(e)	Additional Reporting requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§63.11	Control Device Requirements/Flares	No	Subpart HHHHHH does not require the use of flares.
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	Yes	
§63.14	Incorporation by Reference	Yes	Test methods for measuring paint booth filter efficiency and spray gun transfer efficiency in §63.11173(e)(2) and (3) are incorporated and included in §63.14.
§63.15	Availability of Information/Confidentiality	Yes	
§63.16(a)	Performance Track Provisions—reduced reporting	Yes	
§63.16(b)–(c)	Performance Track Provisions—reduced reporting	No	Subpart HHHHHH does not establish numerical emission limits.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a Registration Transitioning to a Federally Enforceable State Operating Permit (FESOP) with New Source Review (NSR)

Source Description and Location

Source Name:	Metal Improvement Company
Source Location:	302 McSwain Drive, Fremont, IN 46737
County:	Steuben
SIC Code:	3479
Operating Permit No.:	R151-12218-00054
Operating Permit Issuance Date:	September 27, 2000
Transition to FESOP No.:	F151-32268-00054
Permit Reviewer:	Joshua Levering

On March 8, 2013, the Office of Air Quality (OAQ) had a notice published in the Herald Republican, Angola, Indiana, stating that Metal Improvement Company had applied to transition from a Registration to a Federally Enforceable State Operating Permit (FESOP) to operate a stationary existing metal finishing operation for automotive parts. The notice also stated that OAQ proposed to issue a permit for this operation and modification 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.

On April 5, 2013, Metal Improvement Company submitted comments on the proposed permit. The summary of the comments is as follows:

Comment 1: The source has submitted additional information pertaining to the spray lines. The original calculations included Lines 3,4,6, and 8 having the same gallon/unit of material. The source has sent information that changes the gallon/unit of material for spray Lines 3 and 8 because they coat smaller parts than spray Lines 4 and 6.

Response 1: The changes to the spray Lines gallon/unit and unit/hour are updated below, and the decrease in the PTE of HAPs are shown below, additions are shown in **bold** and deletions are shown in ~~strikethrough~~.

Type of Material	Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Chrome Vi	Weight % Ethyl Benzene	Weight % Formaldehyde	Weight % Glycol ethers	Weight % Methanol	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Chromium vi Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Glycol Ethers (tons/yr)	Methanol Emissions (tons/yr)
Basecoat	Dacroment 320 LV (Line ~~3~~,4 **or** 6,~~8~~) or PB-1 (booth 1A,B, or C)	11.59	0.002	**1210.00**	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	**5.22**	0.00	0.00	0.00	0.00
Basecoat	**Dacroment 320 LV (Line 3 or 8) or PB-1 (booth 1A,B, or C)**	**11.59**	**0.001**	**3000.00**	**0.00%**	**0.00%**	**5.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00**	**0.00**	**5.18**	**0.00**	**0.00**	**0.00**	**0.00**
Basecoat	B06A (Line 6)	11.17	0.002	600.00	2.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	1.00	0.00	0.00	0.50	0.00	0.00	0.00
Primer	B09H (Line 6)	18.22	0.002	600.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Topcoat	B18A (Line 6)	8.90	0.002	600.00	0.50%	0.00%	0.00%	0.20%	0.20%	0.00%	0.00%	0.20	0.00	0.00	0.08	0.08	0.00	0.00
Total PTE Single HAPs for Lines 3, 4, 6, 8												**1.20**	**0.00**	**10.40**	**0.58**	**0.08**	**0.00**	**0.00**
Basecoat	Geomet 720 (can run on ~~3~~, 4, 6, ~~8~~) or PB-1	11.35	0.002	**1210.00**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	**4.09**
Basecoat	**Geomet 720 (can run on 3, 8)**	**11.35**	**0.001**	**3000.00**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**4.00%**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.06**
Basecoat	Geomet 321 (can run on ~~3~~, 4, 6, ~~8~~) or	11.35	0.002	**1210.00**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	**4.09**
Basecoat	**Geomet 321 (can run on 3, 8) or**	**11.35**	**0.001**	**3000.00**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**4.00%**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.06**
Basecoat	Geomet (can run on ~~3~~, 4, 6, ~~8~~) or	11.26	0.002	**1210.00**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	**4.06**
Basecoat	**Geomet (can run on 3, 8)**	**11.26**	**0.001**	**3000.00**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**4.00%**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.02**
Total PTE Single HAPs for Line 3, 4, 6, and 8								**Worst case coating mixed and thinned**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.09**
	Actone Cleaning solvent	6.96	0.003	10.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Total PTE Single HAPs (worst case)	**1.20**	**0.00**	**10.40**	**0.58**	**0.08**	**0.00**	**4.09**
											***Worst Case Total PTE Combined HAPs**	**10.40**						

The change in PTE decreases the HAPs emissions, however, there is no change in rule applicability or permit level.

Comment 2: The source has requested that the transfer efficiency for all Spray Lines and Paint booths be increased from 60% to 75%, as their original application stated.

Response 2: The corresponding tab (SL-3,4,6,8) in the Calculations, Appendix A to the TSD, has been updated. The transfer efficiency column for the four (4) spray lines and the paint booth has been changed from 60% to 75%.

These two comments and corresponding responses have no effect on rule applicability or permit level determination. The changes will be made to the Appendix A calculations and will be updated and labeled 32268AddendumCalcs.

No change will be made to the original TSD. The OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Appendix A: Emissions Calculations
Source-wide Summary
(page 1 of 2)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Uncontrolled PTE (tons/year)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
PTE (tpy) Permitted Units											
SL-3,4,6,8, PB-1 (Worst case HAP base coat on all lines)									10.40	10.40	Chromium
SL-6 + Plus L	2.39	2.39	2.39	--	--	53.17	--	--			
SL-3 +Plus L	3.17	3.17	3.17	--	--	7.51	--	--			
SL-4 + Plus L	7.48	7.48	7.48	--	--	6.93	--	--			
Spray Washer Line Combustion	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,006.58	0.11	0.10	Hexane
Permitted Combustion Units	0.21	0.85	0.85	0.07	11.14	0.61	9.36	13,450.00	0.21	0.20	Hexane
PTE of Permitted Units (tpy)	**13.36**	**14.33**	**14.33**	**0.10**	**16.94**	**68.55**	**14.23**	**20,456.58**	**10.72**	**10.40**	
PTE (tpy) New Units											
SL-8 Geomet 320	2.97	2.97	2.97	--	--	7.51	--	--	--	0.00	Methanol
New Combustion Units	0.02	0.08	0.08	0.01	1.01	0.06	0.85	1,216.24	0.02	0.02	Hexane
PTE of New Units (tpy)	**2.99**	**3.05**	**3.05**	**0.01**	**1.01**	**7.56**	**0.85**	**1,216.24**	**0.02**	**0.02**	
PTE (tpy) Unpermitted Units											
Dip Spin	0.00	0.00	0.00	--	--	11.17	--	--	--	--	
Paint Booth for large Parts (PB-1)	0.22	0.22	0.22	--	--	1.05	--	--	--	--	
Unpermitted Combustion units	0.00	0.02	0.02	0.00	0.24	0.01	0.20	290.84	0.00	0.004	Hexane
SB-1 Wheelabrator	578.16	578.16	578.16	--	--	--	--	--	--	--	
SB-2&3 Goff	399.46	399.46	399.46	--	--	--	--	--	--	--	
SB-4(Glass Bead)	4.74	4.74	4.74	--	--	--	--	--	--	--	
PTE (tpy) of Unpermitted Units	**982.58**	**982.59**	**982.59**	**0.00**	**0.24**	**12.23**	**0.20**	**290.84**	**0.00**	**0.00**	
Fugitive (Road)	0.68	0.14	0.03	--	--	--	--	--	--	--	
Combined Total	**999.61**	**1,000.10**	**1,000.00**	**0.11**	**18.19**	**88.34**	**15.28**	**21,963.65**	**10.74**	**10.40**	

* Emissions are pursuant to R151-00054
** emissions do not take natural mitigation into account

Controlled PTE (tons/year)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
PTE (tpy) Permitted Units											
SL-6 worst case	2.39	2.39	2.39	0.00	0.00	53.17	0.00	0.00	10.40	2.59	Chromium
SL-3 +Plus L	3.17	3.17	3.17	0.00	0.00	6.93	0.00	0.00	0.00	1.36	Methanol
SL-4 + Plus L	7.48	7.48	7.48	0.00	0.00	6.93	0.00	0.00	0.00	1.36	Methanol
Spray Washer Line Combustion	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,006.58	0.11	0.10	Hexane
Permitted Combustion Units	0.21	0.85	0.85	0.07	11.14	0.61	9.36	13,450.00	0.21	0.20	Hexane
PTE (tpy) Permitted Units	**13.36**	**14.33**	**14.33**	**0.10**	**16.94**	**67.97**	**14.23**	**20,456.58**	**10.72**	**5.62**	
PTE (tpy) New Units											
SL-8 Geomet 320	2.97	2.97	2.97	0.00	0.00	7.51	0.00	0.00	0.00	1.36	Methanol
New Combustion units	0.02	0.08	0.08	0.01	1.01	0.06	0.85	1,216.24	0.02	0.02	Hexane
PTE (tpy) New Units	**2.99**	**3.05**	**3.05**	**0.01**	**1.01**	**7.56**	**0.85**	**1,216.24**	**0.02**	**1.38**	
PTE (tpy) Unpermitted Units											
Dip Spin	0.00	0.00	0.00	0.00	0.00	11.17	0.00	0.00	0.00	--	
Paint Booth for large Parts	0.22	0.22	0.22	0.00	0.00	1.05	0.00	0.00	0.00	--	
Unpermitted Combustion Units	0.00	0.02	0.02	0.00	0.24	0.01	0.20	290.84	0.00	0.004	Hexane
SB-1 Wheelabrator	28.91	28.91	28.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-2&3 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-4(Glass Bead)	4.74	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PTE (tpy) Unpermitted Units	**43.86**	**43.87**	**43.87**	**0.00**	**0.24**	**12.23**	**0.20**	**290.84**	**0.00**	**0.00**	
Fugitive (Road)**	0.62	0.12	0.03	--	--	--	--	--	--	--	
Combined Total	**60.83**	**61.37**	**61.27**	**0.11**	**18.19**	**87.77**	**15.28**	**21,963.65**	**10.74**	**4.09**	

NOTE: PM, PM10. PM2.5 emissions from the spray coating lines are uncontrolled.
* Emissions are pursuant to R151-00054
** emissions take natural mitigation into account

Appendix A: Emissions Calculations
Source-wide Summary
(page 2 of 2)

Potential to Emit After Issuance of Permit (ton/yr)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr)**	
PTE (tpy) Permitted Units											
SL-6 worst case	2.39	2.39	2.39	0.00	0.00		0.00	0.00	10.40	10.40	Chromium
SL-3 +Plus L	3.17	3.17	3.17	0.00	0.00		0.00	0.00	1.36	1.36	Methanol
SL-4 + Plus L	7.48	7.48	7.48	0.00	0.00		0.00	0.00	1.36	1.36	Methanol
SL-8 Geomet 320	2.97	2.97	2.97	0.00	0.00	95.00	0.00	0.00	1.36	1.36	Methanol
Dip Spin	0.00	0.00	0.00	0.00	0.00		0.00	0.00	--	--	
Paint Booth for large Parts (PB-1)	0.22	0.22	0.22	0.00	0.00		0.00	0.00	0.00	0.00	
Combustion Units	0.35	1.38	1.38	0.11	18.19	1.00	15.28	21,963.65	0.34	0.33	Hexane
SB-1 Wheelabrator	28.91	28.91	28.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-2 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-3 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-4(Glass Bead)	4.74	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fugitive (Road) **	0.62	0.12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Combined Total	**70.82**	**71.36**	**71.26**	**0.11**	**18.19**	**96.00**	**15.28**	**21,963.65**	**10.74**	**10.40**	**Chromium**

NOTE: PM, PM10. PM2.5 emissions from the spray coating lines are uncontrolled.
* Emissions are pursuant to R151-00054
** emissions take natural mitigation into account

Appendix A: Emissions Calculations

VOC and Particulate Matter
From Surface Coating Operations (Spray Lines-3,4,6,8, and PB-1 and Dip Spin)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Material		Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (Solids)	Gal of Mat. (Gal/Unit)	Maximum (Unit/Hour)	Pounds VOC Per Gallon of Coating Less Water	Pounds VOC Per Gallon of Coating	Potential VOC Pounds Per Hour	Potential VOC Pounds Per Day	Potential VOC Tons Per Year	Transfer Efficiency (%)	Particulate Potential (Ton/Yr)	Lb VOC/Gal Solids	Transfer Efficiency	Control Efficiency %	Controlled Particulate Potential (ton/yr)
Type of Material - Worst case spray Line 6 - (Two booths)*	**Worst Case spray Line 6 [Maximum (unit/hr) is for 2 lines]**																			
Basecoat	Delta-Tone 9000	12.49	40.00%	0.00%	40.00%	0.00%	32.10%	0.001445	600	5.00	5.00	4.34	104.04	18.99	75%	1.78	15.56	75%	95%	0.09
Thinner for Base	Protect LT	7.38	100.00%	0.00%	100.00%	0.00%	0.00%	0.000255	600	7.38	7.38	1.13	27.10	4.95	75%	0.00	0.00	75%	95%	0.00
Topcoat	DeltaSeal GZ Silver	9.01	67.50%	0.00%	67.50%	0.00%	23.60%	0.001275	600	6.08	6.08	4.65	111.63	20.37	75%	0.61	25.77	75%	95%	0.03
Topcoat thinner	Deltaseal 2000	7.94	100.00%	0.00%	100.00%	0.00%	0.00%	0.000425	600	7.94	7.94	2.02	48.59	8.87	75%	0.00	0.00	75%	95%	0.00
											Worst Case Normal Operating scenario - Spray Line 6		**291.36**	**53.17**		**2.39**				**0.12**
	Alternate Coating Scenerio for Line 6																			
	DacraKote 107	*9.49*	*71.00%*	*65.00%*	*6.00%*	*73.50%*	*29.40%*	*0.0017*	*600*	*1.70*	*0.50*	*0.51*	*12.24*	*2.23*	*75%*	*0.77*	*1.94*	*75%*	*95%*	*0.04*
Primer	*Dacromet 320 LV*	*11.59*	*93.00%*	*56.90%*	*5.80%*	*77.60%*	*10.60%*	*0.0017*	*600*	*3.00*	*0.67*	*0.69*	*16.46*	*3.00*	*75%*	*0.91*	*6.34*	*75%*	*95%*	*0.05*
Top Coat	*Plus L*	*9.67*	*76.20%*	*76.20%*	*0.00%*	*88.60%*	*25.00%*	*0.0017*	*600*	*0.30*	*0.10*	*0.10*	*2.45*	*0.45*	*75%*	*2.57*	*0.00*	*75%*	*95%*	*0.13*
											Alternative Operating Scenario - Spray Line 6	**31.14**	**5.68**			**4.25**				**0.21**
											Worst Case Operating Scenario Spray Line 6			**53.17**		**4.25**				**0.21**
Type of Material Worst case spray line3 (two booths)*	**Worse Case Spray Line 3 [Maximum (unit/hr) is for 2 lines]**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.00068	1500	3.49	1.41	1.44	34.52	6.30	75%	1.33	6.98	75%	95%	0.07
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.00068	1500	0.30	0.10	0.10	2.45	0.45	75%	1.79	0.00	75%	95%	0.09
Rust Inhibitor	Eco-Kor 430	8.93	50.00%	0.00%	**50.00%**	0.00%	0.00%	0.0000068	1500	4.22	4.22	0.04	1.03	0.19	75%	0.05	0.00	75%	95%	0.00
											Worst Case Normal Operating Scenario - Spray Line 3	**38.00**	**6.93**			**3.17**				**0.16**
	Alternative Coating Scenario for Line 3																			
Primer	*Dacromet 320 LV*	*11.59*	*93.00%*	*56.90%*	*5.80%*	*77.60%*	*10.60%*	*0.0017*	1500	*3.00*	*0.67*	*1.71*	*41.14*	*7.51*	*75%*	*2.27*	*6.34*	*75%*	*95%*	*0.11*
											Alternative Operating Scenario - Spray Line 3	**41.14**	**7.51**			**2.27**				**0.11**
											Worst Case Operating Scenario Spray Line 3	**41.14**	**7.51**			**3.17**				**0.16**
Type of Material Worst case spray line 4 (two booths)*	**Worst Case Spray Line 4 [Maximum (unit/hr) is for 2 lines]**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.0017	600	3.49	1.41	1.44	34.52	6.30	75%	1.33	6.98	75%	95%	0.07
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.0017	600	0.30	0.10	0.10	2.45	0.45	75%	1.79	0.00	75%	95%	0.09
Rust Inhibitor	Quaker 624	8.64	10.41%	80.00%	**50.00%**	0.00%	0.00%	0.000017	600	4.22	4.22	0.04	1.03	0.19	75%	0.09	0.00	75%	95%	0.00
											Worst case total line 4	**1.58**	**38.00**	**6.93**		**7.48**				**0.37**
	Alternate Base Coats for Line 4																			
Base Coat	*Dacromet 320 - LV*	*11.59*	*63.30%*	*57.50%*	*5.80%*	*78.00%*	*22.00%*	*0.0017*	*600*	*3.00*	*0.67*	*0.69*	*16.46*	*3.00*	*75%*	*1.19*	*3.06*	*75%*	*95%*	*0.06*
Base Coat	***Geomet 720***	*11.34*	*55.80%*	*45.60%*	*10.20%*	*62.30%*	*37.70%*	*0.0017*	*600*	*3.20*	*1.30*	*1.33*	*31.82*	*5.81*	*75%*	*5.60*	*3.07*	*75%*	*95%*	*0.28*
Worst Case Spray Line 8	**Worst Case Spray Line 8**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.00068	1500	3.49	1.41	1.44	34.52	6.30	75%	1.33	6.98	75%	95%	0.07
Base Coat	*Dacromet 320 - LV*	*11.59*	*63.30%*	*57.50%*	*5.80%*	*78.00%*	*22.00%*	*0.0017*	*1500*	*3.00*	*0.67*	*1.71*	*41.14*	*7.51*	*75%*	*2.97*	*3.06*	*75%*	*95%*	*0.15*
											Worst Case total Line 8 (can only apply one (1) base coat at a time)	1.71	41.14	**7.51**		**2.97**				**0.15**
Type of Material Worst Case PB-1	**Worst Case PB-1 (only one (1) material can be applied at a time)**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.017	10	3.49	1.41	0.24	5.75	1.05	75%	0.22	6.98	75%	95%	0.01
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.017	10	0.30	0.10	0.02	0.41	0.07	75%	0.30	0.00	75%	95%	0.01
Rust Inhibitor	Eco-Kor 430	8.93	50.00%	0.00%	**50.00%**	0.00%	0.00%	0.000017	10	4.22	4.22	0.00	0.02	0.00	75%	0.00	0.00	75%	95%	0.00
											Worst Case total PB-1	0.24	5.75	1.05		**0.22**				**0.01**
Dip Spin	Geomet 500	11.26	55.50%	44.40%	**11.10%**	61.80%	37.70%	0.0017	1500	3.10	1.00	2.55	61.20	11.17	100%	0.00	3.32	100%	95%	0.00
	Worst Case total for Line 6, 3, 4, 8, PB-1, and the Dip Spin =													**87.34**		**18.08**				**0.81**
	Cleanup Solvent (Acetone)	6.60	100.00%	0.00%	100.00%	0.00%	0.00%	0.00007	1500.000	6.60	6.60	0.67	16.16	2.95	100%	0.00	N/A			
	Total Potential to Emit from Spray Lines 6, 3, 4, 8, PB-1, Dip Spin, and Cleanup Solvent													**90.29**		**18.08**				

Notes

* Spray Lines 6, 3, and 4 can only run two booths at any given time

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 + Cleanup Solvents

Appendix A: Emission Calculations
HAP Emission Calculations (SL-3,4,6,7)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Type of Material	Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Chrome Vi	Weight % Ethyl Benzene	Weight % Formaldehyde	Weight % Glycol ethers	Weight % Methanol	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Chromium vl Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Glycol Ethers (tons/yr)	Methanol Emissions (tons/yr)
Basecoat	Dacroment 320 LV (Line 3,4,6,8) or PB-1 (booth 1A,B, or C)	11.59	0.002	1210.00	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	5.22	0.00	0.00	0.00	0.00
Basecoat	Dacroment 320 LV (Line 3,4,6,8) or PB-1 (booth 1A,B, or C)	11.59	0.001	3000.00	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	5.18	0.00	0.00	0.00	0.00
Basecoat	B06A (Line 6)	11.17	0.002	600.00	2.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	1.00	0.00	0.00	0.50	0.00	0.00	0.00
Primer	B09H (Line 6)	18.22	0.002	600.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Topcoat	B18A (Line 6)	8.90	0.002	600.00	0.50%	0.00%	0.00%	0.20%	0.20%	0.00%	0.00%	0.20	0.00	0.00	0.08	0.08	0.00	0.00
Total PTE Single HAPs for Lines 3, 4, 6, 8												**1.20**	**0.00**	**10.40**	**0.58**	**0.08**	**0.00**	**0.00**
Basecoat	Geomet 720 (can run on 4, 6) or PB-1	11.35	0.002	1210.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.09
Basecoat	Geomet 720 (can run on 3, 8)	11.35	0.001	3000.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.06
Basecoat	Geomet 321 (can run on 4, 6) or	11.35	0.002	1210.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.09
Basecoat	Geomet 321 (can run on 3, 8) or	11.35	0.001	3000.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.06
Basecoat	Geomet (can run on 4, 6) or	11.26	0.002	1210.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.06
Basecoat	Geomet (can run on 3, 8)	11.26	0.001	3000.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	4.02
Total PTE Single HAPs for Line 3, 4, 6, and 8								**Worst case coating mixed and thinned**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.09**
	Actone Cleaning solvent	6.96	0.003	10.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE Single HAPs (worst case)												**1.20**	**0.00**	**10.40**	**0.58**	**0.08**	**0.00**	**4.09**
***Worst Case Total PTE Combined HAPs**												**10.40**						

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
*Only one booth per line will run a base coat

Appendix A: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr	
EV-1	0.4	Permitted
EV-2	0.285	
CO-6A	2.5	
CO-6B	6.5	
IR-6	1.35	
CO-3A	0.8	
CO-3B	1.5	
EV-3 (DAC)	0.4	
CO-4A	2.5	
CO-4B	6.5	
IR-4	1.9	
SH-1	0.8	
CO-7	0.55	Unpermitted
CO-8A	1.5	New
CO-8B	0.8	
Total	**28.3**	

Spray Line Units

Emission Unit	MMBtu/hr
SVL-6-1	2
SVL-6-2	2
SVL-6-3	1.35
SVL-3-1	1.5
SVL-3-2	0.8
SVL-3-3	0.8
SVL-3-4	0.4
SVL-4-1	1.3
SVL-4-2	1.3
SVL-4-3	1.3
SVL-4-4	0.5
Total*	**13.3**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
41.5	1000	363.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.35	1.38	1.38	0.11	18.19	1.00	15.28

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.820E-04	2.183E-04	0.014	0.327	6.185E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	9.096E-05	2.001E-04	2.547E-04	6.913E-05	3.820E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	21,831	0.4	0.4
Summed Potential Emissions in tons/yr	21,832		
CO2e Total in tons/yr	21,964		

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: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
CO-8A	1.5
CO-8B	0.8
Total	**2.3**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
2.3	1000	20.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.02	0.08	0.08	0.01	1.01	0.06	0.85

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.116E-05	1.209E-05	0.001	0.018	3.425E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.037E-06	1.108E-05	1.410E-05	3.828E-06	2.116E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	1,209	0.0	0.0
Summed Potential Emissions in tons/yr	1,209		
CO2e Total in tons/yr	1,216		

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: Emissions Calculations
Unpermitted Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
CO-7	0.55
Total	**0.6**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
0.6	1000	4.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.00	0.02	0.02	0.00	0.24	0.01	0.20

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 13 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.059E-06	2.891E-06	0.000	0.004	8.191E-06

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.205E-06	2.650E-06	3.373E-06	9.154E-07	5.059E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 12 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	289	0.0	0.0
Summed Potential Emissions in tons/yr	289		
CO2e Total in tons/yr	291		

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: Emissions Calculations
Existing Permitted Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
EV-1	0.4
EV-2	0.285
CO-6A	2.5
CO-6B	6.5
IR-6	1.35
CO-3A	0.8
CO-3B	1.5
EV-3	0.4
CO-4A	2.5
CO-4B	6.5
IR-4	1.9
SH-1	0.8
Total	**25.4**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
25.4	1000	222.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.21	0.85	0.85	0.07	11.14	0.61	9.36

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 13 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.340E-04	1.337E-04	0.008	0.201	3.788E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.570E-05	1.225E-04	1.560E-04	4.233E-05	2.340E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 12 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	13,369	0.3	0.2
Summed Potential Emissions in tons/yr	13,369		
CO2e Total in tons/yr	13,450		

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: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
SVL-6-1	2
SVL-6-2	2
SVL-6-3	1.35
SVL-3-1	1.5
SVL-3-2	0.8
SVL-3-3	0.8
SVL-3-4	0.4
SVL-4-1	1.3
SVL-4-2	1.3
SVL-4-3	1.3
SVL-4-4	0.5
Total*	**13.3**

*Note = These 10 spray washer line units were previously uncalculated, but listed in the permit emission units.

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
13.3	1000	116.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.11	0.44	0.44	0.03	5.80	0.32	4.87

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.219E-04	6.964E-05	0.004	0.104	1.973E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.902E-05	6.384E-05	8.125E-05	2.205E-05	1.219E-04

Methodology is the same as page 1.

Total HAPs
1.095E-01

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	6,964	0.1	0.1
Summed Potential Emissions in tons/yr	6,964		
CO2e Total in tons/yr	7,007		

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

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

550 lbs/min throw rate

Shot Usage Rate	33000	pounds/hr

	PM	PM10	PM2.5
Emission Factors lbs/lb shot **	0.00400	0.00400	0.00400
Percentage of Emissions	100%	100%	100%
Potential Emissions lbs/hr	132.0	132.0	132.0
Potential Uncontrolled and Unlimited Emissions tons/yr*	**578.16**	**578.16**	**578.16**
Control Efficiency % : **95%**			
Potential Controlled Emissions lb/hr	**6.6**	**6.6**	**6.6**
Potential Controlled Emissions tons/yr	**28.9**	**28.9**	**28.9**

** Emission Factors from STAPPA/ALAPCO factor of .004.

Potential to Emit PM/PM-10 Before Controls (pounds/hour) = PM/PM-10 Emission Emission factor (lbs/lb) * blast rate (lbs per hour).
Potential to Emit PM/PM-10 Before Controls (tons/year) = PM/PM-10 Emission Emission Rate (lbs/hour) * 8760 (hours/year) * 1 ton/2000 pounds
Potential Controlled Emissions tons/yr = Potential Uncontrolled and Unlimited Emissions tons/yr * (1- Control Efficiency)

Appendix A: Emission Calculations
Goff 3 Cubic Foot Blaster

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Shot Usage Rate 11400 pounds/hr Each

	PM	PM10	PM2.5
Emission Factors lbs/lb shot **	0.00400	0.00400	0.00400
Percentage of Emissions	100%	100%	100%
Potential Emissions lbs/hr (each unit)	45.6	45.6	45.6
Potential Uncontrolled and Unlimited Emissions tons/yr* (each unit)	**199.73**	**199.73**	**199.73**
Control Efficiency % 95%			
Potential Controlled Emissions lb/hr (each unit)	**2.3**	**2.3**	**2.3**
Potential Controlled Emissions tons/yr (each unit)	**9.99**	**9.99**	**9.99**

** Emission Factors from STAPPA/ALAPCO factor of .004.

Potential to Emit PM/PM-10 Before Controls (pounds/hour) = PM/PM-10 Emission Emission factor (lbs/lb) * blast rate (lbs per hour).
Potential to Emit PM/PM-10 Before Controls (tons/year) = PM/PM-10 Emission Emission Rate (lbs/hour) * 8760 (hours/year) * 1 ton/2000 pounds
Potential Controlled Emissions tons/yr = Potential Uncontrolled and Unlimited Emissions tons/yr * (1- Control Efficiency)

*An evaluation was made on the control device being Intergral to the Process, and a determination made that the controls are NOT considered as integral. Therefore, potential emissions for the permit level were made without consideration for the control devices on this unit.

Appendix A: Emission Calculations
Empire Glass Bead Hand Blast

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Table 1 - Emission Factors for Abrasives

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

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	405
Glass Bead	25.25

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)
Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

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

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)

FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	420
D = Density of abrasive (lb/ft3) From Table 2 =	25.5
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.3125
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125

Flow Rate (FR) (lb/hr) = **108.182** per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.010
FR = Flow Rate (lb/hr) =	108.182
w = fraction of time of wet blasting =	0 %
N = number of nozzles =	1

Uncontrolled Emissions =	**1.08 lb/hr**
	4.74 ton/yr
Controlled Emissions =	**0.01 lb/hr**
	0.05 ton/yr

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
E = EF x FR x (1-w/200) x N
w should be entered in as a whole number (if w is 50%, enter 50)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Metal Improvement Company
Source Address: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	2.0	2.0	4.0	40.0	160.0	1320	0.250	1.0	365.0
Vehicle (leaving plant) (one-way trip)	0.0	1.0	0.0	1.0	0.0	10000	1.894	0.0	0.0
		Totals	**4.0**		**160.0**			**1.0**	**365.0**

Average Vehicle Weight Per Trip = 40.0 tons/trip
Average Miles Per Trip = 0.25 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	40.0	40.0	40.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.745	0.749	0.1838	lb/mile
Mitigated Emission Factor, Eext =	3.424	0.685	0.1681	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.68	0.14	0.03	0.62	0.12	0.03
Vehicle (leaving plant) (one-way trip)	0.00	0.00	0.00	0.00	0.00	0.00
Totals	**0.68**	**0.14**	**0.03**	**0.62**	**0.12**	**0.03**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registration Transitioning to a Federally Enforceable State Operating Permit (FESOP) with New Source Review (NSR)

Source Description and Location

Source Name:	**Metal Improvement Company, LLC**
Source Location:	**302 McSwain Drive, Fremont, IN 46737**
County:	**Steuben**
SIC Code:	**3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)**
Operation Permit No.:	**F 151-32268-00054**
Permit Reviewer:	**Joshua Levering**

On August 31, 2012, the Office of Air Quality (OAQ) received an application from Metal Improvement Company related to the construction and operation of new emission units at an existing metal finishing operation for automotive parts and transition from a Registration to a FESOP.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration Notice Only Change No. 151-23079-00054, issued on July 05, 2006,

(b) Registration No. 151-12218-00054, issued on September 27, 2000, and

(c) Construction Permit Registration No. 151-12144-00054, issued on April 27, 2000.

Due to this application, the source is transitioning from a Registration to a FESOP.

County Attainment Status

The source is located in Steuben County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.	

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Steuben County has been designated as

attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Steuben County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$, SO_2, and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Steuben County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Metal Improvement Company on August 31, 2012, addressing unpermitted units and the addition of new units, the combination of which results in a permit level change.

The source consists of the following permitted emission units:

(a) One (1) spray line 6, identified as SL-6, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-4.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-6.

(3) One (1) paint booth, identified as paint booth 1C, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-7.

(4) One (1) paint booth, identified as paint booth 2A, using filter bags as control, and exhausting to SV-6-10.

(5) One (1) natural gas fired preheat cure oven, identified as CO-6A, with heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-8.

(6) One (1) natural gas fired high heat cure oven, identified as CO-6B, with heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-6-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-6, with heat input rate of 1.35 million British thermal units per hour, using no controls and exhausting to stack SV-6-5.

(b) One (1) spray line 3, identified as SL-3, constructed in 2000, with a maximum capacity of 1,500 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-6.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-10.

(5) One (1) natural gas fired preheat curing oven, identified as CO-3A, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-3-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-3B, with a heat input rate of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-3-9.

(c) One (1) spray line 4, identified as SL-4, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-5.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-7.

(3) One (1) paint booth, identified as paint booth 2A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-10.

(4) One (1) paint booth, identified as paint booth 2B, equipped with air atomization spray guns, using filter bags as control, and exhausting inside.

(5) One (1) natural gas fired preheat curing oven, identified as CO-4A, with a heat input rate of 2.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-8.

(6) One (1) natural gas fired high heat curing oven, identified as CO-4B, with a heat input rate of 6.5 million British thermal units per hour, using no controls, and exhausting to stack SV-4-9.

(7) One (1) natural gas fired infrared curing oven, identified as IR-4 with a heat input rate of 1.9 million British thermal units per hour, using no controls, and exhausting to stack SV-4-6.

(d) One (1) spray washer for line 6, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-6-1, with a heat input rate of 2.0 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 5, fired by natural gas and exhausting to stack SV-6-2, with a heat input rate of 2.0 million British thermal units per hour, and using no controls.

(3) One (1) Hot air blow off fired by natural gas and exhausting to stack SV-6-3, with a heat input rate of 1.35 million British thermal units per hour, and using no controls.

(4) Two (2) natural gas fired evaporators, identified as EV-1 and EV-2, processing wash water overflow, with heat input rate of 0.4 million British thermal units per hour and 0.285 million British thermal units per hour, respectively, each using no controls, and exhausting to stack SV-EV-1 and SV-EV-2.

NOTE: These two (2) evaporators are inside the line 6 cell but not directly part of the inline process. These units have alkaline water from SL-3, 4, 6 and alkaline water from the manual wash line pumped to them for evaporation.

(e) One (1) spray washer for line 3, exhausting to stacks SV-3-1, SV -3-2, SV -3-3, SV -3-4, and SV-3-5, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-3-1 and SV-3-2, with a heat input rate of 1.5 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 3, fired by natural gas and exhausting to stack SV-3-3, with a heat input rate of 0.8 million British thermal units per hour and using no controls.

(3) One (1) spray washer stage 4, fired by natural gas, and exhausting to stack SV-3-4, with a heat input rate of 0.8 million British thermal units per hour and using no controls.

(4) One (1) washer blow off burner, fired by natural gas, with a heat input rate of 0.4 million British thermal units per hour and exhausting to SV-3-5 and using no controls.

(5) One (1) natural gas fired evaporator, identified as EV-3 (DAC), with a heat input rate of 0.4 million British thermal units, used for miscellaneous evaporation including floor wash water, using no controls and exhausting to stack EV-3.

(f) One (1) spray washer for line 4, exhausting to SV-4-1, SV-4-2, SV-4-3, and SV-4-4, consisting of the following equipment:

(1) One (1) spray washer stage 1, fired by natural gas and exhausting to stack SV-4-1, with a capacity of 1.3 million British thermal units per hour, and using no controls.

(2) One (1) spray washer stage 2, fired by natural gas and exhausting to stack SV-4-2, with a heat input capacity of 1.3 million British thermal units per hour and using no controls.

(3) One (1) spray washer stage 3, fired by natural gas and exhausting to stack SV-4-3, with a heat input rate of 0.5 million British thermal units per hour and using no controls.

(4) One (1) spray washer stage 5, fired by natural gas and exhausting to stack SV-4-4, with a heat input rate of 0.5 million British thermal units per hour and using no controls.

(g) One (1) natural gas fired air make up unit, identified as SH-1, constructed in 1999, with a heat input rate of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SH-1.

The following is a list of the new emission units and pollution control devices:

(a) One (1) spray line, identified as SL-8, approved for construction in 2013, consisting of the following equipment:

(1) One (1) spray booth, identified as paint booth 1, using air atomization spray guns, with a maximum capacity of 1,500 metal parts per hour, using dry filters as control, and exhausting to SV-8-1.

(2) One (1) pre heat cure oven, identified as CO-8A, with a heat input capacity of 1.5 million British thermal units per hour, using no controls, and exhausting to stack SV-8-2.

(3) One (1) high heat cure oven, identified as CO-8B, with a heat input capacity of 0.8 million British thermal units per hour, using no controls, and exhausting to stack SV-8-3.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) One (1) Wheelabrator shot blast unit, identified as SB-1, constructed in 2001, with a maximum shot usage rate of 33,000 pounds per hour, using a baghouse as control, and exhausting indoors.

(b) Two (2) Goff shot blast units, identified as SB-2 and SB-3, respectively, both constructed in 2000, each with a maximum shot usage rate of 11,400 pounds per hour, each controlled with a baghouse, and both exhausting indoors.

(c) One (1) Empire hand bead blast unit, identified as SB-4, constructed in 2000, with a maximum bead blast rate of 420 pounds per hour, controlled with a baghouse and exhausting indoors.

(d) One (1) cure oven, identified as CO-7, used for low volume large parts, constructed in 2006, with a heat input rate capacity of 0.55 million British thermal units per hour, using no controls , and exhausting to stack SV-CO-7.

(e) One (1) large paint booth, identified as PB-1, constructed in 2006, equipped with air atomization spray guns, with a maximum capacity of 10 units per hour, using filter bags as control, and exhausting to SV-PB-1.

(f) One (1) small dip spin coating machine, identified as DS-1, constructed in 2000, with a maximum capacity of 1,500 parts per hour, using no controls, and exhausting indoors.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1,003.76
PM10[(1)]	1,004.25
PM2.5	1,004.15
SO_2	0.11
NO_x	18.19
VOC	88.34
CO	15.28
GHGs as CO_2e	21,963.65

(1) 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".

HAPs	Potential To Emit (tons/year)
Worst Single HAP	18.17 (Chromium)
TOTAL HAPs	**18.52**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of PM10, PM2.5, and VOC are each greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
SL-3,4,6,8,PB-1 (Worst Case HAP base coat on all lines)	--	--	--	--	--	--	--	--	18.17	18.17 (Chromium)
SL-6	3.83	3.83	3.83	0.00	0.00	95.00	0.00	0.00	--	--
SL-3	3.97	3.97	3.97	0.00	0.00		0.00	0.00	--	--
SL-4	7.48	7.48	7.48	0.00	0.00		0.00	0.00	--	--
SL-8	4.75	4.75	4.75	0.00	0.00		0.00	0.00	--	--
Dip Spin	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
PB-1	0.35	0.35	0.35	0.00	0.00		0.00	0.00	--	--
Combustion Units	0.35	1.38	1.38	0.11	18.19	1.00	15.28	21,963.65	0.34	0.33 (Hexane)
SB-1 Wheelabrator	28.91	28.91	28.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SB-2 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SB-3 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SB-4 Glass Bead	4.74	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions Paved Roads	0.62	0.12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	**74.97**	**75.50**	**75.41**	**0.11**	**18.19**	**96.00**	**15.28**	**21,963.65**	**18.52**	**18.17 Chromium**
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = 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_2e 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) FESOP Status

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year total HAP. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

(1) PM10 and PM2.5 emissions from shot blasting unit SB1 shall not exceed 6.6 pounds per hour, each.

(2) PM10 and PM2.5 emissions from shot blasting unit SB2 shall not exceed 2.3 pounds per hour, each.

(3) PM10 and PM2.5 emissions from shot blasting unit SB3 shall not exceed 2.3 pounds per hour, each.

(4) The total input of VOC to the spray lines 3, 4, 6, 8, Dip Spin, and PB-1, including coatings, dilutaion solvents, and cleaning solvents, shall not exceed ninety-five (95) tons per twelve (12) consecutive month period.

(5) The total input of each single HAP to the spray lines 3, 4, and 8, including coatings, dilution solvents, and cleaning solvents, shall be less than ten (10) tons per twelve (12) consecutive month period.

(6) The total input of HAP to the spray lines 3, 4 and 8, including coatings, diluation solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, each single HAP, total HAP, and VOC from all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, and VOC to less than 100 tons per twelve (12) consecutive month period, each, any single HAP to less than ten (10) tons per 12 consecutive month period, the total HAP to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits)**,** 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)*,* and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(b) PSD Minor Source

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit PM is limited to less than 250 tons per year, the potential to emit all other attainment regulated criteria pollutants are less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than the PSD subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(1) PM emissions from shot blasting unit SB1 shall not exceed 26.4 pounds per hour.

(2) PM emissions from shot blasting unit SB2 shall not exceed 9.2 pounds per hour.

(3) PM emissions from shot blasting unit SB3 shall not exceed 9.2 pounds per hour.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (326 IAC 12), are not included in the permit, since this source does not coat metal furniture.

(b) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM (326 IAC 12), are not included in the permit, since this source does not coat automobiles or light duty trucks at an assembly plant.

(c) The requirements of the New Source Performance Standard for Metal Coil Surface Coating, 40 CFR 60, Subpart TT (326 IAC 12), are not included in the permit, since this source does not coat metal coils.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Surface Coating of Automobiles and Light Duty Trucks, 40 CFR 63.3080, Subpart IIII (4I) (326 IAC 20-85), are not included in the permit, since this source does not coat automobiles or light duty trucks at an assembly plant and is not considered a major source of HAPs.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM (326 IAC 20-80), are not included in the permit, since this source is not considered a major source of HAPs.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Surface Coating of Metal Furniture, 40 CFR 63.4880, Subpart RRRR (326 IAC 20-78), are not included in the permit, since this source does not coat metal furniture and is not considered a major source of HAPs.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Surface Coating of Metal Coil, 40 CFR 63.5080, Subpart SSSS (326 IAC 20-64), are not included in the permit, since this source does not coat metal coils and is not considered a major source of HAPs.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63.7480, Subpart DDDDD (5D) (326 IAC 20-95), are not included in the permit, since the natural combustion units are not boilers or process heaters as defined in §63.7575 and are not considered a major source of HAPs.

(i) Spray line 6, 3, 4, 8, and the large manual paint booth are subject to the National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating

Operations at Area Sources (40 CFR 63, Subpart HHHHHH (6H)), because the spray coating contains compounds of chromium and is located in an area source of HAPs.

The units subject to this rule include the following:

(a) One (1) spray line 6, identified as SL-6, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-4.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-6.

(3) One (1) paint booth, identified as paint booth 1C, equipped with air atomization spray guns, using filter bags as control, and exhausting to SV-6-7.

(b) One (1) spray line 3, identified as SL-3, constructed in 2000, with a maximum capacity of 1,500 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-6.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-3-7.

(c) One (1) spray line 4, identified as SL-4, constructed in 2000, with a maximum capacity of 600 metal parts per hour, consisting of the following equipment:

(1) One (1) paint booth, identified as paint booth 1A, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-5.

(2) One (1) paint booth, identified as paint booth 1B, equipped with air atomization spray guns, using filter bags as control, and exhausting to stack SV-4-7.

(d) One (1) spray line 8, identified as SL-8, approved for construction in 2013, consisting of the following equipment:

(1) One (1) spray booth, identified as paint booth 1, using air atomization spray guns, with a maximum capacity of 1,500 metal parts per hour, using dry filters as control, and exhausting to SV-8-1.

(E) One (1) large paint booth, identified as PB-1, constructed in 2006, equipped with air atomization spray guns, with a maximum capacity of 10 units per hour, using filter bags as control, and exhausting to SV-PB-1.

Applicable portions of the NESHAP are the following:

(1) 40 CFR 63.11169(c)
(2) 40 CFR 63.11170(a)(2), (a)(3), and (b)
(3) 40 CFR 63.11171
(4) 40 CFR 63.11172(b)
(5) 40 CFR 63.11173(e), (f), and (g)
(6) 40 CFR 63.11174
(7) 40 CFR 63.11175(a)
(8) 40 CFR 63.11176

(9) 40 CFR 63.11177(a) through (d) and (g)
(10) 40 CFR 63.11178
(11) 40 CFR 63.11179
(12) 40 CFR 63.11180
(13) Table 1

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the units except as otherwise specified in 40 CFR 63, Subpart HHHHHH (6H).

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63.11193, Subpart JJJJJJ (6J), are not included in the permit, since the natural combustion units are not boilers as defined in §63.11237.

Compliance Assurance Monitoring (CAM)

(k) 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 - Entire Source

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-3 (Emission Offset)
Emission Offset applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the units is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the units to 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. Therefore, the source is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Section above.

(e) 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.

(f) 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.

(g) 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.

(h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year.

(i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability – Individual Facilities

Spray Lines, Paint Booth, and Dip Spin

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the paint booth (PB-1) and the dip spin are not subject to the requirements of 326 IAC 6-3-2, since the potential emissions are less than five hundred fifty-one thousandths (0.551) pound per hour each.

Pursuant to 326 IAC 6-3-1, the requirements of 326 IAC 6-3-2 are applicable to Spray Lines 6, 3, 4, and 8. Pursuant to 326 IAC 6-3-2(d), particulate from spray lines 6, 3, 4, and 8 shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)
Pursuant to 326 IAC 8-1-6, each of the spray lines, the paint booth, and the dip spin are not subject to the requirements of 326 IAC 8-1-6, because each of the units are regulated by another provision of this article.

(c) 326 IAC 8-2-9 (Miscellaneous metal and plastic parts coating operations)
Pursuant to 326 IAC 8-2-9(a)(1)(E), each of the spray lines, the paint booth, and the dip spin are each subject to the requirements of 326 IAC 8-2-9 since the source coats metal parts under the Standard Industrial Classification Code of major group #34.

Pursuant to 326 IAC 8-2-9, each of the spray lines, the paint booth, and the dip spin when coating metal parts shall not allow the discharge into the atmosphere of VOC in excess of for clear coats four and three-tenths (4.3), for air dried or forced warm air dried coatings three and five-tenths (3.5), for extreme performance coatings three and five-tenths (3.5), and for all other coatings three (3.0) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

SB-1 & 2 & 3

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

Pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 are applicable to each of the three (3) shot blasters (SB-1, SB-2, and SB-3), since they each have potential particulate emissions greater than five hundred fifty-one thousandths (0.551) pound per hour. Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following emission units shall not exceed the pound per hour limit listed in the table below:

Emission Units	P (tons/hr)	E (lbs/hr)
SB-1	16.5	26.82
SB-2	5.7	13.16
SB-3	5.7	13.16

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

E = 4.10P^0.67 Where: E= Rate of emission in pounds per hour.
P= Process weight rate in tons per hour.

The baghouses shall be in operation at all times the shot blasting units are in operation, in order to comply with this limit.

Spray Line Washer Units

(a) 326 IAC 6-2-4 (Emission limitations for Indirect Heating Units)
Pursuant to 326 IAC 6-2-1(a), each of the spray line washers are not subject to 326 IAC 6-2-4, since each are not a source of indirect heating.

(b) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The natural gas combustion units are each not subject to the requirements of 326 IAC 6-3-2, since they each are not a "manufacturing process" as defined by 326 IAC 6-3-1.5.

Combustion Units

(a) 326 IAC 6-2-4 (Emission limitations for Indirect Heating Units)
Pursuant to 326 IAC 6-2-1(a), each of the combustion units are not subject to 326 IAC 6-2-4, since each are not a source of indirect heating.

(b) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The natural gas combustion units are each not subject to the requirements of 326 IAC 6-3-2, since they each are not a "manufacturing process" as defined by 326 IAC 6-3-1.5.

Compliance Determination, Monitoring and Testing Requirements

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

(a)

Emission Units	Control	Operating Parameters	Frequency	Range	Excursions and Exceedances
SL-6, SL-3, SL-4, SL-8, and PB-1	Filters	Filter Checks	Daily	Normal-Abnormal	Response Steps
		Overspray Observations	Weekly	Normal-Abnormal	Response Steps
		Stack Exhausts Observations	Monthly	Normal-Abnormal	Response Steps

Emission Units	Control	Operating Parameters	Frequency	Range	Excursions and Exceedances
SB-1, SB-2, SB-3, and SB-4	Baghouse	Baghouse Inspections	Semi-annual	Normal-Abnormal	Response Steps

All baghouses and filters listed in the above table shall be in operation and control particulate whenever the units are operating.

(b) Compliance with VOC and HAP usage is contained within the permit.

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 August 31, 2012.

The operation of this source shall be subject to the conditions of the attached proposed New Source Review and FESOP No. F151-32268-00054. The staff recommends to the Commissioner that this New Source Review and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.

(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

Appendix A: Emissions Calculations
Source-wide Summary
(page 1 of 2)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Uncontrolled PTE (tons/year)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
PTE (tpy) Permitted Units											
SL-3,4,6,8, PB-1 (Worst case HAP base coat on all lines)									18.17	18.17	Chromium
SL-6 + Plus L	3.83	3.83	3.83	--	--	53.17	--	--			
SL-3 +Plus L	3.97	3.97	3.97	--	--	7.51	--	--			
SL-4 + Plus L	7.48	7.48	7.48	--	--	6.93	--	--			
Spray Washer Line Combustion	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,006.58	0.11	0.10	Hexane
Permitted Combustion Units	0.21	0.85	0.85	0.07	11.14	0.61	9.36	13,450.00	0.21	0.20	Hexane
PTE of Permitted Units (tpy)	**15.59**	**16.56**	**16.56**	**0.10**	**16.94**	**68.55**	**14.23**	**20,456.58**	**18.49**	**18.17**	
PTE (tpy) New Units											
SL-8 Geomet 320	4.75	4.75	4.75	--	--	7.51	--	--	--	0.00	Methanol
New Combustion Units	0.02	0.08	0.08	0.01	1.01	0.06	0.85	1,216.24	0.02	0.02	Hexane
PTE of New Units (tpy)	**4.77**	**4.83**	**4.83**	**0.01**	**1.01**	**7.56**	**0.85**	**1,216.24**	**0.02**	**0.02**	
PTE (tpy) Unpermitted Units											
Dip Spin	0.00	0.00	0.00	--	--	11.17	--	--	--	--	
Paint Booth for large Parts (PB-1)	0.35	0.35	0.35	--	--	1.05	--	--	--	--	
Unpermitted Combustion units	0.00	0.02	0.02	0.00	0.24	0.01	0.20	290.84	0.00	0.004	Hexane
SB-1 Wheelabrator	578.16	578.16	578.16	--	--	--	--	--	--	--	
SB-2&3 Goff	399.46	399.46	399.46	--	--	--	--	--	--	--	
SB-4(Glass Bead)	4.74	4.74	4.74	--	--	--	--	--	--	--	
PTE (tpy) of Unpermitted Units	**982.71**	**982.73**	**982.73**	**0.00**	**0.24**	**12.23**	**0.20**	**290.84**	**0.00**	**0.00**	
Fugitive (Road)	0.68	0.14	0.03	--	--	--	--	--	--	--	
Combined Total	**1,003.76**	**1,004.25**	**1,004.15**	**0.11**	**18.19**	**88.34**	**15.28**	**21,963.65**	**18.51**	**18.17**	

* Emissions are pursuant to R151-00054
** emissions do not take natural mitigation into account

Controlled PTE (tons/year)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
PTE (tpy) Permitted Units											
SL-6 worst case	3.83	3.83	3.83	0.00	0.00	53.17	0.00	0.00	18.17	2.59	Chromium
SL-3 +Plus L	3.97	3.97	3.97	0.00	0.00	6.93	0.00	0.00	0.00	3.73	Methanol
SL-4 + Plus L	7.48	7.48	7.48	0.00	0.00	6.93	0.00	0.00	0.00	3.73	Methanol
Spray Washer Line Combustion	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,006.58	0.11	0.10	Hexane
Permitted Combustion Units	0.21	0.85	0.85	0.07	11.14	0.61	9.36	13,450.00	0.21	0.20	Hexane
PTE (tpy) Permitted Units	**15.59**	**16.56**	**16.56**	**0.10**	**16.94**	**67.97**	**14.23**	**20,456.58**	**18.49**	**10.35**	
PTE (tpy) New Units											
SL-8 Geomet 320	4.75	4.75	4.75	0.00	0.00	7.51	0.00	0.00	0.00	3.73	Methanol
New Combustion units	0.02	0.08	0.08	0.01	1.01	0.06	0.85	1,216.24	0.02	0.02	Hexane
PTE (tpy) New Units	**4.77**	**4.83**	**4.83**	**0.01**	**1.01**	**7.56**	**0.85**	**1,216.24**	**0.02**	**3.75**	
PTE (tpy) Unpermitted Units											
Dip Spin	0.00	0.00	0.00	0.00	0.00	11.17	0.00	0.00	0.00	--	
Paint Booth for large Parts	0.35	0.35	0.35	0.00	0.00	1.05	0.00	0.00	0.00	--	
Unpermitted Combustion Units	0.00	0.02	0.02	0.00	0.24	0.01	0.20	290.84	0.00	0.004	Hexane
SB-1 Wheelabrator	28.91	28.91	28.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-2&3 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-4(Glass Bead)	4.74	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PTE (tpy) Unpermitted Units	**43.99**	**44.01**	**44.01**	**0.00**	**0.24**	**12.23**	**0.20**	**290.84**	**0.00**	**0.00**	
Fugitive (Road)**	0.62	0.12	0.03	--	--	--	--	--	--	--	
Combined Total	**64.98**	**65.52**	**65.42**	**0.11**	**18.19**	**87.77**	**15.28**	**21,963.65**	**18.51**	**11.19**	

NOTE: PM, PM10. PM2.5 emissions from the spray coating lines are uncontrolled.
* Emissions are pursuant to R151-00054

Appendix A: Emissions Calculations
Source-wide Summary
(page 2 of 2)

Potential to Emit After Issuance of Permit (ton/yr)											
Emission Unit	**PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr)**	
PTE (tpy) Permitted Units											
SL-6 worst case	3.83	3.83	3.83	0.00	0.00		0.00	0.00	18.17	18.17	Chromium
SL-3 +Plus L	3.97	3.97	3.97	0.00	0.00		0.00	0.00	3.73	3.73	Methanol
SL-4 + Plus L	7.48	7.48	7.48	0.00	0.00		0.00	0.00	3.73	3.73	Methanol
SL-8 Geomet 320	4.75	4.75	4.75	0.00	0.00	95.00	0.00	0.00	3.73	3.73	Methanol
Dip Spin	0.00	0.00	0.00	0.00	0.00		0.00	0.00	--	--	
Paint Booth for large Parts (PB-1)	0.35	0.35	0.35	0.00	0.00		0.00	0.00	0.00	0.00	
Combustion Units	0.35	1.38	1.38	0.11	18.19	1.00	15.28	21,963.65	0.34	0.33	Hexane
SB-1 Wheelabrator	28.91	28.91	28.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-2 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-3 Goff	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SB-4(Glass Bead)	4.74	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fugitive (Road) **	0.62	0.12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Combined Total	**74.97**	**75.50**	**75.41**	**0.11**	**18.19**	**96.00**	**15.28**	**21,963.65**	**18.51**	**18.17**	**Chromium**

NOTE: PM, PM10. PM2.5 emissions from the spray coating lines are uncontrolled.
* Emissions are pursuant to R151-00054
** emissions take natural mitigation into account

Appendix A: Emissions Calculations

VOC and Particulate Matter
From Surface Coating Operations (Spray Lines-3,4,6,8, and PB-1 and Dip Spin)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Material		Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (Solids)	Gal of Mat. (Gal/Unit)	Maximum (Unit/Hour)	Pounds VOC Per Gallon of Coating Less Water	Pounds VOC Per Gallon of Coating	Potential VOC Pounds Per Hour	Potential VOC Pounds Per Day	Potential VOC Tons Per Year	Transfer Efficiency (%)	Particulate Potential (Ton/Yr)	Lb VOC/Gal Solids	Transfer Efficiency	Control Efficiency %	Controlled Particulate Potential (ton/yr)
Type of Material - Worst case spray Line 6 - (Two booths)*	**Worst Case spray Line 6 [Maximum (unit/hr) is for 2 lines]**																			
Basecoat	**Delta-Tone 9000**	12.49	40.00%	0.00%	40.00%	0.00%	32.10%	0.001445	600	5.00	5.00	4.34	104.04	18.99	60%	2.85	15.56	75%	95%	0.14
Thinner for Base	**Protect LT**	7.38	100.00%	0.00%	100.00%	0.00%	0.00%	0.000255	600	7.38	7.38	1.13	27.10	4.95	60%	0.00	0.00	75%	95%	0.00
Topcoat	**DeltaSeal GZ Silver**	9.01	67.50%	0.00%	67.50%	0.00%	23.60%	0.001275	600	6.08	6.08	4.65	111.63	20.37	60%	0.98	25.77	75%	95%	0.05
Topcoat thinner	Deltaseal 2000	7.94	100.00%	0.00%	100.00%	0.00%	0.00%	0.000425	600	7.94	7.94	2.02	48.59	8.87	60%	0.00	0.00	75%	95%	0.00
										Worst Case Normal Operating scenario - Spray Line 6			**291.36**	**53.17**		**3.83**				**0.19**
										Alternate Coating Scenerio for Line 6										
	DacraKote 107	*9.49*	*71.00%*	*65.00%*	*6.00%*	*73.50%*	*29.40%*	*0.0017*	*600*	*1.70*	*0.50*	*0.51*	*12.24*	*2.23*	60%	*1.23*	*1.94*	75%	*95%*	*0.06*
Primer	*Dacromet 320 LV*	*11.59*	*93.00%*	*56.90%*	*5.80%*	*77.60%*	*10.60%*	*0.0017*	*600*	*3.00*	*0.67*	*0.69*	*16.46*	*3.00*	60%	*0.91*	*6.34*	75%	*95%*	*0.05*
Top Coat	*Plus L*	*9.67*	*76.20%*	*76.20%*	*0.00%*	*88.60%*	*25.00%*	*0.0017*	*600*	*0.30*	*0.10*	*0.10*	*2.45*	*0.45*	60%	*2.57*	*0.00*	75%	*95%*	*0.13*
										Alternative Operating Scenario - Spray Line 6			**31.14**	**5.68**		**4.71**				**0.24**
										Worst Case Operating Scenario Spray Line 6				**53.17**		**4.71**				**0.24**
Type of Material Worst case spray line3 (two booths)*	**Worse Case Spray Line 3 [Maximum (unit/hr) is for 2 lines]**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.00068	1500	3.49	1.41	1.44	34.52	6.30	60%	2.13	6.98	75%	95%	0.11
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.00068	1500	0.30	0.10	0.10	2.45	0.45	60%	1.79	0.00	75%	95%	0.09
Rust Inhibitor	Eco-Kor 430	8.93	50.00%	0.00%	**50.00%**	0.00%	0.00%	0.0000068	1500	4.22	4.22	0.04	1.03	0.19	60%	0.05	0.00	75%	95%	0.00
										Worst Case Normal Operating Scenario - Spray Line 3			**38.00**	**6.93**		**3.97**				**0.20**
										Alternative Coating Scenario for Line 3										
Primer	*Dacromet 320 LV*	*11.59*	*93.00%*	*56.90%*	*5.80%*	*77.60%*	*10.60%*	*0.0017*	1500	*3.00*	*0.67*	*1.71*	*41.14*	*7.51*	60%	*2.27*	*6.34*	75%	95%	*0.11*
										Alternative Operating Scenario - Spray Line 3			**41.14**	**7.51**		**2.27**				**0.11**
										Worst Case Operating Scenario Spray Line 3			**41.14**	**7.51**		**3.97**				**0.20**
Type of Material Worst case spray line 4 (two booths)*	**Worst Case Spray Line 4 [Maximum (unit/hr) is for 2 lines]**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.0017	600	3.49	1.41	1.44	34.52	6.30	60%	2.13	6.98	75%	95%	0.11
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.0017	600	0.30	0.10	0.10	2.45	0.45	60%	1.79	0.00	75%	95%	0.09
Rust Inhibitor	Quaker 624	8.64	10.41%	80.00%	**50.00%**	0.00%	0.00%	0.000017	600	4.22	4.22	0.04	1.03	0.19	60%	0.09	0.00	75%	95%	0.00
										Worst case total line 4		**1.58**	**38.00**	**6.93**		**7.48**				**0.37**
										Alternate Base Coats for Line 4										
Base Coat	*Dacromet 320 - LV*	*11.59*	*63.30%*	*57.50%*	*5.80%*	*78.00%*	*22.00%*	*0.0017*	*600*	*3.00*	*0.67*	*0.69*	*16.46*	*3.00*	60%	*1.90*	*3.06*	75%	*95%*	*0.10*
Base Coat	***Geomet 720***	*11.34*	*55.80%*	*45.60%*	*10.20%*	*62.30%*	*37.70%*	*0.0017*	*600*	*3.20*	*1.30*	*1.33*	*31.82*	*5.81*	60%	*5.60*	*3.07*	75%	*95%*	*0.28*
Worst Case Spray Line 8	**Worst Case Spray Line 8**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.00068	1500	3.49	1.41	1.44	34.52	6.30	60%	2.13	6.98	75%	95%	0.11
Base Coat	*Dacromet 320 - LV*	*11.59*	*63.30%*	*57.50%*	*5.80%*	*78.00%*	*22.00%*	*0.0017*	*1500*	*3.00*	*0.67*	*1.71*	*41.14*	*7.51*	60%	*4.75*	*3.06*	75%	95%	*0.24*
										Worst Case total Line 8 (can only apply one (1) base coat at a time)		1.71	41.14	**7.51**		**4.75**				**0.24**
Type of Material Worst Case PB-1	**Worst Case PB-1 (only one (1) material can be applied at a time)**																			
Base Coat	Geomet 321	11.345	58.00%	41.40%	**16.60%**	57.10%	27.00%	0.017	10	3.49	1.41	0.24	5.75	1.05	60%	0.35	6.98	75%	95%	0.02
Sealer	Plus JL	9.43	83.00%	83.00%	**0.00%**	93.60%	6.40%	0.017	10	0.30	0.10	0.02	0.41	0.07	60%	0.30	0.00	75%	95%	0.01
Rust Inhibitor	Eco-Kor 430	8.93	50.00%	0.00%	**50.00%**	0.00%	0.00%	0.000017	10	4.22	4.22	0.00	0.02	0.00	60%	0.00	0.00	75%	95%	0.00
										Worst Case total PB-1		0.24	5.75	1.05		**0.35**				**0.02**
Dip Spin	Geomet 500	11.26	55.50%	44.40%	**11.10%**	61.80%	37.70%	0.0017	1500	3.10	1.00	2.55	61.20	11.17	100%	0.00	3.32	100%	95%	0.00
										Worst Case total for Line 6, 3, 4, 8, PB-1, and the Dip Spin =				**87.34**		**21.26**				**1.02**
	Cleanup Solvent (Acetone)	6.60	100.00%	0.00%	100.00%	0.00%	0.00%	0.00007	1500.000	6.60	6.60	0.67	16.16	2.95	100%	0.00	N/A			
										Total Potential to Emit from Spray Lines 6, 3, 4, 8, PB-1, Dip Spin, and Cleanup Solvent				**90.29**		**21.26**				

Notes

* Spray Lines 6, 3, and 4 can only run two booths at any given time

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 + Cleanup Solvents

Appendix A: Emission Calculations
HAP Emission Calculations (SL-3,4,6,7)

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Type of Material	Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Chrome Vi	Weight % Ethyl Benzene	Weight % Formaldehyde	Weight % Glycol ethers	Weight % Methanol	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Chromium vI Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Glycol Ethers (tons/yr)	Methanol Emissions (tons/yr)
Basecoat	Dacroment 320 LV (Line 3,4,6,8) or PB-1 (booth 1A,B, or C)	11.59	0.002	4210.00	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	18.17	0.00	0.00	0.00	0.00
Basecoat	B06A (Line 6)	11.17	0.002	600.00	2.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	1.00	0.00	0.00	0.50	0.00	0.00	0.00
Primer	B09H (Line 6)	18.22	0.002	600.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Topcoat	B18A (Line 6)	8.90	0.002	600.00	0.50%	0.00%	0.00%	0.20%	0.20%	0.00%	0.00%	0.20	0.00	0.00	0.08	0.08	0.00	0.00
Total PTE Single HAPs for Lines 3, 4, 6, 8												**1.20**	**0.00**	**18.17**	**0.58**	**0.08**	**0.00**	**0.00**
	Geomet 720 (can run on 3,4,6, 8) or PB-1	11.35	0.002	3310.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	11.19
Base Coat	Geomet 321 (can run on 3,4,6, 8) c	11.35	0.002	3310.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	11.10
	Geomet (can run on 3,4, 6, 8)	11.26	0.002	3310.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	0.00	0.00	11.10
Total PTE Single HAPs for Line 3, 4, 6, and 8								**Worst case coating mixed and thinned**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**11.19**
	Actone Cleaning solvent	6.96	0.003	10.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE Single HAPs (worst case)												**1.20**	**0.00**	**18.17**	**0.58**	**0.08**	**0.00**	**11.19**
***Worst Case Total PTE Combined HAPs**												**18.17**						

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
*Only one booth per line will run a base coat

Appendix A: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr	
EV-1	0.4	Permitted
EV-2	0.285	
CO-6A	2.5	
CO-6B	6.5	
IR-6	1.35	
CO-3A	0.8	
CO-3B	1.5	
EV-3 (DAC)	0.4	
CO-4A	2.5	
CO-4B	6.5	
IR-4	1.9	
SH-1	0.8	
CO-7	0.55	Unpermitted
CO-8A	1.5	New
CO-8B	0.8	
Total	**28.3**	

Spray Line Units

Emission Unit	MMBtu/hr
SVL-6-1	2
SVL-6-2	2
SVL-6-3	1.35
SVL-3-1	1.5
SVL-3-2	0.8
SVL-3-3	0.8
SVL-3-4	0.4
SVL-4-1	1.3
SVL-4-2	1.3
SVL-4-3	1.3
SVL-4-4	0.5
Total*	**13.3**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
41.5	1000	363.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.35	1.38	1.38	0.11	18.19	1.00	15.28

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.820E-04	2.183E-04	0.014	0.327	6.185E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	9.096E-05	2.001E-04	2.547E-04	6.913E-05	3.820E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	21,831	0.4	0.4
Summed Potential Emissions in tons/yr	21,832		
CO2e Total in tons/yr	21,964		

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: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
CO-8A	1.5
CO-8B	0.8
Total	**2.3**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
2.3	1000	20.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.02	0.08	0.08	0.01	1.01	0.06	0.85

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.116E-05	1.209E-05	0.001	0.018	3.425E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.037E-06	1.108E-05	1.410E-05	3.828E-06	2.116E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	1,209	0.0	0.0
Summed Potential Emissions in tons/yr	1,209		
CO2e Total in tons/yr	1,216		

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: Emissions Calculations
Unpermitted Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
CO-7	0.55
Total	**0.6**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
0.6	1000	4.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.00	0.02	0.02	0.00	0.24	0.01	0.20

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 13 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.059E-06	2.891E-06	0.000	0.004	8.191E-06

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.205E-06	2.650E-06	3.373E-06	9.154E-07	5.059E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 12 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	289	0.0	0.0
Summed Potential Emissions in tons/yr	289		
CO2e Total in tons/yr	291		

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: Emissions Calculations
Existing Permitted Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
EV-1	0.4
EV-2	0.285
CO-6A	2.5
CO-6B	6.5
IR-6	1.35
CO-3A	0.8
CO-3B	1.5
EV-3	0.4
CO-4A	2.5
CO-4B	6.5
IR-4	1.9
SH-1	0.8
Total	**25.4**

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
25.4	1000	222.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.21	0.85	0.85	0.07	11.14	0.61	9.36

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 13 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.340E-04	1.337E-04	0.008	0.201	3.788E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.570E-05	1.225E-04	1.560E-04	4.233E-05	2.340E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 12 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	13,369	0.3	0.2
Summed Potential Emissions in tons/yr	13,369		
CO2e Total in tons/yr	13,450		

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: Emissions Calculations
New Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Emission Unit	MMBtu/hr
SVL-6-1	2
SVL-6-2	2
SVL-6-3	1.35
SVL-3-1	1.5
SVL-3-2	0.8
SVL-3-3	0.8
SVL-3-4	0.4
SVL-4-1	1.3
SVL-4-2	1.3
SVL-4-3	1.3
SVL-4-4	0.5
Total*	**13.3**

*Note = These 10 spray washer line units were previously uncalculated, but listed in the permit emission units.

Maxium Heat input Cap MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
13.3	1000	116.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.11	0.44	0.44	0.03	5.80	0.32	4.87

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.219E-04	6.964E-05	0.004	0.104	1.973E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.902E-05	6.384E-05	8.125E-05	2.205E-05	1.219E-04

Methodology is the same as page 1.

Total HAPs
1.095E-01

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	6,964	0.1	0.1
Summed Potential Emissions in tons/yr	6,964		
CO2e Total in tons/yr	7,007		

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

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

550 lbs/min throw rate

Shot Usage Rate	33000	pounds/hr

	PM	PM10	PM2.5
Emission Factors lbs/lb shot **	0.00400	0.00400	0.00400
Percentage of Emissions	100%	100%	100%
Potential Emissions lbs/hr	132.0	132.0	132.0
Potential Uncontrolled and Unlimited Emissions tons/yr*	**578.16**	**578.16**	**578.16**
Control Efficiency % = 95%			
Potential Controlled Emissions lb/hr	**6.6**	**6.6**	**6.6**
Potential Controlled Emissions tons/yr	**28.9**	**28.9**	**28.9**

** Emission Factors from STAPPA/ALAPCO factor of .004.

Potential to Emit PM/PM-10 Before Controls (pounds/hour) = PM/PM-10 Emission Emission factor (lbs/lb) * blast rate (lbs per hour).
Potential to Emit PM/PM-10 Before Controls (tons/year) = PM/PM-10 Emission Emission Rate (lbs/hour) * 8760 (hours/year) * 1 ton/2000 pounds
Potential Controlled Emissions tons/yr = Potential Uncontrolled and Unlimited Emissions tons/yr * (1- Control Efficiency)

Appendix A: Emission Calculations
Goff 3 Cubic Foot Blaster

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Shot Usage Rate 11400 pounds/hr Each

	PM	PM10	PM2.5
Emission Factors lbs/lb shot **	0.00400	0.00400	0.00400
Percentage of Emissions	100%	100%	100%
Potential Emissions lbs/hr (each unit)	45.6	45.6	45.6
Potential Uncontrolled and Unlimited Emissions tons/yr* (each unit)	**199.73**	**199.73**	**199.73**
Control Efficiency % : 95%			
Potential Controlled Emissions lb/hr (each unit)	**2.3**	**2.3**	**2.3**
Potential Controlled Emissions tons/yr (each unit)	**9.99**	**9.99**	**9.99**

** Emission Factors from STAPPA/ALAPCO factor of .004.

Potential to Emit PM/PM-10 Before Controls (pounds/hour) = PM/PM-10 Emission Emission factor (lbs/lb) * blast rate (lbs per hour).
Potential to Emit PM/PM-10 Before Controls (tons/year) = PM/PM-10 Emission Emission Rate (lbs/hour) * 8760 (hours/year) * 1 ton/2000 pounds
Potential Controlled Emissions tons/yr = Potential Uncontrolled and Unlimited Emissions tons/yr * (1- Control Efficiency)

*An evaluation was made on the control device being Intergral to the Process, and a determination made that the controls are NOT considered as integral. Therefore, potential emissions for the permit level were made without consideration for the control devices on this unit.

Appendix A: Emission Calculations
Empire Glass Bead Hand Blast

Company Name: Metal Improvement Company
Address City IN Zip: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Table 1 - Emission Factors for Abrasives

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

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	405
Glass Bead	25.25

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

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

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

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)

FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	420
D = Density of abrasive (lb/ft3) From Table 2 =	25.5
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.3125
ID1 = Nozzle internal diameter (in) from Table 3 =	0.3125

Flow Rate (FR) (lb/hr) = **108.182** per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =	0.010
FR = Flow Rate (lb/hr) =	108.182
w = fraction of time of wet blasting =	0 %
N = number of nozzles =	1

Uncontrolled Emissions =	**1.08 lb/hr**
	4.74 ton/yr
Controlled Emissions =	**0.01 lb/hr**
	0.05 ton/yr

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
E = EF x FR x (1-w/200) x N
w should be entered in as a whole number (if w is 50%, enter 50)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Metal Improvement Company
Source Address: 302 Mc Swain Drive Fremont, IN 46737
FESOP No.: 151-32268-00054
Reviewer: Joshua Levering
Date: Sept. 2012

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	2.0	2.0	4.0	40.0	160.0	1320	0.250	1.0	365.0
Vehicle (leaving plant) (one-way trip)	0.0	1.0	0.0	1.0	0.0	10000	1.894	0.0	0.0
		Totals	**4.0**		**160.0**			**1.0**	**365.0**

Average Vehicle Weight Per Trip = 40.0 tons/trip
Average Miles Per Trip = 0.25 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	40.0	40.0	40.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.745	0.749	0.1838	lb/mile
Mitigated Emission Factor, Eext =	3.424	0.685	0.1681	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.68	0.14	0.03	0.62	0.12	0.03
Vehicle (leaving plant) (one-way trip)	0.00	0.00	0.00	0.00	0.00	0.00
Totals	**0.68**	**0.14**	**0.03**	**0.62**	**0.12**	**0.03**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Jeff Hall
Metal Improvement Company
302 McSwain Dr
Fremont, IN 46737

DATE: April 25, 2013

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

SUBJECT: Final Decision
FESOP
151-32268-00054

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:
Peter Keck, Consultant
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.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Fremont Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Metal Improvement Company
Permit Number: 151-32268-00054

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 4/25/2013 Metal Improvement Company 151-32268-00054 (Final)		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	Type of Mail: **CERTIFICATE OF MAILING ONLY**

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		Jeff Hall Metal Improvement Company 302 McSwain Dr Fremont IN 46737 (Source CAATS) (CONFIRM DELIVERY)									
2		Mr. Peter Keck Compliance Consulting Service, Inc. 207 Hoosier Drive, Suite 4 Angola IN 46703 *(Consultant)*									
3		Steuben County Board of Commissioners 317 S Wayne Suite 2H Angola IN 46703 *(Local Official)*									
4		Steuben County Health Department 317 S. Wayne St, Community Center Suite 3-A Angola IN 46703-1938 *(Health Department)*									
5		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 *(Affected Party)*									
6		Fremont Town Council PO Box 10, 204 N. Coffin Street Fremont IN 47432 *(Local Official)*									
7		Mr. Diane Hanson 490 E 300 N Angola IN 46703 *(Affected Party)*									
8		Orland Town Council P.O. Box 445 Orland IN 46776 *(Local Official)*									
9		Fremont Public Library 1004 W Toledo St Fremont IN 46737 *(Library)*									
10		Acres Land Trust 1082 Chapman road Hunterstown IN 46748 *(Affected Party)*									
11		Fremont Development, LLC PO box 750 SR 827 N Fremont IN 46737 *(Affected Party)*									
12		Cardinal I. G. Company 301 East McSwain Drive Fremont IN 46737 *(Affected Party)*									
13											
14											
15											

Total number of pieces Listed by Sender	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 ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** 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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