



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: March 30, 2007
RE: Imperial Stamping Corporation / 039-24303-00335
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

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

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot 03/23/06



Mitchell E. Daniels, Jr.
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March 30, 2007

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
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Mr. John T. Conner
Imperial Stamping Corporation
4801 Middlebury Street
Elkhart, Indiana 46516

Re: Exempt Construction and Operation Status,
039-24303-00335

Dear Mr. Conner:

The application from the Imperial Stamping Corporation, received on February 9, 2007, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission units, located at 4801 Middlebury Street, Elkhart, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) surface coating dip tank, identified as 001, constructed in 2005, with a maximum capacity of 65 mobile home anchors per hour.
- (b) Five (5) Metal Inert Gas welders, identified as 002 through 006, constructed in 2005, each with a maximum wire consumption of 2.25 pounds of ER70-6 wire per hour.
- (c) Four (4) Robotic Metal Inert Gas welders, identified as 011 through 014, constructed in 2007, each with a maximum wire consumption of 3.15 pounds of ER70-6 wire per hour.
- (d) One (1) plasma cutting system, identified as 3070, constructed after 1995, with a maximum cutting rate of 250 inches per minute, exhausting to a dry filtration system which vents inside the building.
- (e) Three (3) natural gas-fired furnaces, identified as H-1, H-2, and H-3, constructed in 1995, each with a maximum heat input capacity of 0.032 MMBtu/hr.
- (f) Seven (7) natural gas-fired infrared tube heaters, identified as H-4 through H-10, constructed in 2007, each with a maximum heat input capacity of 0.1 MMBtu/hr.

The following conditions shall be applicable:

- (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:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (2) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the VOC content of the coating used in dip tank 001 shall be limited as follows:
 - (a) Three and five tenths (3.5) pounds VOC per gallon of coating, excluding water, delivered to the applicators that in a coating application system that is air dried or forced warm air

dried at temperatures up to ninety (90) degrees Celsius (90EC) (one hundred ninety-four degrees Fahrenheit (194EF)).

- (b) 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 completed, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (3) Pursuant to 326 IAC 6-4(Fugitive Dust Emissions), the owner and /or operator of this source shall not generate fugitive dust to the extent that some portion of the material escapes 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).

This existing source was issued an Exemption (E039-4634-00335) on July 14, 1995.

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

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 386-1024 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027, and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original document signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

ERG/YC

cc: File - Elkhart County
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner

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

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Imperial Stamping Corporation
Source Location:	4801 Middlebury Street, Elkhart, Indiana 46516
County:	Elkhart
SIC Code:	3499
Exemption No.:	039-24303-00335
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from the Imperial Stamping Corporation relating to the operation of a metal fabricating and coating operation.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units operating at this source. The source has been operating under Exemption #039-4634-00335, issued on July 14, 1995, which includes the following exempted emission units:

- (a)* Eight (8) Metal Inert Gas welders, identified as 002 through 009, constructed in 2005, each with a maximum wire consumption of 2.25 pounds of ER70-6 wire per hour.
- (b)* One (1) Robotic Metal Inert Gas welder, identified as 010, constructed in 2005, with a maximum wire consumption of 2.25 pounds of ER70-6 wire per hour.
- (c) One (1) surface coating dip tank, identified as 001, constructed in 2005, with a maximum capacity of 65 mobile home anchors per hour.
- (d) Three (3) natural gas-fired furnaces, identified as H-1, H-2, and H-3, constructed in 1995, each with a maximum heat input capacity of 0.032 MMBtu/hr.
- (e)* One (1) natural gas-fired heater, identified as H-4, constructed in 1995, with a maximum heat input capacity of 0.025 MMBtu/hr.

Note: Welders 007 through 010 and natural gas fired heater H-4 have been removed from this plant.

Unpermitted Emission Units and Pollution Control Equipment

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

Exempted Emission Units and Pollution Control Equipment

The application includes information relating to the operation of the following existing equipment constructed after 1995:

- (a) Four (4) Robotic Metal Inert Gas welders, identified as 011 through 014, constructed after 1995, each with a maximum wire consumption of 3.15 pounds of ER70-6 wire per hour.
- (b) One (1) plasma cutting system, identified as 3070, constructed after 1995, with a maximum cutting rate of 250 inches per minute, exhausting to a dry filtration system which vents inside the building.
- (c) Seven (7) natural gas-fired infrared tube heaters, identified as H-4 through H-10, constructed in 2007, each with a maximum heat input capacity of 0.1 MMBtu/hr.

Existing Approvals

The source has been operating under Exemption #039-4634-00335, issued on July 14, 1995. All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

A complete application for the purposes of this review was received on February 9, 2007.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Appendix A, pages 1 through 4).

Potential to Emit of the Source Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	0.58
PM-10	0.60
SO ₂	Negligible
VOC	7.59
CO	0.29
NO _x	0.34

HAPs	Potential to Emit (tons/yr)
Manganese (Mn)	0.03
Hexane	0.01
Other HAPs	Negligible
Total	0.04

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) all criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.
- (d) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all pollutants is less than the levels listed in 326 IAC 2-5.5-1(b). Therefore, the source is not subject to the provisions of 326 IAC 2-5.5-1.
- (e) **Fugitive Emissions**
 Since this type of operation is not in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and 326 IAC 2-3, 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.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
PM 2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (a) Elkhart County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.

- (c) Elkhart County has been classified as attainment or unclassifiable in Indiana for all other pollutant. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD and Emission Offset Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.58
PM-10	0.60
SO ₂	Negligible
VOC	7.59
CO	0.29
NO _x	0.34

- (a) This existing source is not an Emission Offset major source because no regulated nonattainment pollutant is emitted at a rate of 100 tons/yr or greater.
- (b) This existing source is not a PSD major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (c) This information is based on the potential to emit of the entire source (see Appendix A).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 039-24303-00335, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

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

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

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this exemption.
- (b) The source does not perform surface coating operations of metal furniture. Therefore, the New Source Performance Standards for Surface Coating of Metal Furniture (326 IAC 12, 40 CFR 60.310 - 60.316, Subpart EE) are not included in this exemption.
- (c) The source does not perform metal coil surface coating operations. Therefore, the New Source Performance Standards for Metal Coil Surface Coating (326 IAC 12, 40 CFR 60.460 - 60.466, Subpart TT) are not included in this exemption.

- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 20, and 40 CFR Parts 61 and 63) included in this exemption.
- (e) This source is a minor source for HAP emissions. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Miscellaneous Metal Parts and Products Surface Coating (40 CFR 63, Subpart M) are not included in this exemption.

State Rule Applicability – Entire Source

326 IAC 2-3 (Emission Offset)

This source is located in Elkhart County, which is has been designated as nonattainment for the 8-hour ozone standard. The potential to emit VOC and NO_x of the entire source is less than 100 tons per year. Therefore, this source is an Emission Offset minor source and the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 1995 and is not in 1 of the 28 source categories defined in 326 IAC 2-2-1. The potential to emit of PM, PM₁₀, SO₂, and CO is less than 250 tons per year. Therefore, this source is a PSD minor source and the requirements of 326 IAC 2-2 (PSD) are not applicable.

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

The potential to emit HAPs from this source is less than 10 tons/yr for a single HAP and less than 25 tons/yr for any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County, is not required to operate under a Part 70 permit, and has potential lead emissions that are less than five (5) tons per year. Therefore, pursuant to 326 IAC 2-6-1(b), the source is only subject to additional information requests as provided in 326 IAC 2-6-5.

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 the permit:

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

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the owner and /or operator of this source shall not generate fugitive dust to the extent that some portion of the material escapes 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 6-5 (Fugitive Particulate Emissions Limitations)

Although constructed after December 13, 1985, the provisions of 326 IAC 6-5 do not apply to this source because the only source of fugitive dust is from paved roads.

State Rule Applicability – Dip Tank 001

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

This dip tank was constructed after 1990, performs metal coating, and use more than 15 pounds of VOC per day. This existing source is under the Standard Industrial Classification Code of major group #34. Therefore, the VOC content of the coatings applied at this facility shall be limited as follows:

- (a) Three and five tenths (3.5) pounds VOC per gallon of coating, excluding water, delivered to the applicators that in a coating application system that is air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (90EC) (one hundred ninety-four degrees Fahrenheit (194EF)).
- (b) 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 completed, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the Permittee, the VOC content of the coating delivered to the dip tank is in compliance with the requirements above.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The potential VOC emissions from the dip tank are each less than 25 tons per year and the VOC emissions from the dip tank are regulated under 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations). Therefore, the requirements of 326 IAC 8-1-6 (BACT) are not applicable to the dip tank at this source.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(5), dip coating operations are exempt from the requirements of 326 IAC 6-3.

State Rule Applicability - Natural Gas Fired Combustion Units

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The insignificant natural gas combustion units are not considered indirect heating units. Therefore, the requirements of 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating) are not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The insignificant natural gas combustion units are not considered manufacturing processes. Therefore, the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) are not applicable.

State Rule Applicability - Welding and Cutting Operations

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The welding operation at this source does not consume more than six hundred and twenty-five (625) pounds of rod or wire per day. The cutting operation at this source does not cut more than three thousand and four hundred (3,400) inches per hour of stock with one inch thickness or more. Therefore, the welding and cutting operations at this source are exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(b)(9) and (b)(10).

Conclusion

The operation of this metal fabricating and coating operation shall be subject to the conditions of the Exemption No.: 039-24303-00335.

**Appendix A: Emission Calculations
VOC Emissions
From the Dip Tank (001)**

Company Name: Imperial Stamping Corporation

Address: 4801 Middlebury St., Elkhart, IN 46516

Exemption: 039-24303-00335

Reviewer: ERG/YC

Date: March 13, 2007

Material	Density (lbs/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	*Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)
Black WR Primer N3607	9.61	73.7%	44.6%	29.1%	65.0	0.0095	2.80	1.73	41.5	7.57
Total										7.57

Note: There are no PM/PM10 emissions for the dip coating operations. The coating used at this tank does not contain any HAP.

The make up solution used in this coating operation is water.

METHODOLOGY

Pounds of VOC per Gallon Coating = Density (lbs/gal) x Weight % Organics

PTE of VOC (lbs/hr) = Pounds of VOC per gallon coating (lbs/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per gallon coating (lbs/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit) x 24 hrs/day

PTE of VOC (tons/yr) = Pounds of VOC per gallon coating (lbs/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit) x 8760 hrs/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations

PM/PM10 and HAP Emissions From the Welding and Cutting Operations

Company Name: Imperial Stamping Corporation
Address: 4801 Middlebury St., Elkhart, IN 46516
Exemption: 039-24303-00335
Reviewer: ERG/YC
Date: March 13, 2007

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Type of Wire	EMISSION FACTORS* (lb pollutant/lb electrode used)				EMISSIONS (lbs/hr)				Total HAPS (lbs/hr)
				PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(carbon steel)	5	2.25	ER70-6	0.0052	3.18E-04	1.00E-06	1.00E-06	0.059	0.004	1.13E-05	1.13E-05	3.60E-03
Robotic MIG	4	3.15	ER70-6	0.0052	3.18E-04	1.00E-06	1.00E-06	0.066	0.004	1.26E-05	1.26E-05	4.03E-03

FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS** (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				Total HAPS (lbs/hr)
				PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Plasma	1	0.12	250	0.0039				0.007	0.00	0.00	0.00	0.00

EMISSION TOTALS	PM = PM10	Mn	Ni	Cr	Total HAPS
Potential to Emit (lbs/hr)	0.13	7.58E-03	2.39E-05	2.39E-05	7.63E-03
Potential to Emit (lbs/day)	3.14	1.82E-01	5.72E-04	5.72E-04	1.83E-01
Potential to Emit (tons/yr)	0.57	0.03	1.04E-04	1.04E-04	0.03

*Emission factors are from AP-42, Tables 12.19-1 and 12.19-2 for electrode type of E70S (01/95).

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick mild steel.
Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick.

METHODOLOGY

Welding emissions (lb/hr) = (# of stations) x Max. electrode consumption (lbs/hr/station) x Emission Factor (lbs pollutant/lb of electrode used)
Cutting emissions (lb/hr) = (# of stations) x Max. Metal Thickness (in) x Max. Cutting Rate (in./min) x 60 min/hr x Emission Factor (lb pollutant/1,000 in. cut, 1" thick)
Potential to Emit (lbs/day) = Emissions (lbs/hr) x 24 hrs/day
Potential to Emit (tons/yr) = Emissions (lbs/hr) x 8,760 hrs/yr x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From Three (3) 0.032 MMBtu/hr Furnaces and Seven (7) 0.1 MMBtu/hr Tube Heaters**

**Company Name: Imperial Stamping Corporation
Address: 4801 Middlebury St., Elkhart, IN 46516
Exemption: 039-24303-00335
Reviewer: ERG/YC
Date: March 13, 2007**

Heat Input Capacity
MMBtu/hr
0.80 (10 units total)

Potential Throughput
MMSCF/yr
6.8

	Pollutant					
Emission Factor in lbs/MMSCF	PM	PM10*	SO ₂	**NO _x	VOC	CO
	1.9	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	0.01	0.03	2.1E-03	0.34	0.02	0.29

*PM10 emission factor is condensable and filterable PM combined.

**Emission factor for NO_x: Uncontrolled = 100 lbs/MMSCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (07/98).

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMSCF = 1,000,000 Standard Cubic Feet of Gas

Methodology

Potential Throughput (MMSCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMSCF/1,020 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMSCF/yr) x Emission Factor (lbs/MMSCF) x 1 ton/2000 lbs

Appendix A: Emission Calculations
HAP Emissions
From Three (3) 0.032 MMBtu/hr Furnaces and Seven (7) 0.1 MMBtu/hr Tube Heaters

Company Name: Imperial Stamping Corporation
Address: 4801 Middlebury St., Elkhart, IN 46516
Exemption: 039-24303-00335
Reviewer: ERG/YC
Date: March 13, 2007

Heat Input Capacity
MMBtu/hr

0.80 (10 units total)

Potential Throughput
MMCF/yr

7.0

Emission Factor in lbs/MMCF	Pollutant					Total HAPs
	Hexane	Formaldehyde	Toluene	Benzene	Nickel	
	1.8E+00	7.5E-02	3.4E-03	2.1E-03	2.1E-03	
Potential to Emit in tons/yr	0.01	2.61E-04	1.19E-05	7.32E-06	7.32E-06	0.01

Emission factors are from AP-42, Chapter 1.4, Table 1.4-3 (AP-42, 03/98).

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMSCF = 1,000,000 Standard Cubic Feet of Gas

Methodology

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

PTE (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs