

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Venture Welding, Inc.
53375 County Road 13
Elkhart, Indiana 46516**

is hereby authorized to construct and operate
a plant consisting of an electrocoating operation of metal frames for modular homes and motor vehicles.

The equipment is listed in the Page 2 of this permit.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-039-9800-00498	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (a) thirty-five (35) radiant heaters, natural gas fired, identified as IR1-1 to 23, IR2-1 to 6 and IR3-1 to 6, with a heat input capacity of 0.2, 0.15, and 0.2 MMBtu per hour, each, respectively, exhausting to stacks, not identified,
- (b) eighty-five (85) Mig welders with a maximum consumption of 0.59 pound per hour of wire, per station, exhausting to a stack through an exhaust fan EF-13,
- (c) four (4) make-up air units, natural gas fired, identified as MUA1-1 through 4, with a heat input capacity of 5.3 MMBtu per hour, each, exhausting to stacks, not identified,
- (d) four (4) bake ovens, natural gas fired, identified as BK-1 through 4, with a heat input capacity of 3.5 MMBtu per hour, each, exhausting to stacks S3 through S6,
- (e) two (2) water heaters, natural gas fired, identified as WH1 through 2, with a heat input capacity of 0.4 MMBtu per hour, each, exhausting to stacks, not identified,
- (f) one (1) pre-treatment system consisting of two (2) natural gas fired ovens, with a total heat input capacity of 8.0 MMBtu per hour, and using 166.8 pounds per hour of aqueous cleaners, aqueous rinse and phosphate solution, each, and exhausting to vent stacks S1, S2 and EF1 thru EF4; and
- (g) electrocoating process operation with a maximum resin use of 181.2 pounds per hour, method of application is by dipping and exhausting to a vent stack EF5

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).
 - (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.
7. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the IDEM may revoke this permit to construct if the:
 - (a) Construction of has not begun within eighteen (18) months from the date of the effective date of this permit or if during the construction of work is suspended for a continuous period of one (1) year or more.

The OAM may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.

8. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of this electrocoating operation of metal frames for modular homes and motor vehicles is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

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

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Opacity Limitations

7. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

8. That pursuant to 326 IAC 6-3 (Process Operations):

- (a) The electrocoating operations shall comply with 326 IAC 6-3-2(c) using the following equation:

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

where: E = rate of emission in pounds per hour,
P = process weight in tons per hour, if
P is equal to or less than 60,000 lbs/hr (30 tons/hr)

9. That pursuant to 326 IAC 6-3-2, the particulate matter emissions (PM) from the welding operations shall be limited to 0.551 pounds per hour.

10. Volatile Organic Compound (VOC) Limitations.
That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal frames of the modular homes and motor vehicles shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Air Dried Coat	3.5

11. Recordkeeping Requirements
That a log of information necessary to document compliance with operation permit condition No.10 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM). These records shall include monthly logs of the material used in pounds per month, weight % VOC in the resin, % flash off factors or emission factors, material safety data sheets (MSDS), and VOC in tons per month.

12. Annual Emission Reporting
That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support & Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

13. That pursuant to 326 IAC 2-1-3 (i) (8) the owner or operator shall operate the fan, EF-5 at all times when the resin is applied to metal frames of the modular homes and motor vehicles.

**Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section**

Quarterly Report

Company Name: Venture Welding, Inc.
 Location: 53375 County Road 13, Elkhart, Indiana 46516
 Permit No.: CP 039-9800- 00498
 Source: Electrocoating operation
 Pollutant: Volatile Organic Compounds (VOC)
 Limit: 3.5 lbs of VOC /gallon of coating

Year: _____

coating material	Number of units in gal/month	Density in lb/gal	weight %VOC	Weight % water in the coating	VOC emissions in tons / month
Total					

Methodology:

$$\text{VOC in tons /month} = \frac{\text{Wgt \% VOC} \times \text{gal/month} \times \text{lb/gal} (1 - \text{wt. \% water})}{2,000 \text{ lbs per ton}}$$

Submitted by :

Date Submitted : _____

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Venture Welding, Inc.
Source location: 53375 County Road 13, Elkhart, Indiana 46516
County: Elkhart
Construction Permit No.: CP 039-9800
SIC Code: 3499, 3714
Permit Reviewer: Yogesh Parikh

The Office of Air Management (OAM) has reviewed an application from Venture Welding, Inc. relating to the construction and operation of a plant consisting of electrocoating operation for metal frames of modular homes and motor vehicles. The plant consists of the following equipment:

- (a) thirty-five (35) radiant heaters, natural gas fired, identified as IR1-1 to 23, IR2-1 to 6 and IR3-1 to 6, with a heat input capacity of 0.2, 0.15, and 0.2 MMBtu per hour, each, respectively, exhausting to stacks, not identified,
- (b) eighty-five (85) Mig welders with a maximum consumption of 0.59 pound per hour of wire, per station, exhausting to a stack through an exhaust fan EF-13,
- (c) four (4) make-up air units, natural gas fired, identified as MUA1-1 through 4, with a heat input capacity of 5.3 MMBtu per hour, each, exhausting to stacks, not identified,
- (d) four (4) bake ovens, natural gas fired, identified as BK-1 through 4, with a heat input capacity of 3.5 MMBtu per hour, each, exhausting to stacks S3 through S6,
- (e) two (2) water heaters, natural gas fired, identified as WH1 through 2, with a heat input capacity of 0.4 MMBtu per hour, each, exhausting to stacks, not identified,
- (f) one (1) pre-treatment system consisting of two (2) natural gas fired ovens, with a total heat input capacity of 8.0 MMBtu per hour, and using 166.8 pounds per hour of aqueous cleaners, aqueous rinse and phosphate solution, each, and exhausting to vent stacks S1, S2 and EF1 thru EF4; and
- (g) electrocoating process operation with a maximum resin use of 181.2 pounds per hour, method of application is by dipping and exhausting to a vent stack EF5.

General Scope:

Venture Welding, Inc. has proposed to install a new plant to produce metal frames for modular homes and motor vehicles. The coating is applied by dipping. Resin is used for the coating purpose. There will be make up air units and radiant heaters for space heating. The flow process diagram indicates that the frames will be welded, then pre-treated and then they will go to the electrocoating process. The final product will be heated in the bake oven. The plant will be constructed on August 1, 1998 and will begin operation on December 1, 1998.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
EF-1 & EF-2	Pre-treatment	40	4.0	31,000	100
EF-13	Welding	40	4.0	31,000	100
EF-3 & EF-4	Pre-treatment	40	4.0	27,000	100
EF-5	Electrocoating	40	2.5	7,600	200
S-1 , S-2	Pre-treatment	35	0.5	1,000	1,800
S-3 through S-6	Bake Ovens	35	0.5	1,000	1,800
MUA1-1 through 4	Combustion	26	0.33	1,000	2,000
IR1-1 thru 23	Combustion	26	0.33	500	225
IR2-1 thru 6	Combustion	26	0.33	500	200
IR3-1 thru 6	Combustion	26	0.33	500	225
BK-1 thru 4	Combustion	35	0.5	1,000	1,800
WH1 thru 2	Combustion	35	0.5	1,000	1,800

Recommendation

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

Information, unless otherwise stated, 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 May 25, 1998.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (4 pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	7.83	4.2
Particulate Matter (PM10)	7.83	4.2
Sulfur Dioxide (SO ₂)	0.1	0.1
Volatile Organic Compounds (VOC)	63.1	63.1
Carbon Monoxide (CO)	7.8	7.8
Nitrogen Oxides (NO _x)	31.1	31.1
Single Hazardous Air Pollutant (HAP)	1.09	1.09
Combination of HAPs	1.09	1.09

- (a) Allowable PM emissions are determined from the applicability of rule 326 IAC 6-3-2. See attached spreadsheets for detailed calculations.
- (b) The potential emissions of particulate matter (PM) based on the rules cited are less than the allowable emissions, therefore, the allowable emissions are used for the permitting determination.
- (c) The allowable emissions of volatile organic compounds (VOC) are same as the potential emissions, therefore, the potential emissions are taken as allowable emissions.
- (d) Allowable emissions (as defined in the Indiana Rule) of NO_x and VOC are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

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

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)
PM	4.2
PM10	4.2
SO ₂	0.1
VOC	63.1
CO	7.8
NO _x	31.1
Single HAP	1.09
Combination HAPs	1.09

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

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

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

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

This is the first air approval issued to this source.

Federal Rule Applicability

There are no New Source Performance Standards, 326 IAC 12 and 40 CFR Part 60 applicable to this source.

There are no 326 IAC 14 and 40 CFR Part 63 NESHAP rules applicable to this source because the single and combined HAP emissions are less than 10 and 25 tons per year respectively from the welding, pre-treatment and the electrocoating operations.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it emits more than 10 tons/yr of VOC and is located in one of the counties listed in the rule. Pursuant to this rule, the owner/operator of Venture Welding, Inc. must submit annual emission statement report. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 6-3-2 (Particulate Emissions Limitations)

The particulate matter emissions from the electrocoating and welding operations are subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2, the particulate matter emissions from the electrocoating and welding operation shall comply with the following equation

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,} \\ P = \text{process weight in tons per hour, if} \\ P \text{ is equal to or less than 60,000 lbs/hr (30 tons/hr)}$$

326 IAC 5-1-2 (Opacity Limitations: Visible Emissions Limitations)

This source is subject to the provisions of 326 IAC 5-1-2 (a). Pursuant to this rule, visible emissions from a source or facility located in attainment area for particulate matter (PM) shall not exceed

- a) an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

326 IAC 8-2-9 (Miscellaneous Metal Coatings)

The facility identified as electrocoating operations of steel or metal frames of the modular homes and the motor vehicles will be constructed in August, 1998 and subject to rule 326 IAC 326 8-2-9(d)(2). This coating is air dried at temperatures up to ninety degrees Celsius (90°C). Therefore, pursuant to 326 IAC 8-2-9 (d) (2) , the VOC emissions are limited to 3.5 pounds per gallon of coating excluding water . The VOC emissions from the process operation is 1.91 pounds per gallon of coating less water. (See attached spread sheet calculations, page 3 of 4). Therefore, it is in compliance with the rule.

326 IAC 2-1-3.4 (New Source Toxics Control Rule)

The single and combined HAP emissions are less than 10 and 25 tons per year respectively. Therefore, the rule 326 IAC 2-1-3.4 does not apply to welding operation.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This new source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of this combustion equipment, electrocoating , welding and pre-treatment operations will be subject to the conditions of the attached proposed **Construction Permit No. CP-039-9800-00498.**

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Venture Welding, Inc.
2200 Middlebury Street
Elkhart, Indiana 46516

Affidavit of Construction

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

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

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

3. By virtue of my position with _____, I have personal
(Company Name)

knowledge of the representations contained in this affidavit and am authorized to make

these representations on behalf of _____.
(Company Name)

4. I hereby certify that Venture Welding, Inc. 53375 County Road 13, Elkhart, Indiana 46516, has constructed

(a) thirty-five (35) radiant heaters, natural gas fired, identified as IR1-1 to 23, IR2-1 to 6 and IR3-1 to 6, with a heat input capacity of 0.2, 0.15, and 0.2 MMBtu per hour, each, respectively,

(b) eighty-five (85) Mig welders with a maximum consumption of wire 0.59 pound per hour, per station,

(c) four (4) make-up air units, natural gas fired, identified as MUA1-1 through 4, with a heat input capacity of 5.3 MMBtu per hour, each,

(d) four (4) bake ovens, natural gas fired, identified as BK-1 through 4, with a heat input capacity of 3.5 MMBtu per hour,

(e) two (2) water heaters, natural gas fired, identified as WH1 through 2, with a heat input capacity of 0.4 MMBtu per hour, each,

(f) one (1) pre-treatment system consisting of two (2) natural gas fired ovens, with a total heat input capacity of 8.0 MMBtu per hour, and uses clean up solvents, and

(g) electrocoating process operation with a maximum resin use of 181.2 pounds per hour, method of application is by dipping.

5. I hereby certify that Venture Welding, Inc. is now subject to the Title V program and will submit a Title V (or FESOP) operating permit application within twelve (12) months from the postmarked submission date of this Affidavit of Construction.

Further Affiant said not.

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

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 19 _____.

My Commission expires: _____

Signature

Name (typed or printed)

Emissions calculations:

Source Background and Description

Source Name:	Venture Welding, Inc.
Source location:	53375 County Road 13, Elkhart, Indiana 46516
County:	Elkhart
Construction Permit No.:	CP 039-9800
SIC Code:	3499, 3714
Permit Reviewer:	Yogesh Parikh

Combustion emissions:

See attached spread sheet, page 4 of 4, for detailed calculations.

Potential emissions of PM from the welding operation:

MIG Welding:

Maximum hourly consumption of aluminum wire per station = 0.589 lb/hr.

Number of welding station = 85

$$\begin{aligned}
 \text{Total hourly consumption of wire} &= \text{Number of stations} \times \text{maximum consumption lb/station/hour} \\
 &= 85 \times 0.589 \text{ lb/hr} \\
 &= 50.0 \text{ lb/hr}
 \end{aligned}$$

The following emission factors were applied from the SARA 313 Reporting Guide.

PM = PM10 = 0.0055 lb PM/lb of electrode
Mn = 0.005 lb Mn/lb of electrode

Since the classification of electrode is not stated in the application, the default values are assumed.

$$\text{Throughput} = 50.0 \frac{\text{lb}}{\text{hr}} \times 8,760 \frac{\text{hr}}{\text{year}} = 438,000 \text{ lb/yr.}$$

$$\text{PM emissions in tons/yr} = \text{Throughput} \frac{\text{lb.}}{\text{yr.}} \times \text{emission factor} \frac{\text{lb. of PM}}{\text{lb. of electrode}} \times \frac{1}{2,000} \frac{\text{ton}}{\text{lb.}}$$

$$\text{PM} = \text{PM}_{10} = 438,000 \frac{\text{lb. of electrode}}{\text{yr.}} \times 0.0055 \frac{\text{lb. of PM}}{\text{lb. of electrode}} \times \frac{1}{2,000} \frac{\text{ton}}{\text{lb.}}$$

PM = PM10 = 1.2 tons/yr.

$$\text{Mn} = 438,000 \frac{\text{lb}}{\text{yr.}} \times 0.005 \frac{\text{lb of PM}}{\text{lb of electrode}} \times \frac{1}{2,000} \frac{\text{ton}}{\text{lb.}}$$

Mn = 1.09 tons /yr.

Allowable emissions of PM from the welding operation:

In the following table the emissions of particulate matter from all the welding operations are summarized:

Welding operation	Potential PM/PM10 emissions	*Allowable PM/PM10 emissions
Tons/yr	1.2	2.4
Lbs/day	6.6	13.15
lbs/hr	0.27	0.551

* Note: The allowable PM/PM10 emissions are based on the process weight rate of 100 lbs/hr from the table listed in the rule 326 IAC 6-3-2.

VOC emissions from the usage of resin in electrocoating process operation :

See attached spread sheet, page 3 of 4, for detailed calculations.

Allowable PM emissions from the electrocoating operation:

The allowable PM emissions are 0.551 lb/hr based on the process weight rate of 100 lbs/hr from the table listed in the rule 326 IAC 6-3-2.

Air Toxic Calculations:

HAP emitted	HAP in pound per hour	HAP in tons per year
Chromium Compounds	0.0005	0.002
Manganese Compounds	0.2490	1.09
Nickel Compounds	0.0005	0.002
Total	0.2500	1.094

The individual and the combined total of all the HAP emissions do not exceed 10 and 25 tons per year, respectively. Therefore, this facility is not a major source for air toxics.

Summary of potential emissions:

Operation	PM/PM10 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	SO2 (tons/yr)	HAP's (tons/yr)
Welding	1.2	0.0	0.0	0.0	0.0	1.09
Combustion	3.0	0.6	7.8	31.1	0.1	0.0
Surface coating	0.0	62.46	0.0	0.0	0.0	0.0
Total	4.2	63.06	7.8	31.1	0.1	1.09