



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: August 4, 2006
RE: Industrial Steel Corporation / 089-22406-00161
FROM: Nisha Sizemore
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, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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.



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Daniel Moore
Industrial Steel Construction, Inc.
86 North Bridge Street
Gary, IN 46404

August 4, 2006

Re: 089-22406-00161
Transition to TV from
FESOP Permit No.: F089-5330-00161

Dear Mr. Moore:

Industrial Steel Construction, Inc. was issued a FESOP on July 5, 2000 for a metal working and bridge beam fabrication source. A letter requesting the addition of one (1) mechanical blaster identified as EU #21 along with a request to transition from a FESOP to a Part 70 permit was received on December 12, 2005. Pursuant to the provisions of 326 IAC 2-8-9, a transition to a Part 70 operation permit is hereby approved as described in the attached Technical Support Document.

The following conditions are applicable to the Part 70 permit:

1. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
2. All requirements and conditions of this approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-9, this permit shall be revised by incorporating the significant source modifications into the permit and transitioning to a Part 70 permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised permit, with all revisions and amendments made to it, is being provided.



This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions on this matter call (800) 451-6027, and ask for Walter Habeeb or extension 2 - 8422, or dial (317) 232- 8422.

Sincerely,

Original signed by
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments

WVH

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Gary Department of Environmental Affairs
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Branch



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

NEW SOURCE REVIEW and PART 70 PERMIT OFFICE OF AIR QUALITY

**Industrial Steel Construction, Inc.
86 North Bridge Street
Gary, Indiana 46404**

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

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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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. ***This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures 326 IAC 2-7-10.5, applicable to those conditions.***

Operation Permit No.: T089-22406-00161	
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 4, 2006 Expiration Date: August 4, 2011

TABLE OF CONTENTS

A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	9
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]	
B.3	Enforceability [326 IAC 2-7-7]	
B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]	
B.16	Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4] [326 IAC 2-7-8(e)]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]	
B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]	
B.19	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.20	Source Modification Requirement [326 IAC 2-7-10.5]	
B.21	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24	Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62-FR 8341] [326 IAC 1-1-6]	
C	SOURCE OPERATION CONDITIONS.....	19
	Emission Limitations and Standards [326 IAC 2-7-5(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]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Fugitive Dust Emissions [326 IAC 6.8-10-3]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.9	Performance Testing [326 IAC 3-6]	

Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

C.15 Response to Excursions and Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
[326 IAC 2-3]

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
[326 IAC 2-3]

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS – Girder Shop 27

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD and Emission Offset Minor Limit [326 IAC 2-2] [326 IAC 2-3]

D.1.2 Emission Offset [326 IAC 2-3-2]

D.1.3 Hazardous Air Pollutants Limit [326 IAC 2-4.1] [MACT]

D.1.4 Particulate Matter [326 IAC 6.8-1-2]

D.1.5 Volatile Organic Compounds [326 IAC 8-2-9]

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

D.1.7 Hazardous Air Pollutants Emissions

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(5)(c)][326 IAC 2-1.1-11]

D.1.9 Volatile Organic Compounds (VOC)

D.1.10 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Particulate Matter (PM)

D.1.12 Visible Emissions Notations [326 IAC 2-7-6]

D.1.13 Parametric Monitoring

D.1.14 Monitoring of Smoke Eliminators

D.1.15 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.16 Record Keeping Requirements

D.1.17 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - EU #20 Paint Booth..... 34

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]

- D.2.2 Emission Offset [326 IAC 2-3]
- D.2.3 Regenerative Thermal Oxidizer
- D.2.4 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.5 Testing Requirements
- D.2.6 Volatile Organic Compounds (VOC)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.2.7 Parametric Monitoring
- D.2.8 Thermal Oxidizer Temperature

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.2.9 Record Keeping Requirements
- D.2.10 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - EU #19 Blaster..... 37

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Particulate Matter (PM) [326 IAC 6-1-2]
- D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.3 Particulate Matter (PM)
- D.3.4 Testing Requirements

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.5 Visible Emissions Notations [326 IAC 2-7-6]
- D.3.6 Parametric Monitoring
- D.3.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.8 Record Keeping Requirements

D.4 FACILITY OPERATION CONDITIONS - Insignificant Activities..... 40

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Emission Offset Minor Limit [326 IAC 2-3]
- D.4.2 Particulate Matter (PM) [326 IAC 6.8 -1-2]
- D.4.3 Fugitive Dust Emissions [326 IAC 6.8-10-3]
- D.4.4 Organic Solvent Degreasing Operations: Open top vapor degreaser operation [326 IAC 8-3-3]

Compliance Determination Requirements

- D.4.5 VOC Emissions

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.4.6 Record Keeping Requirements
- D.4.7 Reporting Requirements

Certification Report.....	44
Emergency Occurrence Report	45
Quarterly Reports.....	47-57
Quarterly Deviation and Compliance Monitoring Report	58

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Gary Department of Environmental Affairs. 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 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a miscellaneous metal working and bridge beam fabrication source.

Responsible Official:	Daniel Moore
Source Address:	86 North Bridge Street, Gary, Indiana 46404
Mailing Address:	86 North Bridge Street, Gary, Indiana 46404
General Source Phone Number:	219-885-7600
SIC Code:	3441 and 3449
County Location:	Lake County
Source Location Status:	Severe Nonattainment for Ozone based on the 1-hour standard Moderate Nonattainment for Ozone based on the 8-hour standard Nonattainment area for PM _{2.5} Attainment for CO, PM10, and Lead Primary Nonattainment for SOx
Source Status:	Part 70 Permit Program Minor Source, under PSD, and Major Source under Emission Offset Rules and Nonattainment NSR;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

#1 Blaster Conveyor Line

- (a) One (1) mechanical blaster, identified as EU #1, equipped with a baghouse identified as #1 for particulate matter control, installed in 1968, exhausting through Stack #1, capacity: a maximum media throughput of 160,800 pounds per hour or 720 linear feet of steel plates and shapes per hour.

Annex

- (b) One (1) mechanical blaster, identified as EU #2, equipped with a baghouse identified as #2 for particulate matter control, installed in 1990, exhausting through Stack #2, capacity: a maximum media throughput of 187,600 pounds per hour or 480 linear feet of steel plates per hour.

Girder Shop

- (c) One (1) paint booth, identified as EU #15, installed in 1977, exhausting to general ventilation, limited to less than 19.5 tons of VOC delivered to the applicators per year and 2.0 tons of PM/PM10 emissions per twelve (12) consecutive month period.
- (d) Electric arc stick welding, identified as EU #9, installed in 2001, capacity: 2.477 pounds of rods per minute.

- (e) Oxy Methane Cutting, including forty-seven (47) torches exhausting inside the building and two (2) DB torches equipped with smoke eliminators, collectively identified as EU #13, installed in 1998, which equals a total of forty-nine (49) torches operational. The forty-seven (47) torches, (excluding the two (2) DB torches) are limited to a total of 34,601,227 inches of one (1) inch steel cut per twelve (12) consecutive month period, rolled monthly.
- (f) One (1) blaster #3, identified as EU #18, installed in 1997, equipped with a baghouse identified as #18 for particulate matter control, exhausting through Stack #18, capacity: a maximum throughput of 328,500 lineal feet of steel plate per twelve (12) consecutive month period.
- (g) One (1) mechanical blaster #5, identified as EU #21, installed in 2006, equipped with a baghouse identified as #21 for particulate matter control and exhausting through Stack # 11. EU #21 will have a maximum media throughput of 487,000 pounds per hour with a capacity of 600 linear feet of steel plate per hour. The new blaster would clean scale from steel girders using steel shot.

Grinding

- (h) Two (2) plate sweep grinders, identified as part of EU #11, installed in 1990, capacity: 75 square feet of steel per hour total, limited to 18,000 square feet of steel plates per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (i) Two (2) slab grinders, identified as part of EU #11, installed in 1991, capacity: 613,200 tons of slabs per year total, limited to 111,116 tons of steel slabs per twelve (12) consecutive month period.

“A” Building

- (j) One (1) paint booth, known as EU #20, equipped with HVLP and/or airless applicators and dry filters for PM overspray, equipped with a natural gas-fired regenerative thermal oxidizer, identified as RTO 100, rated at 1.5 million British thermal units per hour, installed in 2001, exhausted through Stack #10, capacity: limited to 10,498 gallons of paint and 536 gallons of solvents per twelve (12) consecutive month period.
- (k) One (1) mechanical blaster/blowoff, known as EU #19, equipped with a baghouse identified as #19, exhausting through Stack #9, installed in 2001, capacity: 700 linear feet of steel plate per hour.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) boiler, identified as EU #7, rated at 1.8 million British thermal units per hour, installed in 1976, exhausting through Stack #7.
 - (2) Sixty-one (61) space heaters, identified as EU #8, rated at 14.2 million British thermal units per hour total.
 - (3) Four (4) preheat tables and torches, identified as EU #14, rated at 0.30 million British thermal units per hour each or 1.2 million British thermal units per hour total.
 - (4) One (1) natural gas-fired cure oven, rated at 1.4 million British thermal units per hour,

exhausted through Stack #10, to be installed in 2001.

- (5) One (1) natural gas-fired preheat oven, rated at 2.58 million British thermal units per hour, exhausted through Stack #10, to be installed in 2001.
- (b) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Four (4) open parts washers, identified as EU #12, capacity: 725 gallons per year, total.
- (i) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or;
 - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (k) Closed loop heating and cooling systems.
- (l) Any of the following structural steel and bridge fabrication activities:
 - (1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent.
 - (2) Using 80 tons or less of welding consumables.
- (m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (n) Paved and unpaved roads and parking lots with public access.

- (o) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) On-site fire and emergency response training approved by the department.
- (r) Any unit emitting less than five (5) pounds per hour or twenty-five (25) pounds per day of particulate matter: Hand grinding.

Building C

- (s) Two (2) stills, installed on August 1 and October 11, 2005, capacities 3 and 7 gallons of reclaimed solvents.

Girder Shop

- (t) Submerged arc welding identified as EU #17, installed in 1994, capacity: 18.25 tons of wire per month total or 219 tons of wire per year.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- (a) This permit, T089-22406-00161, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Enforceability [326 IAC 2-7-7]

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.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

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.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and

information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (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 2-7-5(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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility/emissions unit:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (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 or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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 and the Northwest 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 Section), or
Telephone Number: (317)-233-0178 (ask for Compliance Section)
Facsimile Number: (317)-233-6865

and

Northwest Regional Office
Telephone Number: (219)-757-0265
Facsimile Number: (219)-757-0267

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 2-7-5(3)(C)(ii) and must contain the following:

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). 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 emission. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) 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 2-7 and any other applicable rules.
 - (g) 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.
 - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T 089-22406-00161 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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 2-7-9(a)(3)]

- (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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (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 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-7 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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), 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 preconstruction approval required by 326 IAC 2-7-10.5 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 emissions trades that are subject to 326 IAC 2-7-20(b), (c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
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 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 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 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 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 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), 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.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][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 2-7-5(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 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted within ninety (90) days of issuance of this permit.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

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

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements [326 IAC 2-7-6(1)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 certification by the "responsible official" as defined by

326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements 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 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.14 Risk Management Plan [326 IAC 2-7-5(12)] [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.15 Response to Excursions and Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (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;
 - (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 maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

-
- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:
 - (1) starting in 2007 and every three (3) years thereafter, and
 - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater

than twenty-five (25) tons during the previous calendar year.

- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326IAC 2-2]
[326 IAC 2-3]

- (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. 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility that a "project" [as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)] at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" [as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)] may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" [as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)], the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" [as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)] at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

- (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" [as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1(II)] at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C-General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C-General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C-General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C-General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

#1 Blaster Conveyor Line

- (a) One (1) mechanical blaster, identified as EU #1, equipped with a baghouse identified as #1 for particulate matter control, installed in 1968, exhausting through Stack #1, capacity: a maximum media throughput of 160,800 pounds per hour or 720 linear feet of steel plates and shapes per hour.

Annex

- (b) One (1) mechanical blaster, identified as EU #2, equipped with a baghouse identified as #2 for particulate matter control, installed in 1990, exhausting through Stack #2, capacity: a maximum media throughput of 187,600 pounds per hour or 480 linear feet of steel plates per hour.

Girder Shop

- (c) One (1) paint booth, identified as EU #15, installed in 1977, exhausting to general ventilation, limited to less than 19.5 tons of VOC delivered to the applicators per year and 2.0 tons of PM/PM10 emissions per twelve (12) consecutive month period.
- (d) Electric arc stick welding, identified as EU #9, installed in 2001, capacity: 2.477 pounds of rods per minute, limited to 50 tons of rods per twelve (12) consecutive month period, rolled monthly.
- (e) Oxy Methane Cutting, including forty-seven (47) torches exhausting inside the building and two (2) DB torches equipped with smoke eliminators, collectively identified as EU #13, installed in 1998, which equals a total of forty-nine (49) torches operational. The forty-seven (47) torches, (excluding the two (2) DB torches) are limited to a total of 34,601,227 inches of one (1) inch steel cut per twelve (12) consecutive month period, rolled monthly.
- (f) One (1) blaster #3, identified as EU #18, installed in 1997, equipped with a baghouse identified as #18 for particulate matter control, exhausting through Stack #18, capacity: a maximum throughput of 328,500 linear feet of steel plate per twelve (12) consecutive month period.
- (g) One (1) mechanical blaster #5, identified as EU #21, installed in 2006, equipped with a baghouse identified as #21 for particulate matter control and exhausting through Stack # 11. EU #21 will have a maximum media throughput of 487,000 pounds per hour with a capacity of 600 linear feet of steel plate per hour. The new blaster would clean scale from steel girders using steel shot.

Grinding

- (h) Two (2) plate sweep grinders, identified as part of EU #11, installed in 1990, capacity: 75 square feet of steel per hour total, limited to 18,000 square feet of steel plates per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (i) Two (2) slab grinders, identified as part of EU #11, installed in 1991, capacity: 613,000 tons of slabs per year total.

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

Emission Limitations and Standards

D.1.1 Emission Offset Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following requirements:

- (a) The one (1) paint booth, identified as EU #15, shall emit less than two (2.0) tons of PM/PM10 per twelve (12) consecutive month period calculated using the following formula:

$$\text{PM/PM}_{10} \text{ (tpy)} = (\text{gal used/yr}) \times (\text{density lb/gal}) \times (\text{weight \% solids}) \times (1 \text{ ton}/2000\text{lb}) \\ \times (1 - 99\% \text{ transfer and enclosure efficiency}) - (\text{tons paint disposed/yr}) \\ \times (\text{average weight \% solids})$$

Compliance shall be determined at the end of each month. The paint booth EU #15 shall be enclosed in a permanent total enclosure.

- (b) The mechanical blaster, identified as EU #1 equipped with a baghouse for particulate matter control, shall have PM/PM₁₀ emissions of less than 2.68 pounds per hour. These conditions are necessary in order to limit the PM and PM₁₀ PTE from EU#1 to less than 11.74 tons per year.
- (c) The mechanical blaster, identified as EU #2 and equipped with a baghouse for particulate matter control, shall emit less than 0.59 pounds of PM/PM₁₀ per hour. These conditions are necessary in order to limit the PM and PM₁₀ PTE from EU#2 to less than 2.57 tons per year.
- (d) The input of rods to the electric arc stick welders, identified as EU #9 shall be limited to 650 tons of rods per twelve (12) consecutive month period, rolled monthly with compliance determined at the end of each month and shall emit less than 18.4 pounds of PM/PM₁₀ per 1000 pounds of rod. This usage limit is required to limit the potential to emit PM and PM₁₀ from EU #9 to 11.98 tons per year.
- (e) The input of steel plates to the two (2) plate sweep grinders, identified as EU #11, shall emit less than 0.0925 pounds of PM/PM₁₀ per square foot of plate swept and be limited to 18,000 square feet of steel plates per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM₁₀ PTE from the two (2) plate sweep grinders to less than 0.833 tons per year.
- (f) The input of steel slabs to the two (2) slab grinders, identified as EU #11, shall emit less PM/PM₁₀ than 0.0493 percent of the weight in tons of steel slab ground and shall be limited to 111,116 tons of steel slabs per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM₁₀ PTE from the two (2) steel slab grinders to less than 54.78 tons per year.
- (g) The emissions of PM/PM₁₀ from the forty-nine (49) torches, identified as EU #13, shall be limited to less than 0.0815 pounds per 1000 inch of 1 inch thick steel cut with a total of 34,601,227 inches of one (1) inch steel cut per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM₁₀ PTE from EU #13 to less than 1.96 tons per year.
- (h) Mechanical blaster #3, identified as EU #18 and equipped with a baghouse identified as #18 for particulate matter control, shall emit less than 0.58 pounds of PM/PM₁₀ per hour. These conditions are necessary in order to limit the PM and PM₁₀ PTE from EU#18 to less than 2.53 tons per year.
- (i) Mechanical blaster #5, identified as EU #21 and equipped with a baghouse identified as #21 for particulate matter control, shall emit less than 2.57 pounds of PM/PM₁₀ per hour. These conditions are necessary in order to limit the PM and PM₁₀ PTE from EU#21 to less than 11.26 tons per year.

D.1.2 Emission Offset [326 IAC 2-3-2]

One (1) paint area, identified as EU #15, will emit less than 19.5 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month.

This usage limit is structured such that when including the VOC emissions from EU #15, EU #20 and all insignificant sources, the total VOC emissions remain below twenty-five (25) tons per year per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

D.1.3 Hazardous Air Pollutants (HAP) Limit [326 IAC 2-4.1] (MACT)

The methyl ethyl ketone (MEK) emissions from EU#15 metal coating operations shall be limited to less than 10 tons per twelve (12) consecutive month period, rolled monthly, computed on a monthly basis according to the following equation:

$$\text{MEK Emissions (tons)} = \frac{\sum_{i=1}^n [\text{MEK content (lb/gal)}]_i [\text{paint or solvents applied by sprayers (gal)}]_i}{2000 \text{ lb/tn}}$$

$$- \frac{\sum_{j=1}^{m=12} [\text{paint disposed (lbs)}]_j \left[\frac{\sum_{i=1}^n [\text{MEK content (lb/gal)}]_i [\text{paint or solvent applied by sprayers (gal)}]_i}{[\text{total paint and solvent applied by sprayers (lbs)}]_j \times 2000 \text{ lb/tn}} \right]_j}{2000 \text{ lb/tn}}$$

where m = the number of months and n = the number of coatings and solvents used.

All other single HAP's will be limited to less than ten (10) tons per year with a limit of less than twenty-five (25) tons per year for all HAPs. Therefore, 326 IAC 2-4.1(MACT) does not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6.8-1-2]

- (a) The particulate matter (PM) emissions from each of the four (4) blasters, identified as EU #1, EU #2, EU #18 and EU #21, shall not exceed 0.03 grains per dry standard cubic foot. This requirement shall be satisfied through compliance with condition D.1.1.
- (b) The particulate matter (PM) emissions from EU #9, EU #11, EU13 and EU #17, shall not exceed 0.03 grains per dry standard cubic foot. Pursuant to 326 IAC 6.8-1-2 those facilities which do not have stacks or vents and are not totally enclosed shall comply with 326 IAC 5-1 and 326 IAC 6-4 in lieu of the 0.03 grains per dry standard cubic foot requirement.

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compounds (VOC) content of coatings delivered to the applicators in EU #15 metal coating operations shall be limited to 3.5 pounds of VOC per gallon of coating less water, for extreme performance coatings computed on a daily volume weighted basis. The daily volume weighted average of VOC content shall be calculated only when one (1) or more of the coating materials exceed a VOC content of 3.5 pounds of VOC per gallon of coating less water using the following formula, where n is the number of coatings (c):

$$\frac{\sum_{c=1}^n \text{coating } c \text{ (gal)} \times \text{H VOC content of } c \text{ (lbs/gal, less water)}}{\sum_{c=1}^n \text{coating } c \text{ (gal)}}$$

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

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit, is required for EU #1, EU #2, EU #9, EU #11, EU #13, EU #15, EU #17 and EU #21 and any control devices.

Compliance Determination Requirements

D.1.7 Hazardous Air Pollutant Emissions

Compliance with the MEK emission limitation contained in Condition D.1.3 shall be determined pursuant to 40 CFR 63.3941 using formulation data supplied by the coating and solvent manufacturers. IDEM, OAQ reserves the authority to determine compliance using Method 311 in 40 CFR 63 Appendix A. Compliance with Condition D.1.3 shall be demonstrated within 30 days of the end of each quarter based on the total MEK used by the sprayers for each of the quarter's three most recent twelve (12) month periods.

D.1.8 Testing Requirements [326 IAC 2-7-6(5)(c)][326 IAC 2-1.1-11]

In order to comply with Condition D.1.4, within five (5) years of October 8, 2003, the Permittee shall perform PM and PM₁₀ testing of EU #1, EU #2, and EU #18 (blasters #1, #2 and #3) utilizing test methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

Within 60 days after achieving capacity, but no later than 180 days after startup, the Permittee shall perform PM and PM₁₀ testing of EU #21 (blaster #5) utilizing test methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.9 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 VOC Emissions

Compliance with Condition D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Particulate Matter (PM)

- (a) In order to comply with Condition D.1.4, the baghouses for PM control shall be in operation and control emissions from the EU #1, EU #2, EU #18 and EU #21 (blasters #1, #2, #3 and #5) at all times that the blasting processes are in operation.
- (b) The smoke eliminators associated with the two (2) DB torches in EU #13 shall be in operation at all times that the DB torches are in operation.

D.1.12 Visible Emissions Notations [326 IAC 2-7-6]

- (a) Visible emission notations of the blaster stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the DB torches smoke eliminator exhausts in EU #13 shall be

performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit.

D.1.13 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the blasting processes, at least once per day when the blasting processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses for blasters #1 and #2 is outside the normal range of 2.0 and 6.0 inches of water and the normal range of 1.0 and 5.0 inches of water for blasters #3 and #5 or a range established during the latest stack tests, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.14 Monitoring of Smoke Eliminators

Daily inspections shall be performed to verify the placement and integrity of the smoke eliminators associated with the two (2) DB torches in EU #13. The Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.15 Broken or Failed Bag Detection

- (a) For a single compartment baghouse, controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse, controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouses pressure reading with abnormal

visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.16 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, D.1.5, and D.1.9, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken daily or monthly, as specified, and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC content limits established in Conditions D.1.2, D.1.5, and D.1.9.
- (1) The amount, density, and VOC and solids content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day, if necessary;
 - (4) The cleanup solvent usage for day;
 - (5) The total VOC usage for each day;
 - (6) The weight of VOCs emitted for each compliance period; and
 - (7) The total amount of coatings used.
- (b) To document compliance with Conditions D.1.3 the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken quarterly and shall be complete and sufficient to establish compliance with the MEK emission limit established in Condition D.1.3.
- (1) The amount of coating and MEK content of each coating material and solvent used. Records shall include usage records, material safety data sheets (MSDS), air quality data sheets, hazardous waste manifests, and product data sheets necessary to verify the type and amount of coating and solvent used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The weight of the coating and solvent mixture disposed each month;
 - (4) The volume of coatings and solvents used each month;
 - (5) The average MEK content of coatings and solvents used each month;
 - (6) The total MEK usage each month; and
 - (7) The weight of MEK emitted each month.
- (c) To document compliance with Condition D.1.12, the Permittee shall maintain records of daily visible emission notations of the four (4) blaster stack exhausts and the two (2) DB

torch smoke eliminator exhausts.

- (d) To document compliance with Condition D.1.13, the Permittee shall maintain a record of the pressure drops once per day during normal operation when venting to the atmosphere.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 (a) through D.1.1(j), D.1.2 and D.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

“A” Building - Paint Booth known as EU#20

Paint Line

- (j) One (1) paint booth, known as EU#20, equipped with HVLP and/or airless applicators and dry filters for PM overspray, equipped with a natural gas-fired regenerative thermal oxidizer, identified as RTO 100, rated at 1.5 million British thermal units per hour, installed in 2001, exhausted through Stack #10, capacity: limited to 10,498 gallons of paint and 536 gallons of solvents per twelve (12) consecutive month period.

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

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

D.2.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-1-2] [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, delivered to HVLP paint applicators.
- (b) Based upon 326 IAC 8-1-2(c) and a minimum overall control efficiency of 69.1% (the overall control efficiency equals: (capture efficiency) x (destruction efficiency)), the VOC content of the coating shall not exceed 21.6 pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.2.2 Emission Offset Minor Limit [326 IAC 2-3]

- (a) Pursuant to OP-089-22406-00161, the potential to emit VOC from EU #20 shall be limited to less than 1.51 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (b) The total amount of VOC delivered to the coating applicator shall be limited to less than 47.04 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This limit in conjunction with the overall control efficiency of the regenerative thermal oxidizer of 69.1% limits the potential to emit VOC from the coating applicators to less than 1.51 tons per year.
- (c) This usage limit is structured such that when including the VOC emissions from EU #15, EU #20 and all insignificant sources, the total VOC emissions remain below twenty-five (25) tons per year per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.4 Regenerative Thermal Oxidizer

- (a) The regenerative thermal oxidizer shall operate at all times that the process is in operation.
- (b) When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, and to maintain the pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator to less than 3.5, the thermal oxidizer shall maintain a minimum overall control efficiency of 69.1%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2).
- (c) The overall control efficiency of the thermal oxidizer for EU # 20 shall be no less than the equivalent overall efficiency calculated by the following equation:

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

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

D.2.5 Testing Requirements [326 IAC 2-7-6(5)(c)] [326 IAC 2-1.1-11]

Within five (5) years of October 8, 2003, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing of EU #20 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.7 Parametric Monitoring

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1, as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.
- (c) When for any one reading, the duct pressure or fan amperage is outside the normal range as established in most recent compliant stack test, the Permittee shall take reasonable

response steps in accordance with Section C - Response to Excursion or Exceedances. A reading that is outside the range as established in the most recent compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursion or Exceedances shall be considered a deviation from this permit.

D.2.8 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1,400°F.
- (b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature as observed during the compliant stack test.
- (d) The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursion or Exceedances whenever the hourly average temperature of the thermal oxidizer is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursion or Exceedances shall be considered a deviation from this permit.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.6, D.2.7 and D.2.8, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.2.1 and D.2.2 as well as the monitoring requirements of Condition D.2.6, D.2.7 and D.2.8.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
 - (6) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.

- (7) Daily records of the duct pressure or fan amperage.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official " as defined by 326 IAC 2-7-1.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

“A” Building - Blaster/blowoff, known as EU#19

- (k) One (1) mechanical blaster/blowoff, known as EU#19, equipped with a baghouse identified as #19, exhausting through Stack #9, installed in 2001, capacity: 700 lineal feet of steel plate per hour.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6.8-1-2] [326 IAC 2-2] [326 IAC 2-3]

- (a) In order to render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable, emissions from Stack # 9 of the mechanical blaster/blowoff, known as EU#19, shall not exceed a limit of 1.25 pounds of PM/PM10 per hour. This will limit the PM/PM10 PTE from EU #19 to less than 5.45 tons per year.
- (b) Pursuant to 326 IAC 6.8-1-2, the particulate matter (PM) emissions from EU #19 shall not exceed 0.03 grains per dry standard cubic foot.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.3 Particulate Matter (PM)

In order to comply with Condition D.3.1, the baghouse for PM control shall be in operation and control emissions from the mechanical blaster/blowoff, known as EU#19, at all times that the mechanical blaster/blowoff is in operation.

D.3.4 Testing Requirements [326 IAC 2-7-6(5)(c)] [326 IAC 2-1.1-11]

Within five (5) years of October 8, 2003, the Permittee shall perform PM and PM₁₀ testing of the EU #19, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM and PM₁₀ testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visible Emissions Notations [326 IAC 2-7-6]

- (a) Visible emission notations of the mechanical blaster/blowoff stack exhaust #9 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of

the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit.

D.3.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the mechanical blaster/blowoff process, at least once per day when the mechanical blaster/ blowoff process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse for mechanical blaster/blowoff is outside the normal range of 1.5 to 6.5 inches of water or a range established during the latest stack tests. The Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse, controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouses pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.8 Record Keeping Requirements

- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of visible emission notations once per day of the mechanical blaster/blowoff stack exhaust #9.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
 - (1) Daily records of the pressure drop during normal operation when venting to the atmosphere:
 - (3) Documentation of the dates vents are redirected.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: - Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) boiler, identified as EU #7, rated at 1.8 million British thermal units per hour, installed in 1976, exhausting through Stack #7.
 - (2) Sixty-one (61) space heaters, identified as EU #8, rated at 14.2 million British thermal units per hour total.
 - (3) Four (4) preheat tables and torches, identified as EU #14, rated at 0.30 million British thermal units per hour each or 1.2 million British thermal units per hour total.
 - (4) One (1) natural gas-fired cure oven, rated at 1.4 million British thermal units per hour, exhausted through Stack #10, to be installed in 2001.
 - (5) One (1) natural gas-fired preheat oven, rated at 2.58 million British thermal units per hour, exhausted through Stack #10, to be installed in 2001.
- (b) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Four (4) open parts washers, identified as EU #12, capacity: 72.5 gallons per year, total.
- (i) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or;

<p>(2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.</p> <p>(j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.</p> <p>(k) Closed loop heating and cooling systems.</p> <p>(l) Any of the following structural steel and bridge fabrication activities:</p> <p>(1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent.</p> <p>(2) Using 80 tons or less of welding consumables.</p> <p>(m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.</p> <p>(n) Paved and unpaved roads and parking lots with public access.</p> <p>(o) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.</p> <p>(p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.</p> <p>(q) On-site fire and emergency response training approved by the department.</p> <p>(r) Any unit emitting less than five (5) pounds per hour or twenty-five (25) pounds per day of particulate matter: Hand grinding.</p> <p>Building C</p> <p>(s) Two (2) stills, installed in August 1 and October 11, 2005, capacities 3 and 7 gallons of reclaimed solvents.</p> <p>Girder Shop</p> <p>(t) Submerged arc welding identified as EU #17, installed in 1994, capacity: 18.25 tons of wire per month or 219 tons of wire per year.</p> <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p>

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Emission Offset Minor Limit [326 IAC 2-3]

The VOC used by the four (4) open parts washers, identified as EU #12, shall be less than a total of 1.50 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month. This usage limit is required to limit the source's potential to emit VOC to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

D.4.2 Particulate Matter (PM) [326 IAC 6.8-1-2]

- (a) Pursuant to 326 IAC 6.8-1-2(a) (Nonattainment Area Particulate Limitations), PM/PM10 emissions from the brazing equipment, cutting torches soldering equipment, welding equipment structural steel and bridge fabrication activities and hand grinding shall be limited to 0.03 grain per dry standard cubic foot.
- (b) Pursuant to 326 IAC 6.8-1-2, the particulate matter emissions from the 1.80 million British thermal units per hour natural gas-fired boiler, identified as EU #7, shall not exceed 0.01 grains per dry standard cubic foot of exhaust air.
- (c) Pursuant to 326 IAC 6.8-1-2, the emissions from the submerged arc welding operation EU #17 shall be limited to less than 0.036 pounds of PM/PM10 per pound of welding wire used with a limit of 18.25 tons of wire per month or 130 tons per twelve (12) consecutive month period, with compliance determined at the end of the month. This condition is necessary in order to limit the PM/PM10 PTE from EU #17 to less than 0.01 tons per year.

D.4.3 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent

(20%), three (3) minute average opacity standard.

D.4.4 Organic Solvent Degreasing Operations: Open top vapor degreaser operation [326 IAC 8-3-3]

The four (4) open parts washers, identified as EU #12, are subject to this rule. The owner or operator of open top vapor degreasers shall:

- (a) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover closed at all times except when processing work loads through the degreaser;
- (c) minimize solvent carryout by:
 - (1) racking parts to allow complete drainage;
 - (2) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) tipping out any pools of solvent on the cleaned parts before removal; and
 - (5) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

Compliance Determination Requirements

D.4.5 VOC Emissions

Compliance with Condition D.4.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.6 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC content limits established in Condition D.4.1.
- (1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) The total VOC usage for each month; and
 - (3) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Industrial Steel Construction, Inc.
Source Address: 86 North Bridge Street, Gary, Indiana 46404
Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
Part 70 Permit No.: 089-22406-00161

**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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**Part 70 Operating Permit
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Industrial Steel Construction, Inc.
Source Address: 86 North Bridge Street, Gary, Indiana 46404
Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
Permit No.: OP 089-22406-00161

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
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) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

9 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(c)
The Permittee must submit notice in writing within ten (10) calendar days

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

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

Page 2 of 2

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

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

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facility: One (1) paint booth, EU #15
 Parameter: VOC and PM/PM10 including coatings, dilution solvents delivered to the applicators, and cleaning solvents
 Limit: Less than 19.5 tons VOC and 2.0 tons PM10 per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	VOC this Month (tons)	PM Emitted this Month (tons)	VOC Previous 11 Months (tons)	PM Emitted Previous 11 Months (tons)	VOC 12 Month Total (tons)	PM Emitted 12 Month Total (tons)

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
Source Address: 86 North Bridge Street, Gary, Indiana 46404
Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
Permit No.: OP 089-22406-00161
Facilities: Twelve (12) electric arc stick welders, EU #9
Parameter: Rods
Limit: Six hundred and fifty (650) tons total per twelve (12) consecutive month period, rolled monthly.

YEAR: _____

Month	Rods (tons)	Rods (tons)	Rods (tons)
	This Month	Previous 11 Months	12 Month Total

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facilities: Twelve (12) submerged arc welding heads, EU #17
 Parameter: Wire
 Limit: One hundred and thirty (130) tons total per twelve (12) consecutive month period, rolled monthly.

YEAR: _____

Month	Wire (tons)	Wire (tons)	Wire (tons)
	This Month	Previous 11 Months	12 Month Total

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facilities: Two (2) plate sweep grinders, EU #11
 Parameter: Area of steel plates swept
 Limit: 18,000 square feet of steel plates swept per twelve (12) consecutive month period,
 with compliance determined at the end of each month.

YEAR: _____

Month	Steel Plates Swept (tons)	Steel Plates Swept (tons)	Steel Plates Swept (tons)
	This Month	Previous 11 Months	12 Month Total

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
Source Address: 86 North Bridge Street, Gary, Indiana 46404
Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
Permit No.: OP 089-22406-00161
Facilities: Two (2) slab grinders, EU #11
Parameter: Tons of steel slabs
Limit: 111,116 tons of steel slabs ground per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Steel Slabs Ground (tons)	Steel Slabs Ground (tons)	Steel Slabs Ground (tons)
	This Month	Previous 11 Months	12 Month Total

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
Source Address: 86 North Bridge Street, Gary, Indiana 46404
Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
Permit No.: OP 089-22406-00161
Facility: One (1) paint booth, EU #20
Parameter: VOC used
Limit: Not to exceed 47.04 tons of VOC per twelve (12) consecutive month period, rolled monthly.

YEAR: _____

Month	VOC (tons) This Month	VOC (tons) Previous 11 Months	VOC (tons) 12 Month Total

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facilities: Forty-seven (47) torches (excluding the two (2) DB torches), EU #13
 Parameter: Inches of one (1) inch steel cut
 Limit: 34,601,227 inches total per twelve (12) consecutive month period, rolled monthly.

YEAR: _____

Month	Inches of one (1) inch steel cut	Inches of one (1) inch steel cut	Inches of one (1) inch steel cut
	This Month	Previous 11 Months	12 Month Total

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

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

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facilities: Four (4) parts washers, EU #12
 Parameter: VOC usage
 Limit: Less than 1.50 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	VOC (tons)	VOC (tons)	VOC (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Quarterly Report

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Permit No.: OP 089-22406-00161
 Facilities: EU #15, paint booth
 Parameter: methyl ethyl ketone (MEK) usage
 Limit: Less than 10.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	MEK (tons)	MEK (tons)	MEK (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Industrial Steel Construction, Inc.
 Source Address: 86 North Bridge Street, Gary, Indiana 46404
 Mailing Address: 86 North Bridge Street, Gary, Indiana 46404
 Part 70 Permit No.: 089-22406-00161

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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:

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a New Source Construction
and Part 70 Permit**

Source Description and Location	
--	--

Source Name:	Industrial Steel Construction, Inc.
Source Location:	86 North Bridge Street, Gary, Indiana 46404
County:	Lake
SIC Code:	3441
Operation Permit No.:	F 089-5330-00161
Operation Permit Issuance Date:	July 6, 2000
Part 70 Permit No.:	T 089-22406-00161
Permit Reviewer:	Walter Habeeb

The Office of Air Quality has reviewed a Part 70 Operating Permit application from Industrial Steel Construction, Inc. relating to the operation of a miscellaneous metal working and bridge beam fabrication source.

This Part 70 operating permit contains provisions intended to satisfy the requirements of the construction permit rules.

Permitted Emission Units and Pollution Control Equipment	
---	--

#1 Blaster Conveyor Line

- (a) One (1) mechanical blaster, identified as EU #1, equipped with a baghouse identified as #1 for particulate matter control, installed in 1968, exhausting through Stack #1, capacity: a maximum media throughput of 160,800 pounds per hour or 720 linear feet of steel plates and shapes per hour.

Annex

- (b) One (1) mechanical blaster, identified as EU #2, equipped with a baghouse identified as #2 for particulate matter control, installed in 1990, exhausting through Stack #2, capacity: a maximum media throughput of 187,600 pounds per hour or 480 linear feet of steel plates per hour.

Girder Shop

- (c) One (1) paint booth, identified as EU #15, installed in 1977, exhausting to general ventilation, limited to less than 19.5 tons of VOC delivered to the applicators per year and 2.0 tons of PM/PM10 emissions per twelve (12) consecutive month period.
- (d) Electric arc stick welding, identified as EU #9, installed in 2001, capacity: 2.477 pounds of rods per minute.
- (e) Oxy Methane Cutting, including forty-seven (47) torches exhausting inside the building and two (2) DB torches equipped with smoke eliminators, collectively identified as EU #13, installed in 1998, which equals a total of forty-nine (49) torches operational. The forty-seven (47) torches, (excluding the two (2) DB torches) are limited to a total of 34,601,227 inches of one (1) inch steel cut per twelve (12) consecutive month period, rolled monthly.
- (f) One (1) blaster #3, identified as EU #18, installed in 1997, equipped with a baghouse identified as #18 for particulate matter control, exhausting through Stack #18, capacity: a maximum throughput of 328,500 linear feet of steel plate per twelve(12) consecutive month period.

Grinding

- (h) Two (2) plate sweep grinders, identified as part of EU #11, installed in 1990, capacity: 75 square feet of steel per hour total, limited to 18,000 square feet of steel plates per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (i) Two (2) slab grinders, identified as part of EU #11, installed in 1991, capacity: 613,200 tons of slabs per year total, limited to 111,116 tons of steel slabs per twelve (12) consecutive month period.

“A” Building

- (j) One (1) paint booth, known as EU #20, equipped with HVLP and/or airless applicators and dry filters for PM overspray, equipped with a natural gas-fired regenerative thermal oxidizer, identified as RTO 100, rated at 1.5 million British thermal units per hour, installed in 2001, exhausted through Stack #10, capacity: limited to 10,498 gallons of paint and 536 gallons of solvents per twelve (12) consecutive month period.
- (k) One (1) mechanical blaster/blowoff, known as EU #19, equipped with a baghouse identified as #19, exhausting through Stack #9, installed in 2001, capacity: 700 linear feet of steel plate per hour.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (g) One (1) mechanical blaster #5, identified as EU #21, installed in 2006, equipped with a baghouse identified as #21 for particulate matter control and exhausting through Stack # 11. EU #21 will have a maximum media throughput of 487,000 pounds per hour with a capacity of 600 linear feet of steel plate per hour. The new blaster would clean scale from steel girders using steel shot.

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) boiler, identified as EU #7, rated at 1.8 million British thermal units per hour, installed in 1976, exhausting through Stack #7.
 - (2) Sixty-one (61) space heaters, identified as EU #8, rated at 14.2 million British thermal units per hour total.
 - (3) Four (4) preheat tables and torches, identified as EU #14, rated at 0.30 million British thermal units per hour each or 1.2 million British thermal units per hour total.
 - (4) One (1) natural gas-fired cure oven, rated at 1.4 million British thermal units per hour, exhausted through Stack #10, to be installed in 2001.
 - (5) One (1) natural gas-fired preheat oven, rated at 2.58 million British thermal units per hour, exhausted through Stack #10, to be installed in 2001.
- (b) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.

- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Four (4) open parts washers, identified as EU #12, capacity: 725 gallons per year, total.
- (i) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or;
 - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (k) Closed loop heating and cooling systems.
- (l) Any of the following structural steel and bridge fabrication activities:
 - (1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent.
 - (2) Using 80 tons or less of welding consumables.
- (m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (n) Paved and unpaved roads and parking lots with public access.
- (o) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) On-site fire and emergency response training approved by the department.
- (r) Any unit emitting less than five (5) pounds per hour or twenty-five (25) pounds per day of particulate matter: Hand grinding.

Building C

- (s) Two (2) stills, installed on August 1 and October 11, 2005, capacities 3 and 7 gallons of reclaimed solvents located in Building C.

Girder Shop

- (t) Submerged arc welding, identified as EU #17, installed in 1994, capacity: 18.25 tons of wire per month total or 219 tons of wire per year located in the Girder Shop.

Existing Approvals

The source has been operating under FESOP No. 089-5330-00161 issued on July 6, 2000. The source has since received the following approvals:

- (a) Significant Permit Revision No. 089-21250-00161, issued on September 6, 2005;
- (b) Significant Permit Revision No. 089-20238-00161, issued on January 12, 2005;
- (c) Significant Permit Revision No. 089-14370-00161, issued on January 10, 2002; and
- (d) FESOP Reopening No. 089-13068-00161, issued on September 24, 2001.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

- (a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

- (b) All conditions necessary to render the requirements of Part 70 not applicable.

Reason not incorporated: The source is transitioning to a Part 70 permit; therefore, the FESOP limits are no longer applicable.

Enforcement Issue

There are no pending enforcement actions related to this modification.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 19, 2005. Additional information was received on January 26, 2006.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Stack Summary

Stack summary of emission units #9, #20 and #21.

Stack ID	Operation	Height (feet)	Outlet Dimensions (feet)	Flow Rate (acfm)	Temperature (°F)
9	EU #9 Mech. Blaster/Blowoff	30	2.0	29,052	68
10	Paint Booth EU #20	30	3.0	15,730	700
11	No. 5 Mechanical Blaster EU #21	20	3 X 2.7	30,000	70

Potential to Emit of the Source

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

Pollutant	PTE of New Emission Unit Before Controls (tpy)
PM	563.14
PM10	563.14
SO ₂	0.00
VOC	0.00
CO	0.00
NO _x	0.00
HAPs	0.00

Potential to Emit of New Unit After Controls (tpy)						
Process/Emission Unit	PM	PM10	SO ₂	VOC	CO	NO _x
EU #21 Mechanical Blaster (new equip)	11.26	11.26	0.00	0.00	0.00	0.00
PSD Major Source Threshold	250	250	100	25	250	100
Emission Offset	250	100	100	25	250	100

(PM2.5)						
Summary of Potential Emissions of Source with New Unit – After Controls and Limits (tpy)						
Emission Unit #	PM	PM10	SO2	NOx	VOC	CO
1 (Blaster #1)	11.74	11.74	0.00	0.00	0.00	0.00
2 (Blaster #2)	2.57	2.57	0.00	0.00	0.00	0.00
7 (Boiler #2) (insig)	0.014	0.057	0.005	0.751	0.041	0.631
8 (Comb. Units) (insig)	0.144	0.576	0.046	7.584	0.417	6.37
9 (Stick Welders)	11.98	11.98	0.00	0.00	0.00	0.00
11 (Grinders)	55.61	55.61	0.00	0.00	0.00	0.00
12 (Parts Washers) (insig)	0.00	0.00	0.00	0.00	1.50	0.00
13 (Torches)	1.96	1.96	0.00	0.00	0.00	0.00
14 (Preheat Table & Torches) (insig)	0.010	0.038	0.003	0.501	0.028	0.42
15 (Paint Booth)	2.0	2.0	0.00	0.00	19.50	0.00
17 (Arc Welding)	0.01	0.01	0.00	0.00	0.00	0.00
18 (Blaster #3)	2.53	2.53	0.00	0.00	0.00	0.00
19 (Mech. Blaster)	5.45	5.45	0.00	0.00	0.00	0.00
20 (Paint Booth)	1.63	1.63	0.00	0.00	1.51	0.00
20 (RTO Comb.) (insig)	0.012	0.048	0.004	0.626	0.034	0.526
21 (Mech. Blaster) (New Unit)	11.26	11.26	0.00	0.00	0.00	0.00
Other Insig. Activities	3.34	3.34	0.00	0.00	1.00	0.00
Subtotal Sig. EU	106.73	106.73	0.00	0.626	21.01	0.00
Subtotal Insig. Activities	3.52	4.03	0.058	8.84	3.02	7.947
Total Potential Emissions without EU #21	99.00	99.00	0.058	9.47	24.03	7.947
Total Potential Emission with EU #21	110.25	110.76	0.058	9.47	24.03	7.947

The addition of the new equipment to an existing stationary source is not a major modification under 326 IAC 2-2 and 326 IAC 2-3 because the total controlled emissions from the source are not major. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) do not apply.

Limited HAP Usage	
Methyl ethyl ketone from EU #15 process will be limited to	< 10.0 tpy
Total HAP usage limit from EU #15 process including methyl ethyl ketone	21.5 tpy
Maximum HAP Emissions from Processes Excluding EU15	3.0 tpy
Total HAP Emissions Limit to Remain a Synthetic Minor Source of HAPs	24.5 tpy

Total HAPs from All Processes Excluding EU15		
HAP	Before Controls	After Controls
Methylnaphthalene	2.34E-06	2.34E-06
Antimony	2.93E-01	2.93E-01
Arsenic	1.60E-02	1.60E-02
Benzene	6.48E-04	6.48E-04
Cadmium	5.98E-04	5.98E-04
Chromium	6.76E+00	1.61E-01
Cobalt	9.62E-03	9.62E-03
Dichlorobenzene	1.17E-04	1.17E-04
Ethyl benzene	1.33E-03	3.28E-04
Fluoranthene	2.92E-07	2.92E-07
Fluorene	2.73E-07	2.73E-07
Formaldehyde	7.30E-03	7.30E-03
Hexane	1.75E-01	1.75E-01
Lead	2.98E-01	2.98E-01
Manganese	1.12E+01	1.28E-00
Mercury	2.53E-05	2.53E-05
Methanol	1.19E+01	5.93E-01
Methyl tert-butyl ether	1.33E-03	1.33E-03
Naphthalene	9.56E-04	9.56E-04
Nickel	1.79E-00	1.37E-01
Phenanathrene	1.66E-06	1.66E-06
Pyrene	4.87E-07	4.87E-07
Toluene	3.31E-04	3.31E-04
Xylenes	4.06E-04	2.03E-05
Total HAPs (TPY)	32.4	3.0

The most used single HAP is methyl ethyl ketone which is used at EU #15 only. To remain a minor source of HAP emissions, Industrial Steel Construction will limit methyl ethyl ketone usage to less than 10 tons per year. This will limit HAP's emissions from this source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for all HAPs.

The potential to emit of PM and PM10 is equal to or greater than 1000 tons per year. Therefore the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 2004 emission data received from the source.

Pollutant	Actual Emissions (tpy)
PM	not reported
PM10	0.8061
SO ₂	0.0081
VOC	21.36
CO	1.134
NO _x	1.35
HAP	not reported

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM10	Attainment
PM2.5	Nonattainment
SO ₂	Nonattainment
NO ₂	Attainment
1-hour Ozone	Severe nonattainment
8-hour Ozone	Moderate nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
- (1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standard. Lake County has been designated as severe nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (2) VOC and NO_x emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions pursuant to the Nonattainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) This source is in a portion of Lake County that has been classified as nonattainment in Indiana for SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (d) Lake County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission

Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification and new emission unit:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) HAPs emissions from this source will be limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for all HAPs to render the requirements of National Emission Standards for Hazardous Air Pollutants, 326 IAC 20, 40 CFR 63 not applicable.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tpy)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU #21 (Blaster #5) (PM)	Baghouse	Y	563.14	11.26	100	Y	N
EU #21 (Blaster #5) (PM10)	Baghouse	Y	563.14	11.26	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to EU #21 (Blaster #5) for PM and PM10 upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

The addition of EU #21(Mechanical Blaster #5) will not change the applicability of any other Federal Rules. All other equipment in this permit remains unchanged from Significant Permit Revision 089-21250-00161.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-1.1-5 (NSR Nonattainment)

Lake County has been designated as nonattainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit 100 tpy of any regulated pollutant. Industrial Steel Construction, Inc. has a limited potential to emit of PM10 below 100 tpy. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-3 does not apply.

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is in an attainment county for particulate matter and has the potential to emit greater than two hundred and fifty (250) tons per year of particulate matter. However, this source has chosen to limit PM emissions to less than two hundred and fifty (250) tons per year in order to become a minor source under Prevention of Significant Deterioration and it is not 1 of 28 listed sources categories. The source will render PSD not applicable by complying with the following requirements:

- (a) The one (1) paint booth, identified as EU #15, shall emit less than two (2.0) tons of PM/PM10 per twelve (12) consecutive month period calculated using the following formula:

$$\text{PM/PM10 (tpy)} = (\text{gal used/yr}) \times (\text{density lb/gal}) \times (\text{weight \% solids}) \times (1 \text{ ton}/2000\text{lb}) \\ \times (1 - 99\% \text{ transfer and enclosure efficiency}) - (\text{tons paint disposed/yr}) \\ \times (\text{average weight \% solids})$$

Compliance shall be determined at the end of each month. The paint booth EU #15 shall be enclosed in a permanent total enclosure.

- (b) The mechanical blaster, identified as EU #1 equipped with a baghouse identified as #1 for particulate matter control, shall have PM/PM10 emissions of less than 2.68 pounds per hour. These conditions are necessary in order to limit the PM and PM10 PTE from EU#1 to less than 11.74 tons per year.
- (c) The mechanical blaster, identified as EU #2 and equipped with a baghouse identified as #2 for particulate matter control, shall emit less than 0.59 pounds of PM/PM10 per hour. These conditions are necessary in order to limit the PM and PM10 PTE from EU#2 to less than 2.57 tons per year.
- (d) The input of rods to the electric arc stick welders, identified as EU #9 shall be limited to 650 tons of rods per twelve (12) consecutive month period, rolled monthly with compliance determined at the end of each month and shall emit less than 18.4 pounds of PM/PM10 per 10000 pounds of rod. This usage limit is required to limit the potential to emit PM and PM₁₀ from EU #9 to 11.98 tons per year.
- (e) The input of steel plates to the two (2) plate sweep grinders, identified as EU #11, shall emit less than 0.0925 pounds of PM/PM10 per square foot of plate swept and be limited to 18,000

square feet of steel plates per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM10 PTE from the two (2) plate sweep grinders to less than 0.833 tons per year.

- (f) The input of steel slabs to the two (2) slab grinders, identified as EU #11, shall emit less PM/PM10 than 0.0493 percent of the weight in tons of steel slab ground and shall be limited to 111,116 tons of steel slabs per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM10 PTE from the two (2) steel slab grinders to less than 54.78 tons per year.
- (g) The forty-nine (49) torches, identified as EU #13, shall be limited to less than 0.0815 pounds per 1000 inch of 1 inch thick steel cut with a total of 34,601,227 inches of one (1) inch steel cut per twelve (12) consecutive month period, with compliance determined at the end of each month. These conditions are necessary in order to limit the PM/PM10 PTE from EU #13 to less than 1.96 tons per year.
- (h) Mechanical blaster #3, identified as EU #18 and equipped with a baghouse identified as #18 for particulate matter control, shall emit less than 0.58 pounds of PM/PM10 per hour. These conditions are necessary in order to limit the PM and PM10 PTE from EU#18 to less than 2.53 tons per year.
- (i) Mechanical blaster #5, identified as EU #21 and equipped with a baghouse identified as #21 for particulate matter control, shall emit less than 2.57 pounds of PM/PM10 per hour. This condition is necessary in order to limit the PM and PM10 PTE from EU#21 to less than 11.26 tons per year.
- (j) One (1) mechanical blaster/blowoff, known as EU #19, equipped with a baghouse identified as #19, exhausting through Stack #9, with a maximum capacity of 700 linear feet of steel plates per hour shall not exceed emissions of 1.25 pounds of PM/PM10 per hour. This will limit the PM/PM10 PTE from EU #19 to less than 5.45 tons per year.

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

HAPs emissions from this source will be limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for all HAPs. Therefore, 326 IAC 2-4.1(MACT) does not apply.

326 IAC 2-3-2 Emission Offset

One (1) paint area, identified as EU #15, will emit less than 19.5 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month.

One (1) paint booth, identified as EU #20, equipped with HVLP applicators and a natural gas-fired regenerative thermal oxidizer (RTO 100) will use less than 47.04 tons of VOC, including coatings, dilution solvents and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month. The overall control efficiency of the thermal oxidizer shall be no less than 69.1% which will limit VOC emissions to 1.51 tons per year.

The VOC used by the four (4) open parts washers, identified as EU #12, shall be less than a total of 1.50 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month.

These usage limits are structured such that when including the VOC emissions from EU #15, EU #20 and all insignificant sources, the total VOC emissions from the source remain below twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 2-6 (Emission Reporting)

Since this source is electing to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially starting in July 1, 2007 with subsequent reports due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 6.8-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6.8-1-2, the source is located in Lake County and has actual PM emission over ten (10) tons per year, therefore it shall comply with limitations in 326 IAC 6.8-1-2. The non-fugitive facilities (blasters EU #1, EU #2, EU #7, EU #18, EU #19 and EU #21) shall meet the allowable PM emission limitation pursuant to 326 IAC 6.8-1-2 (a) of 0.03 grains per standard dry cubic feet per minute. The five (5) blasters (EU #1, EU #2, EU #7, EU #18, EU #19 and EU #21), equipped with baghouses are capable of complying with the limit of 0.03 grains per dry standard cubic foot of outlet air.

The fugitive PM emissions from electric arc stick welding EU # 9, plate sweep grinders and slab grinders EU #11, oxy methane cutting torches EU #13 and submerged arc welders EU #17 shall meet the allowable PM emission limitation pursuant to 326 IAC 5-1 and 326 IAC 6-4 in lieu of 326 IAC 6.8-1-2(a).

Pursuant to 326 IAC 6.8-1-2(a) (Nonattainment Area Particulate Limitations), PM/PM10 emissions from the brazing equipment, cutting torches soldering equipment, welding equipment structural steel and bridge fabrication activities and hand grinding shall be limited to 0.03 grain per dry standard cubic foot.

Pursuant to 326 IAC 6.8-1-2, the particulate matter emissions from the 1.80 million British thermal units per hour natural gas-fired boiler, identified as EU #7, shall not exceed 0.01 grains per dry standard cubic foot of exhaust air.

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:

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

326 IAC 6.8-10-3 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (d) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (e) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (f) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (g) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (h) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (j) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, which shall be submitted within 90 days of issuance of permit 089-22406-00161.

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations) does not apply to this source because the source does not have the potential to emit greater than twenty-five (25) tons per year of SO₂ and therefore is not subject to 326 IAC 7-4-1.1.

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

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) applies to this source because the source is in Lake County and the coating facility at the source has the potential to emit greater than ten (10) tons per year of VOC. However, as specified in 326 IAC 8-7-2(b), no emissions standards or limitations exist because the paint booth would be subject to 326 IAC 8-2-9. Certification, record keeping, and reporting requirements do apply to this source.

326 IAC 8-2-9 (Miscellaneous metal coating operations)

326 IAC 8-2-9 (Miscellaneous metal coating operations) applies to this source because the source is in Lake County and the coating facility at the source has the potential to emit greater than ten (10) tons per year of VOC.

Pursuant to 326 IAC 8-2-9, no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, delivered to HVLP paint applicators.

The daily volume weighted average of VOC content from EU # 15 shall be calculated only when one (1) or more of the coating materials exceed a VOC content of 3.5 pounds of VOC per gallon of coating less water using the following formula, where n is the number of coatings (c):

$$\frac{\sum_{c=1}^n \text{coating } c \text{ (gal)} \times \text{VOC content of } c \text{ (lbs/gal, less water)}}{\sum_{c=1}^n \text{coating } c \text{ (gal)}}$$

Based upon 326 IAC 8-1-2(c) and a minimum overall control efficiency of 69.1% [the overall control efficiency equals: (capture efficiency) x (destruction efficiency)], the VOC content of the coating from EU # 20 shall not exceed 21.6 pounds per gallon of coating solids delivered to the applicator.

The overall control efficiency of the thermal oxidizer for EU # 20 shall be no less than the equivalent overall efficiency calculated by the following equation:

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

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

Pursuant to 326 IAC 8-2-9, solvent sprayed from the application equipment of EU # 15 and EU # 20 during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

326 IAC 8-3-3 (Organic Solvent Degreasing Operations: Open top vapor degreaser operation)

The four (4) open parts washers, identified as EU #12, are subject to this rule. The owner or operator of open top vapor degreasers shall:

- (a) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover closed at all times except when processing work loads through the degreaser;
- (c) minimize solvent carry-out by:
 - (1) racking parts to allow complete drainage;
 - (2) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

- (4) tipping out any pools of solvent on the cleaned parts before removal; and
- (5) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a sources failure to take the appropriate corrective actions within a specific time period.

The compliance determination requirements applicable to the source emission units are as follows:

- (1) Compliance with the VOC content and usage limitations for EU #15 and EU #20 included in Conditions D.1.2 and D.2.1, respectively, shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (2) Within five (5) years of October 8, 2003, the Permittee shall perform PM and PM10 testing of EU #1, EU #2, EU #18 (blasters #1,#2 and #3) and blaster EU #19 utilizing test

methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

Within 60 days after achieving capacity, but no later than 180 days after startup, the Permittee shall perform PM and PM10 testing of EU #21 (blaster #5) utilizing test methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

Within five (5) years of October 8, 2003, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing of EU #20 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (3) Compliance with the VOC usage limits for EU#15 and EU#12 included in Conditions D.1.2 and D.4.5, respectively, shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.
- (4) Compliance with the MEK emission limitation for EU#15, included in Condition D.1.3, shall be determined pursuant to 40 CFR 63.3941 using formulation data supplied by the coating and solvent manufacturers. IDEM, OAQ reserves the authority to determine compliance using Method 311 in 40 CFR 63 Appendix A. Compliance with Condition D.1.3 of the permit shall be demonstrated within 30 days of the end of each quarter based on the total MEK used by the sprayers for each of the quarter's three most recent twelve (12) month periods.
- (5) The regenerative thermal oxidizer shall operate at all times that the paint booth EU#20 is in operation.

When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, and to maintain the pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator to less than 3.5, the thermal oxidizer shall maintain a minimum overall control efficiency of 69.1%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2).

The overall control efficiency of the thermal oxidizer for EU # 20 shall be no less than the equivalent overall efficiency calculated by the following equation:

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

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

The compliance monitoring requirements applicable to the source emission units are as follows:

- (1) Visible emission notations of all the Blaster stack exhausts #1, #2, # 9, #11, and #18 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Visible emission notations of the DB torches smoke eliminator exhausts for EU #13 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation of this permit.

- (2) Daily inspections shall be performed to verify the placement and integrity of the smoke eliminators associated with the two (2) DB torches in EU #13. The Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (3) The Permittee shall record the pressure drop across the baghouses controlling blasters #1(EU #1), #2 (EU #2), #3 (EU #18), #5 (EU #21), and #19 (EU #19), once per day when the blasting system is in operation. When for any one (1) reading, the pressure drop across the baghouses is outside the normal ranges of 2.0 to 6.0 inches of water for blasters #1 and #2; 1.0 to 5.0 inches of water for blasters #3 and #5; and 1.5 to 6.5 inches of water for blaster # 19 or within ranges established during the latest stack tests, the Permittee shall take reasonable response steps in accordance with Section C-Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances.

The instrument used for determining the pressure shall comply with Section C- Instrument Specifications, and shall be calibrated at least once every six (6) months. The specifications shall be available on site with the Preventative Maintenance Plan.

These monitoring conditions are necessary because the baghouse for the blasting processes must operate properly to ensure compliance with 326 IAC 6.8-1-2 (Particulate Matter) and 326 IAC 2-7 (Part 70).

- (4) The Permittee shall determine the appropriate duct pressure or fan amperage for the thermal oxidizer controlling paint booth EU #20 from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1 of the permit, as approved by IDEM.

The duct pressure or fan amperage shall be observed at least once per day when the

thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

When for any one reading, the duct pressure or fan amperage is outside the normal range as established in most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursion or Exceedances. A reading that is outside the range as established in the most recent compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursion or Exceedances shall be considered a deviation from this permit.

-
- (5) In order to comply with PM emission limitations, the baghouses for PM control shall be in operation and control emissions from the EU #1, EU #2, EU #18, EU #19 and EU #21 (blasters #1, #2, #3, #19 and #5) at all times that the blasting processes are in operation.
- (6) The thermal oxidizer controlling paint booth EU #20 is subject to the following compliance monitoring requirements:

A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1,400°F.

The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1 of the permit, as approved by IDEM.

On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature as observed during the compliant stack test.

The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursion or Exceedances whenever the hourly average temperature of the thermal oxidizer is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursion or Exceedances shall be considered a deviation from this permit.

Conclusion and Recommendation

The staff recommends to the Commissioner that this Part 70 permit No. 089-22406-00161 be approved.

Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

PLANT WIDE EMISSIONS

EU #1 and #2 (Blaster #1 and #2)

PM and PM10 Emissions							
Unit ID	Control Efficiency (%)	Grain Loading (grains/cu ft)	Air Flow Rate (acfm)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
EU #1	98.0	0.020	15,630.0	133.97	586.79	2.68	11.74
EU #2	98.0	0.020	3,419.0	29.3	128.35	0.59	2.57

Methodology

PM Emissions (lb/hr) = [(gr/dscf) x (1lb/7000gr) x (air flow cu ft/min) x (60 min/hr)]
 (After Control)

EU #7 [Boiler 1.80 MMBtu/hr (heat input capacity)]

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.014	0.057	0.005	0.751	0.041	0.631

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

Emission factor for NOx Uncontrolled = 100

Methodology

Potential throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission factors are from AP-42, Chapter 1.4, tables 1.4-1, 1.4-2, 1.4-3, SCC#1-02-006-02, 1-01-006-02 and 1-03-006-03

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

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

EU #8 [Combustion Units 18.18 MMBtu/hr total (heat input capacity)]

Activity	No. of units	Rating MMBtu/hr	Total Rating MMBtu/hr
Space Heaters	21	0.100	2.10
Space Heaters	12	0.600	7.20
Space Heaters	28	0.175	4.90
Pre-Heat Oven	1	2.580	2.58
Cure Oven	1	1.400	1.40
Total (MMBtu/hr)			18.18

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Potential Emission in tons/yr	1.9	7.6	0.6	100.0	5.5	84.0
	0.144	0.576	0.046	7.584	0.417	6.370

Potential Throughput 151.673 MMCF/yr

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

Emission factor for NOx Uncontrolled = 100

Methodology

Potential throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission factors are from AP-42, Chapter 1.4, tables 1.4-1, 1.4-2, 1.4-3, SCC#1-02-006-02, 1-01-006-02 and 1-03-006-03

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

EU #9 (Electric Arc Welding Stick)

Unit ID	# of Welders	Max. Weld Rate rods/min)	Max. Rod Weight (oz)	PM * (lb/1000lb of rod)	PM (tpy)
EU #9	12	0.718	4.6	18.4	11.98

* Emission Factor from AP-42

Methodology

PM Emissions (tpy) = (Max. Weld Rate in rod/min) x (Max. Rod Weight in oz) x (1lb/16 oz) x (lb PM/1000lb of rod) x (No. of Welders) x (60 min/hr) x (8,760hr/yr) / (2000 lb/ton)

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

EU #11 (Sweep Grinders and Slab Grinders)

PM and PM10 Emissions				
Unit ID	Max. Area of Steel Swept (ft sq/hr)	Max. lb PM/ft sq of Area Swept *	Hours/yr	PM and PM10 (tpy)
EU #11 Sweep Grinders	75	0.0925	8,760	30.39

* Provided by the source

Methodology

PM (tpy) = (Max. Area of Steel Swept in ft sq/hr) x (Max. lb PM/ft sq of Area Swept) x (hours/yr) x (1 ton/2000lb)

Limited to 18,000 ft sq/yr of grinding

Tons per year of PM/PM10 = (18,000 ft sq) / (75 ft sq/hr x 8,760 hr/yr) x (30.39 tpy) = 0.833

PM and PM10 Emissions			
Unit ID	Max. Grind Capacity (tons/yr)	PM Emitted from Grinding Operation (%)*	PM and PM10 (tpy)
EU #11 Slab Grinders	613,200	0.0493	302.31

* Provided by the source

Methodology

PM (tpy) = (Max. Grind Capacity in tons per yr.) x (PM emitted from Grinding Operation in %)

Limited to 111,116 per year of slab

Tons per year of PM/PM10 = (111,116 ton/yr) (0.000493) = 54.78

Appendix A : Emission Calculations

Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

EU #13 (Oxy Methane Cutting Torches)

47 torches exhausting insided the building
 2 DB torches controlled by 99% efficient smoke eliminators

Potential Before Controls					
Number of Torches	Max. Thickness (inches)	Max. Cutting Rate (in/min)	Pm/Pm10 Emission Factor (lb/1000 in cut at 1 in thick) *	Emissions (lb/hr)	Emissions (tpy)
40	3.375	7	0.0815	4.62105	20.2
7	9.1	3	0.0815	0.934479	4.09
2	12	9.4	0.0815	1.103184	4.83
Powder for 2 DB Torches				12.5 lb/hr	54.75
Total					83.9

Potential After Controls					
Number of Torches	Max. Length Cut (in/yr) *	Pm/Pm10 Emission Factor ** (lb/1000 in cut at 1 in thick)	Emissions (lb/hr)	Emissions (tpy)	Emissions After Control & Limits (tpy)
49	34,601,227	0.0815	4.62105	20.2	1.41
Powder for 2 DB Torches		(54.75 tpy) x (1-.99)	12.5 lb/hr	0.548	0.548
Total				24.929	1.958

Methodology

*The 49 torches are limited to 34,601,227 inches of one (1) inch steel cut per year.

** From IDEM internal training document on estimating torch cutting emissions.

Tons per year of PM/PM10after control from 49 torches = (34,601,227 in cut/yr) (0.0815 lb PM/1000 in cut) (1 ton/2000lb) = 1.41 tpy

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

EU #15 Girder Shop Hand Spray guns VOC and Particulate Emissions – see page 10

EU #17 Submerged Arc Welders (insignificant)

Unit ID	# of Welders (heads)	Max. Weld Rate (lbs of wire/hr-head)	PM/PM10 (lb PM /1000 lb of wire) *	PM (lb/hr)	PM (tpy)
EU #17	12	4.20	0.05	0.0025	0.01

* Emission Factor from AP-42 (SCC 3-09-054, Table 12.19-1)

Methodology

PM Emissions (lb/hr) = (No. of welders in heads) x (Max. weld rate-lbs wire/hr-head) x (lb PM/lb of wire)

EU #18 Blaster #3

PM and PM10 Emissions							
Unit ID	Control Efficiency (%)	Grain Loading (grains/cu ft)	Air Flow Rate (acfm)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
EU #18	98.0	0.006	11,200	28.85	126.37	0.58	2.53

Methodology

PM Emissions (lb/hr) = [(gr/dscf) x (1lb/7000gr) x (air flow cu ft/min) x (60 min/hr)]
 (After Control)

EU #19 Mechanical Blaster/Blowoff

PM and PM10 Emissions							
Unit ID	Control Efficiency (%)	Grain Loading (grains/cu ft)	Air Flow Rate (acfm)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
EU #19	98.0	0.005	29,052	62.25	272.67	1.250	5.45

Methodology

PM Emissions (lb/hr) = [(gr/dscf) x (1lb/7000gr) x (air flow cu ft/min) x (60 min/hr)]
 (After Control)

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

EU #20 Paint Booth VOC and Particulate Emissions – see page 10

EU #21 Mechanical Blaster

PM and PM10 Emissions							
Unit ID	Control Efficiency (%)	Grain Loading (grains/cu ft)	Air Flow Rate (acfm)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
EU #21	98.0	0.01	30,000	128.57	563.14	2.57	11.26

Methodology

PM Emissions (lb/hr) = [(gr/dscf) x (1lb/7000gr) x (air flow cu ft/min) x (60 min/hr)]
 (After Control)

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

Total HAPs from Processes Excluding EU15		
HAP	Before Controls	After Controls
Methylnaphthalene	2.34E-06	2.34E-06
Antimony	2.93E-01	2.93E-01
Arsenic	1.60E-02	1.60E-02
Benzene	6.48E-04	6.48E-04
Cadmium	5.98E-04	5.98E-04
Chromium	6.76E+00	1.61E-01
Cobalt	9.62E-03	9.62E-03
Dichlorobenzene	1.17E-04	1.17E-04
Ethyl benzene	1.33E-03	3.28E-04
Fluoranthene	2.92E-07	2.92E-07
Fluorene	2.73E-07	2.73E-07
Formaldehyde	7.30E-03	7.30E-03
Hexane	1.75E-01	1.75E-01
Lead	2.99E-01	2.99E-01
Manganese	1.12E+01	1.281E-00
Mercury	2.53E-05	2.53E-05
Methanol	1.19E+01	5.93E-01
Methyl tert-butyl ether	1.33E-03	1.33E-03
Naphthalene	9.56E-04	9.56E-04
Nickel	1.79E-00	1.37E-01
Phenanathrene	1.66E-06	1.66E-06
Pyrene	4.87E-07	4.87E-07
Toluene	3.31E-04	3.31E-04
Xylenes	4.06E-04	2.03E-05
Total HAPs (TPY)	32.4	3.0

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

Limited HAP Usage	
Methyl ethyl ketone from EU #15 process will be limited to	< 10.0 tpy
Total HAP usage limit from EU #15 process including methyl ethyl ketone	21.5 tpy
Maximum HAP Emissions from Processes Excluding EU15	3.0 tpy
Total HAP Emissions Limit to Remain a Synthetic Minor Source of HAPs	24.5 tpy

Summary of Potential Emissions Before Controls (tpy)						
Emission Unit #	PM	PM10	SO2	NOx	VOC	CO
1 (Blaster #1)	586.79	586.79	0.00	0.00	0.00	0.00
2 (Blaster #2)	128.35	128.35	0.00	0.00	0.00	0.00
7 (Boiler) (insig)	0.014	0.057	0.005	0.751	0.041	0.631
8 (Comb. Units) (insig)	0.144	0.576	0.046	7.584	0.417	6.370
9 (Stick Welders)	11.98	11.98	0.00	0.00	0.00	0.00
11 (Grinders)	332.70	332.70	0.00	0.00	0.00	0.00
12 (Parts Washers) (insig)	0.00	0.00	0.00	0.00	2.70	0.00
13 (Torches)	83.90	83.90	0.00	0.00	0.00	0.00
14 (Preheat Table & Torches) (insig)	0.010	0.038	0.003	0.501	0.028	0.42
15 (Paint Booth)	2.95	2.95	0.00	0.00	80.41	0.00
17 (Arc Welding)	0.01	0.01	0.00	0.00	0.00	0.00
18 (Blaster #3)	126.37	126.37	0.00	0.00	0.00	0.00
19 (Mech. Blaster)	272.67	272.67	0.00	0.00	0.00	0.00
20 (Paint Booth)	2.72	2.72	0.00	0.00	30.20	0.00
20 (RTO Comb.)	1.612	1.848	0.019	3.026	0.034	2.546
21 (Mech. Blaster)	563.14	563.14	0.00	0.00	0.00	0.00
Other Insignificant Activities	3.34	3.34	0.00	0.00	1.00	0.00
Subtotal Sig. EU	2,113.36	2,114.10	0.019	3.026	110.64	2.526
Subtotal Insig. Activities	3.52	4.02	0.054	8.84	4.24	7.42
Total Potential Emissions	2,116.88	2,118.12	0.073	11.87	114.88	9.95

Appendix A : Emission Calculations
 Company Name: Industrial Steel Construction, Inc.
 Address: 86 North Bridge Street, Gary, Indiana 46404
 TV Permit: 089-22406-00161
 Plt ID: 089-00161
 Reviewer: Walter Habeeb
 Date: January 4, 2006

Summary of Potential Emissions With New Unit and After Controls & Limits (tpy)						
Emission Unit #	PM	PM10	SO2	NOx	VOC	CO
1 (Blaster #1)	11.74	11.74	0.00	0.00	0.00	0.00
2 (Blaster #2)	2.57	2.57	0.00	0.00	0.00	0.00
7 (Boiler) (insig)	0.014	0.057	0.005	0.751	0.041	0.631
8 (Comb. Units) (insig)	0.144	0.576	0.046	7.584	0.417	6.370
9 (Stick Welders)	11.98	11.98	0.00	0.00	0.00	0.00
11 (Grinders)	55.61	55.61	0.00	0.00	0.00	0.00
12 (Parts Washers) (insig)	0.00	0.00	0.00	0.00	1.50	0.00
13 (Torches)	1.96	1.96	0.00	0.00	0.00	0.00
14 (Preheat Table & Torches) (insig)	0.010	0.038	0.003	0.501	0.028	0.42
15 (Paint Booth)	2.00	2.00	0.00	0.00	19.50	0.00
17 (Submerged Arc Welding) (insig)	0.01	0.01	0.00	0.00	0.00	0.00
18 (Blaster #3)	2.53	2.53	0.00	0.00	0.00	0.00
19 (Mech. Blaster)	5.45	5.45	0.00	0.00	0.00	0.00
20 (Paint Booth)	1.63	1.63	0.00	0.00	1.51	0.00
20 (RTO Comb.) (insig)	0.012	0.048	0.004	0.626	0.034	0.526
21 (Mech. Blaster)	11.26	11.26	0.00	0.00	0.00	0.00
Other Insignificant Activities	3.34	3.34	0.00	0.00	1.00	0.00
Subtotal Sig. EU	106.73	106.73	0.00	0.626	21.01	0.00
Subtotal Insig. Activities	3.52	4.03	0.058	8.84	3.02	7.947
Total Potential Emissions Without EU #21	98.99	99.50	0.058	9.47	24.03	7.947
Total Potential Emissions With EU #21	110.25	110.76	0.058	9.47	24.03	7.947

