

**CONSTRUCTION PERMIT  
OFFICE OF AIR MANAGEMENT**

**Hoosier Stamping and Manufacturing Corporation  
1825 W. Franklin Street  
Evansville, IN 47719**

is hereby authorized to construct and operate a treatment and surface coating facility with a maximum rated capacity of 200 racks and metal wheels per hour, consisting of the equipment 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-163-9843-00009	
Issued by:  Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (a) one (1) natural gas fired water heater (ID #1) with a maximum heat input capacity of 1.75 million British units (MMBtu) per hour, exhausting through Stack ID #1;
- (b) two (2) natural gas fired bake ovens (ID # 2 & 3), each with a maximum heat input capacity of 2.0 mm Btu per hour, exhausting through Stacks ID #2 & #3, respectively;
- (c) one (1) closed loop powder coating line with three (3) powder coaters, each with a maximum capacity of 40 pounds of powder coating per hour, with overspray reclaimed for re-use;
- (d) two (2) electrostatic spray paint booths (ID # 4 & 5), each with a maximum capacity of 115.78 pounds of coating per hour using dry filter panels for particulate control, exhausting through Stacks #4 & 5, respectively;
- (e) one (1) natural gas fired bake oven (ID #6) with a maximum heat input capacity of 1.0 MMBtu per hour, exhausting through Stack #6;
- (f) one (1) paint mix room (ID #7), exhausting through Stack #7;
- (g) one (1) natural gas fired pyrolysis furnace (ID #8) with a maximum heat input capacity of 0.3 MMBtu per hour, exhausting through Stack #8; and
- (h) one (1) pneumatic blasting hood (ID #9) with a maximum blasting rate of 380 pounds of glass bead abrasives per hour, using panel filters for particulate control, exhausting through Stack #9.

## **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 2-1-7.19 (Fees).
  - (e) The Permittee has submitted their Transition application for a Permit by Rule in January 1998 for the existing source.

Local Agency Requirement

7. That pursuant to 326 IAC 2-1-4 (Operating Permit), this document shall also become the first time state and local operating permit, when prior to start of operation (including testing and debugging), the following requirements are met:
- (a) The attached Affidavit of Construction shall be submitted to the Evansville Environmental Protection Agency (EPA) and the Office of Air Management (OAM), Permit Administration & Development Section.
  - (b) The Evansville EPA will verify that the facilities were constructed as proposed.
  - (c) Pursuant to Municipal Code of Evansville (MCE) 3.30.18.221 (A)(Permits), a local operating permit must be obtained from Evansville EPA prior to start of operation. The local operating permit process will begin upon:
    - (i) Receipt of the Affidavit of Construction by Evansville EPA, and
    - (ii) Payment to Evansville EPA of a non-refundable \$100.00, for the local operating permit issuance fee.

Operations may only begin following the receipt of a valid local operating permit, issued by Evansville EPA.

Pursuant to MCE 3.30.18.221(D), local operating permits shall be issued within a reasonable period of time. Thirty (30) days is considered reasonable in most cases.

- (d) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate Affidavit of Construction must be submitted for each phase of construction and an application for a local operating permit for each phase made to the Evansville EPA. 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.
  - (e) The local operating permit issued by the Evansville EPA will contain at a minimum the conditions in the Operating Conditions section of this permit.
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 treatment and surface coating facility 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, Evansville EPA, or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Annual Emission Reporting

- 8. 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 April 15 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 and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
and

Evansville Environmental Protection Agency  
Room 250  
101 N.W. Martin Luther King Jr. Boulevard  
Evansville, IN 47708

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

Opacity Limitations

- 9. 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 30% 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.

Fugitive Dust Emissions

- 10. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

MACT Synthetic Minor Limitation

- 11. That the input of single and total hazardous air pollutants (HAP), including clean up solvent, minus the HAP solvent shipped out, delivered to the applicators of the treatment and surface coating facility, booths # 4 and 5, shall be limited to 9.90 and 24 tons per year, respectively, rolled on a monthly basis. Therefore, the Maximum Achievable Control Technology (MACT) requirements of 326 IAC 2-1-3.4 will not apply.

Volatile Organic Compound (VOC) Limitations

12. That input of VOC to booths #4 and 5, which were constructed in November 1983, shall be limited to 24 tons per year, rolled on a monthly basis. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

Reporting Requirements

13. That a log of information necessary to document compliance with operation permit condition nos. 11 and 12 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).

- (a) A quarterly summary shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Evansville Environmental Protection Agency  
Room 250  
101 N.W. Martin Luther King Jr. Boulevard  
Evansville, IN 47708

within thirty (30) calendar days after the end of the quarter being reported in the format attached. These reports shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and the date of use for booths # 4 and 5.

- (b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:
- (i) Postmarked on or before the date it is due; or
  - (ii) Delivered by any other method if it is received and stamped by IDEM, OAM and Evansville EPA, on or before the date it is due.
- (c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.
- (e) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Construction.

- Open Burning
14. That 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.



**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - (317) 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ? \_\_\_\_\_, 100 LBS/HR VOC ? \_\_\_\_\_, 100 LBS/HR SULFUR DIOXIDE ? \_\_\_\_\_ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? \_\_\_\_\_ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON THE NEXT PAGE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Hoosier Stamping and Manufacturing Corp. PHONE NO. (812) 426-2778

LOCATION: (CITY AND COUNTY) Evansville, Vanderburgh County

PERMIT NO. 163-9843 AFS PLANT ID: 163-00009 AFS POINT ID: \_\_\_\_\_ INSP: Gene Kelso  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/19\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/19\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_  
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL \* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_



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

**Quarterly Report**

Company Name: Hoosier Stamping and Manufacturing Corporation  
Location: 1825 W. Franklin Street, Evansville, IN 47719  
Permit No.: 163-9843-00009  
Source: surface coating facility - booths # 4 and 5  
Pollutant: total hazardous air pollutant (HAP)  
Limit: The total HAP usage at the surface coating facility shall be limited to 24 tons per twelve (12) month period, rolled on a monthly basis.

YEAR: \_\_\_\_\_

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

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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

**Quarterly Report**

Company Name: Hoosier Stamping and Manufacturing Corporation  
Location: 1825 W. Franklin Street, Evansville, IN 47719  
Permit No.: 163-9843-00009  
Source: surface coating facility - booths # 4 and 5  
Pollutant: single hazardous air pollutant (HAP)  
Limit: The single HAP usage at the surface coating facility shall be limited to 9.90 tons per twelve (12) month period, rolled on a monthly basis.

YEAR: \_\_\_\_\_

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

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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

**Quarterly Report**

Company Name: Hoosier Stamping and Manufacturing Corporation  
Location: 1825 W. Franklin Street, Evansville, IN 47719  
Permit No.: 163-9843-00009  
Source: surface coating facility - booths # 4 and 5  
Pollutant: volatile organic compound (VOC)  
Limit: The VOC usage at the surface coating facility shall be limited to 24 tons per twelve (12) month period, rolled on a monthly basis.

YEAR: \_\_\_\_\_

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

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Indiana Department of Environmental Management**  
**Office of Air Management**  
and  
**Evansville Environmental Protection Agency**

Technical Support Document (TSD) for New Construction and Operation

**Source Background and Description**

Source Name:	Hoosier Stamping and Manufacturing Corporation
Source Location:	1825 W. Franklin Street, Evansville, IN 47719
County:	Vanderburgh
Construction Permit No.	CP-163-9843-00009
SIC Code:	3469
Permit Reviewer:	Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed an application from Hoosier Stamping and Manufacturing Corporation relating to the construction and operation of a treatment and surface coating facility with a maximum rated capacity of 200 racks and metal wheels per hour, consisting of the following equipment:

- (a) one (1) natural gas fired water heater (ID #1) with a maximum heat input capacity of 1.75 million British units (MMBtu) per hour, exhausting through Stack ID #1;
- (b) two (2) natural gas fired bake ovens (ID # 2 & 3), each with a maximum heat input capacity of 2.0 mm Btu per hour, exhausting through Stacks ID #2 & #3, respectively;
- (c) one (1) closed loop powder coating line with three (3) powder coaters, each with a maximum capacity of 40 pounds of powder coating per hour, with overspray reclaimed for re-use;
- (d) two (2) electrostatic spray paint booths (ID # 4 & 5), each with a maximum capacity of 115.78 pounds of coating per hour using dry filter panels for particulate control, exhausting through Stacks #4 & 5, respectively;
- (e) one (1) natural gas fired bake oven (ID #6) with a maximum heat input capacity of 1.0 MMBtu per hour, exhausting through Stack #6;
- (f) one (1) paint mix room (ID #7), exhausting through Stack #7;
- (g) one (1) natural gas fired pyrolysis furnace (ID #8) with a maximum heat input capacity of 0.3 MMBtu per hour, exhausting through Stack #8; and
- (h) one (1) pneumatic blasting hood (ID #9) with a maximum blasting rate of 380 pounds of glass bead abrasives per hour, using panel filters for particulate control, exhausting through Stack #9.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	water heater	25	1.333		300
2	bake oven	20	0.667		150
3	bake oven	20	0.833		150
4	electrostatic spray paint booth	25	2.83	110 cfm	ambient
5	electrostatic spray paint booth	25	2.83	110 cfm	ambient
6	bake oven	25	0.667	1440	250
7	paint mix room		2 x 2		ambient
8	pyrolysis furnace	19	1.167	350-450	1400-1500
9	pneumatic blasting hood	28	1.5	1360	ambient

### Enforcement Issue

This facility has historically been permitted by the Evansville Environmental Protection Agency. This application is being submitted to obtain required State permits.

### 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.

An application for the purposes of this review was received on June 13, 1998.

### Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (5 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)	---	52.23
Particulate Matter (PM10)	---	52.23
Sulfur Dioxide (SO <sub>2</sub> )	---	0.02
Volatile Organic Compounds (VOC)	---	448.91
Carbon Monoxide (CO)	---	2.59
Nitrogen Oxides (NO <sub>x</sub> )	---	3.09
Single Hazardous Air Pollutant (HAP)	---	163.48
Combination of HAPs	---	311.89

- (a) The potential emissions before controls are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of PM, PM-10, 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.
- (c) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year and/or the allowable emissions of any combination of the HAPs are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

**County Attainment Status**

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as nonattainment for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Vanderburgh County has been classified as attainment or unclassifiable for all other 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.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):



Pollutant	Emissions (ton/yr)
PM	5.95
PM10	5.95
SO <sub>2</sub>	0.02
VOC	24.17
CO	2.59
NO <sub>x</sub>	3.09
Single HAP	8.75
Combination HAPs	16.69

- (a) This new source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year, and it is not in one of the 28 listed source categories.
- (b) The VOC emission is limited to 24 tons/yr because the coating booths, Booths # 4 and 5 were constructed in November 1983. Therefore, 326 IAC 8-2-9 requirements do not apply. This limit is equivalent to 5.48 pounds of VOC per hour.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

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

This new source has applied for a Permit by Rule and has submitted a Transition Application in January 1998.

### Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.

There are no National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this source

### State Rule Applicability

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

326 IAC 2-1-3.4 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per year and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per year. Since this modification will limit any single HAP to less than ten (10) tons per year and will limit a combination of HAPs to less than twenty-five (25) tons per year, the requirements of 326 IAC 2-1-3.4 do not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source has the potential to emit more than 10 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

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

Coating booths # 4 and 5, which were constructed in November 1983, are not subject to 326 IAC 8-2-9. The Permittee has agreed to limit total volatile organic compound (VOC) usage in coating booths # 4 and 5 to less than 25 tons per year. Therefore, these booths are not subject to 326 IAC 8-2-9.

### **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 modification 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 treatment and surface coating facility will be subject to the conditions of the attached proposed **Construction Permit No. CP-163-9843-00009**.

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

Hoosier Stamping and Manufacturing Corporation  
Station B, PO Box 6447  
Evansville, IN 47719

**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 Hoosier Stamping and Manufacturing Corporation, 1825 W. Franklin Street, Evansville, Indiana, 47719, has constructed a treatment and surface coating facility in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on June 13, 1998 and as permitted pursuant to **Construction Permit No. CP-163-9843, Plant ID No. 163-00009** issued on \_\_\_\_\_
- 5. I hereby certify that Hoosier Stamping and Manufacturing Corporation is now subject to the Permit by Rule program and has submitted a Transition Application in January 1998.

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)

**Appendix A: Emission Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name:** Hoosier Stamping and Manufacturing Corporation  
**Address City IN Zip:** 1825 W. Franklin Street, Evansville, IN 47719  
**CP:** 163-9843  
**Plt ID:** 163-00009  
**Reviewer:** Yvette de los Angeles  
**Date:** August 6, 1998

**State Potential Emissions (uncontrolled):**

Material** (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
Silver Enamel (62803)	4 & 5	8.05	66.77%	0.00%	70.90%	0.00%	33.23%	0.0710	200.00	5.71	5.71	81.05	1945.10	354.98	41.59	22.90	75.00%
Orange Enamel (62124)	4 & 5	7.93	67.84%	0.00%	71.67%	0.00%	32.16%	0.0730	200.00	5.68	5.68	82.98	1991.47	363.44	40.77	23.56	75.00%
Toluene	for line cleaner only	7.49	100.00%	0.00%	100.00%	0.00%	0.00%	0.0130	200.00	7.49	7.49	19.47	467.38	85.30	0.00	NA	NA
<b>Total State Potential Emissions:</b>												<b>102.45</b>	<b>2458.85</b>	<b>448.74</b>	<b>41.59</b>		

**Limited Potential Emissions (controlled):**

<b>Total Federal Potential Emissions:</b>	Limited Coating Usage*	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM efficiency	Controlled PM tons per Year
	<b>5.35%</b>	<b>5.48</b>	<b>131.51</b>	<b>24.00</b>	<b>95.00%</b>	<b>2.08</b>

\* The VOC usage will be limited to 24 tons per year to avoid the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operation); therefore, the Limited Coating Usage is 5.35% [24/448.74 = 0.0535 = 5.35%]  
 \*\*The coatings are mutually exclusive of one another.

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

## Summary of Emission Calculations

**Company Name:** Hoosier Stamping and Manufacturing Corporation  
**Address City IN Zip:** 1825 W. Franklin Street, Evansville, IN 47719  
**CP:** 163-9843  
**Pit ID:** 163-00009  
**Reviewer:** Yvette de los Angeles  
**Date:** August 6, 1998

<b>Uncontrolled Potential Emissions (tons/year)</b>				
Emissions Generating Activity				
Pollutant	VOC, Particulate & HAP Emissions From Surface Coating Operations	Natural Gas Combustion Emissions From Commercial Boilers	Pneumatic Blasting Emissions From Pneumatic Blaster	<b>TOTAL</b>
PM	41.59	0.23	10.41	52.23
PM10	41.59	0.23	10.41	52.23
SO2	0.00	0.02	0.00	0.02
NOx	0.00	3.09	0.00	3.09
VOC	448.74	0.17	0.00	448.91
CO	0.00	2.59	0.00	2.59
total HAPs	311.89	0.00	0.00	311.89
worst case single HAP	163.48	0.00	0.00	163.48
Total emissions based on rated capacity at 8,760 hours/year.				
<b>Controlled Potential Emissions (tons/year)</b>				
Emissions Generating Activity				
Pollutant	VOC, Particulate & HAP Emissions From Surface Coating Operations	Natural Gas Combustion Emissions From Commercial Boilers	Pneumatic Blasting Emissions From Pneumatic Blaster	<b>TOTAL</b>
PM	2.08	0.23	3.64	5.95
PM10	2.08	0.23	3.64	5.95
SO2	0.00	0.02	0.00	0.02
NOx	0.00	3.09	0.00	3.09
VOC	24.00	0.17	0.00	24.17
CO	0.00	2.59	0.00	2.59
total HAPs	16.69	0.00	0.00	16.69
worst case single HAP	8.75	0.00	0.00	8.75
Total emissions based on rated capacity at 8,760 hours/year, after control.				

**HAP Emission Calculations**

**Company Name:** Hoosier Stamping and Manufacturing Corporation  
**Address City IN Zip:** 1825 W. Franklin Street, Evansville, IN 47719  
**CP:** 163-9843  
**Plt ID:** 163-00009  
**Reviewer:** Yvette de los Angeles  
**Date:** August 6, 1998

State Potential Emissions (uncontrolled):																
Material ** (as applied)	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Weight % Naphthalene	Weight % 2-Butoxyethanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	2-Butoxyethanol Emissions (ton/yr)	TOTAL HAPs (ton/yr)
Silver Enamel ID #4 & #5 (62803)	8.05	0.0710	200.00	32.65%	0.00%	0.28%	6.13%	0.43%	0.00%	163.48	0.00	1.42	30.71	2.13	0.00	197.75
Orange Enamel ID #4 & #5 (62124)	7.93	0.0730	200.00	1.89%	4.73%	0.00%	0.00%	0.43%	0.95%	9.59	23.98	0.00	0.00	2.20	4.80	40.57
Toluene (for line cleaner)	7.49	0.0130	200.00	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00	85.30	0.00	0.00	0.00	0.00	85.30
<b>Total State Potential Emissions:</b>										<b>163.48</b>	<b>109.28</b>	<b>1.42</b>	<b>30.71</b>	<b>2.20</b>	<b>4.80</b>	<b>311.89</b>

**Limited Potential Emissions (controlled):**

Material Usage Limitation *	Limited Xylene Emissions (ton/year)	Limited Toluene Emissions (ton/year)	Limited Formaldehyde Emissions (ton/year)	Limited Ethylbenzene Emission (ton/year)	Limited Naphthalene Emissions (ton/year)	Limited 2-Butoxyethanol Emissions (ton/year)	LIMITED HAP EMISSIONS (ton/year)
<b>5.35%</b>	<b>8.75</b>	<b>5.85</b>	<b>0.08</b>	<b>1.64</b>	<b>0.12</b>	<b>0.26</b>	<b>16.69</b>

**Total Federal Potential Emissions:**

\* The VOC usage will be limited to 24 tons per year to avoid the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operation); therefore, the Material Usage Limitation is 5.35% [24/448.74 = 0.0535 = 5.35%]

\*\* The coatings are mutually exclusive of one another.

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs  
 Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations**  
**Natural Gas Combustion**  
**MM Btu/hr 0.3 - < 100**

**Company Name:** Hoosier Stamping and Manufacturing Corporation  
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**Plt ID:** 163-00009  
**Reviewer:** Yvette de los Angeles  
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Process	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
Water Heater ID #1	1.75	15.3
Bake Oven ID #2	2.00	17.5
Bake Oven ID #3	2.00	17.5
Bake Oven ID #6	1.00	8.8
Pyrolysis Furnace ID #8	0.30	2.6

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr						
Water Heater ID #1	0.06	0.06	0.00	0.77	0.04	0.64
Bake Oven ID #2	0.07	0.07	0.01	0.88	0.05	0.74
Bake Oven ID #3	0.07	0.07	0.01	0.88	0.05	0.74
Bake Oven ID #6	0.03	0.03	0.00	0.44	0.02	0.37
Pyrolysis Furnace ID #8	0.01	0.01	0.00	0.13	0.01	0.11
<b>Total Potential Emissions in tons/yr</b>	<b>0.23</b>	<b>0.23</b>	<b>0.02</b>	<b>3.09</b>	<b>0.17</b>	<b>2.59</b>

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1 emissions.

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

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-02, #1-02-006-02, #1-03-006-02, #1-03-006-03

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

**Pneumatic Blasting Emission Calculations**  
**Company Name:** Hoosier Stamping and Manufacturing Corporation  
**Address City IN Zip:** 1825 W. Franklin Street, Evansville, IN 47719  
**CP:** 163-9843  
**Plt ID:** 163-00009  
**Reviewer:** Yvette de los Angeles  
**Date:** August 6, 1998

**Table 1 - Emission Factors for Abrasives**

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

**Table 2 - Density of Abrasives (lb/ft3)**

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487
Glass beads	84

**Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)**

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

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

**Calculations**

*Adjusting Flow Rates for Different Abrasives and Nozzle Diameters*

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)  
 FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =  
 D = Density of abrasive (lb/ft3) From Table 2 =  
 D1 = Density of sand (lb/ft3) =  
 ID = Actual nozzle internal diameter (in) =  
 ID1 = Nozzle internal diameter (in) from Table 3 =

280
84
99
0.25
0.25

**Flow Rate (FR) (lb/hr) = 237.576 per nozzle**

**Uncontrolled Emissions (E, lb/hr)**

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

0.010
237.576
0%
1

<b>Uncontrolled Emissions =</b>	<b>2.38 lb/hr</b>
	<b>10.41 ton/yr</b>

**Controlled Emissions (C, lb/hr)**

CE = control efficiency =

65%
-----

<b>Controlled Emissions =</b>	<b>0.83 lb/hr</b>
	<b>3.64 ton/yr</b>

**METHODOLOGY**

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"  
 Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs  
 Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)² x (D/D1)  
 E = EF x FR x (1-w/200) x N  
 C = E \* (1-CE)