



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: August 8, 2011

RE: Hensley Fabricating & Equipment Co. / 099 - 30627 - 00109

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

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice.** The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FN-REGIS.dot 1/2/08



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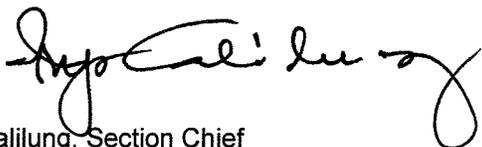
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REGISTRATION OFFICE OF AIR QUALITY

Hensley Fabricating & Equipment Co., Inc.
17624 State Road 331 North
Tippecanoe, IN 46570

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 099-30627-00109	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 8, 2011

SECTION A

SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary existing metal parts manufacturing and coating operation.

Source Address:	17624 State Road 331 North, Tippecanoe, Indiana, 46570
General Source Phone Number:	(574) 498-6514
SIC Code:	3599 (Industrial and Commercial Machinery and Equipment, Not Elsewhere Classified)
County Location:	Marshall
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) Spray Coating Booth, identified as SR1, constructed in 1987, using High Volume Low Pressure and Electrostatic Disc Coating Method, with a maximum capacity of 0.25 metal parts/hour, using dry filters as particulate control, and exhausting to stack SVSR1.
- (b) Twelve (12) heaters, with total heat input rate of 23.3 MMBtu/hour.
- (c) Twenty-six (26) miscellaneous welders.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. 099-30627-00109 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

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

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), 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.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant notifies:

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

The Registrant shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

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

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

C.2 Fugitive Dust Emissions [326 IAC 6-4]

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

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) Spray Coating Booth, identified as SR1, constructed in 1987, using High Volume Low Pressure and Electrostatic Disc Coating Method, with a maximum capacity of 0.25 metal parts/hour, using dry filters as particulate control, and exhausting to stack SVSR1.
- (b) Twelve (12) heaters, with total heat input rate of 23.3 MMBtu/hour.
- (c) Twenty-six (26) miscellaneous welders.

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

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d):

- (1) The spray coating booth (SR1), shall be controlled by a dry particulate filter, or an equivalent control device;
- (2) The source shall operate the control device in accordance with manufacturers specifications; and
- (3) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (C) If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

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

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Hensley Fabricating & Equipment Co., Inc.
Address:	17624 State Road 331 North
City:	Tippecanoe, Indiana, 46570
Phone Number:	(574) 498-6514
Registration No.:	099-30627-00109

I hereby certify that Hensley Fabricating & Equip. Co. is: still in operation.
 no longer in operation.

I hereby certify that Hensley Fabricating & Equip. Co. is: in compliance with the requirements of Registration No. 099-30627-00109
 not in compliance with the requirements of Registration No. 099-30627-00109.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Description and Location

Source Name:	Hensley Fabricating & Equipment Co., Inc.
Source Location:	17624 State Road 331 North, Tippecanoe, Indiana, 46570
County:	Marshall
SIC Code:	3599 (Industrial and Commercial Machinery and Equipment, Not Elsewhere Classified)
Registration No.:	099-30627-00109
Permit Reviewer:	Renee Traivaranon

On June 10, 2011, the Office of Air Quality (OAQ) received an application from Hensley Fabricating & Equipment Co., Inc. related to the construction and operation of a new metal parts manufacturing and coating operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Marshall County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
Marshall County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.
- (c) **Other Criteria Pollutants**
Marshall County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

- (a) One (1) Spray Coating Booth, identified as SR1, constructed in 1987, using High Volume Low Pressure and Electrostatic Disc Coating Method, with a maximum capacity of 0.25 metal parts/hour, using dry filters as particulate control, and exhausting to stack SVSR1.
- (b) Twelve (12) heaters, with total heat input rate of 23.3 MMBtu/hour.
- (c) Twenty-six (26) miscellaneous welders.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Surface Coating (SR1)	4.95	4.95	4.95	0.00	0.00	9.49	0.00	0.00	2.65	negl.
Welders (WD)	1.11	1.11	1.11	0.00	0.00	negl	0.00	0.00	0.00	0.00
Natural Gas Heating (H)	0.02	0.08	0.08	0.01	1.12	0.06	0.94	1348.44	0.00	0.00
Vehicular Traffic (VT)	0.18	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	6.27	6.19	6.19	0.01	1.12	9.56	0.94	1348.44	<10	<25
Registration Levels	25	25	25	25	25	25	100	100,000	25	10

negl. = negligible
 *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
 **The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

Criteria Pollutants

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, and PM2.5 are within the ranges listed in 326 IAC 2-5.5-1(b)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). A Registration will be issued.

Hazardous Air Pollutants

(b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Greenhouse Gases (GHGs) as CO₂e

(c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating Operations of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart Mmmm (326 IAC 20-80), are not included in this registration because the source is not a major source for HAPs.

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH (326 IAC 20-88), are not included for this registration because the coating materials do not contain 0.1 percent or more by mass of the metal HAPs (cadmium (Cd), chromium (Cr), lead (Pb), manganese (Mn), or nickel (Ni)), and this source do not perform paint stripping using Methylene Chloride.
- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.5 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (g) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

Spray Coating Operation

- (h) 326 IAC 8-2-9 (Miscellaneous metal and plastic coating operations)
Spray Coating Booth (SR1) was constructed in 1987 after the applicable rule dated of 1980. However the PTE of VOC is less than 25 tons per year, therefore, the requirements of 326 IAC 8-2-9 do not apply.
- (i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d):
 - (1) The spray coating booth (SR1), shall be controlled by a dry particulate filter, or an equivalent control device;
 - (2) The source shall operate the control device in accordance with manufacturers specifications; and
 - (3) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (C) If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Welding and Cutting Machines Operations

- (j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The PTE of PM of each machine is less than 0.551 pounds per hour, therefore, the requirements of 326 IAC 6-3-2 do not apply.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on June 10, 2011.

The construction and operation of this source shall be subject to the conditions of the attached Registration No. 099-30627-00109. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ms. Renee Traivaranon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5615) or toll free at 1-800-451-6027 extension (4-5615).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emissions Calculations
Emissions Summary**

**Company Name: Hensley Fabricating & Equipment Co., Inc.
Address City IN Zip: 17624 State Road 331 North, Tippecanoe, Indiana, 46570
Permit No.: 099-30627-00109
Permit Reviewer: Renee Traivaranon
Date: August 1, 2011**

POTENTIAL TO EMIT IN TONS PER YEAR

Emission Units	PM	PM10/PM2.5	SO₂	NOx	VOC	CO	CO2e	* Highest Single HAP	Combined HAP
Welding (WD)	1.11	1.11	0.00	0.00	0.02	0.00	0.00	0.02	1.77E-02
Vehicular Traffic (VT)	0.18	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Coating (SR1)	4.95	4.95	0.00	0.00	9.49	0.00	0.00	0.03	2.65
Natural Gas Heating (H)	0.02	0.08	0.01	1.12	0.06	0.94	1348.44	0.00	0.00
TOTALS	6.27	6.19	0.01	1.12	9.56	0.94	1348.44	0.05	2.67

*Xylene as Determined Below

HAZARDOUS AIR POLLUTANTS

Emission Units	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Manganese Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Welding (WD)	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00
Vehicular Traffic (VT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Coating (SR1)	0.85	0.00	0.00	0.00	0.03	1.77	2.65
Natural Gas Heating (H)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Emissions (TPY) by HAP	0.85	0.00	0.00	0.00	0.03	1.77	2.65

**Appendix A: Emissions Calculations
VOC/HAP and Particulate
Surface Coating Operations (SR1)**

**Company Name: Hensley Fabricating & Equipment Co., Inc.
Address City IN Zip: 17624 State Road 331 North, Tippecanoe, Indiana, 46570
Permit No.: 099-30627-00109
Permit Reviewer: Renee Traivaranon
Date: August 1, 2011**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Weight % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Material Usage (gal/hr)	Material Usage (lb/hr)	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*
Gray Primer 95-249	9.68	40.00%	0.00%	40.00%	0.00%	70.37%	0.4990	0.250	3.87	3.87	0.12	1.21	0.48	11.59	2.12	0.79	5.50	75%
Epoxy Mastic Catalyst 95-249	12.60	21.00%	0.00%	21.00%	0.00%	86.96%	0.4990	0.250	2.65	2.65	0.12	1.57	0.33	7.92	1.45	1.36	3.04	75%
Reducer 97-736	6.76	100.00%	0.00%	100.00%	0.00%	0.00%	0.0596	0.250	6.76	6.76	0.01	0.10	0.10	2.42	0.44	0.00	NA	75%
Topcoat 95-8001	12.35	37.00%	0.00%	37.00%	0.00%	79.54%	0.9990	0.250	4.57	4.57	0.25	3.08	1.14	27.39	5.00	2.13	5.74	75%
Curing Agent 95-819	9.76	0.00%	0.00%	0.00%	0.00%	100.00%	0.2499	0.250	0.00	0.00	0.06	0.61	0.00	0.00	0.00	0.67	0.00	75%
Urethane Accelerator 97-722	8.18	98.40%	0.00%	98.40%	0.00%	1.68%	0.0145	0.250	8.05	8.05	0.00	0.03	0.03	0.70	0.13	0.00	479.11	75%
Potential Emission Rates - Coating Room													2.08	50.02	9.13	4.95		
AND																		
PS-229 Thinner for Cleanup	6.51	100.00%	0.00%	100.00%	0.00%	0.00%	0.0500	0.250	6.51	6.51	0.01	0.08	0.08	1.95	0.36	0.00	0.00	100%
Total Potential Emission Rates for Cleanup Solvents													0.08	1.95	0.36	0.00		
Potential Emission Rates - Coating Room													2.08	50.02	9.13	4.95		
Cleanup Solvents													0.08	1.95	0.36	0.00		
Coating + Cleanup Solvent = Potential to Emit													2.17	51.98	9.49	4.95		
Particulate Matter Emission Rates (lb/hr)																1.13	lb/hr	
Particulate Matter Emission Rates (lb/hr)																0.24	lb/hr	

*Application and Manual Cleaning - Mutually Exclusive Coating Application

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 hrs/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

HAZARDOUS AIR POLLUTANTS

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Formaldehyde	Weight % MIBK	Weight % Methanol	Weight % Toluene	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	MIBK Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Gray Primer 95-249	9.68	0.4990	0.250	4.90%	0.00%	0.00%	0.00%	0.00%	9.90%	0.26	0.00	0.00	0.00	0.00	0.52	0.78	
Epoxy Mastic Catalyst 95-249	12.60	0.4990	0.250	0.99%	0.00%	0.00%	0.00%	0.00%	0.99%	0.07	0.00	0.00	0.00	0.00	0.07	0.14	
Reducer 97-736	6.76	0.0596	0.250	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Topcoat 95-8001	12.35	0.9990	0.250	0.00%	0.00%	0.00%	0.00%	0.00%	0.99%	0.00	0.00	0.00	0.00	0.00	0.13	0.13	
Curing Agent 95-819	9.76	0.2499	0.250	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Urethane Accelerator 97-722	8.18	0.0145	0.250	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Potential Emission Rates - Coating Room											0.26	0.00	0.00	0.00	0.00	0.52	0.78
PS-229 Thinner for Cleanup	6.51	0.0500	0.250	0.00%	0.00%	0.00%	0.00%	8.90%	0.00%	0.00	0.00	0.00	0.00	0.03	0.00	0.03	
Coating + Cleanup Solvent = Potential to Emit											0.59	0.00	0.00	0.00	0.03	1.249	1.867
Coating + Cleanup Solvent = Potential to Emit											0.59	0.00	0.00	0.00	0.03	1.25	1.867
Worst Case HAP Emission Rates											0.85	0.00	0.00	0.00	0.03	1.77	2.65

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 - Add Worst Case Coating to All Cleanup Solvents

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

**Company Name: Hensley Fabricating & Equipment Co., Inc.
Address City IN Zip: 17624 State Road 331 North, Tippecanoe, Indiana, 46570
Prepared By: D&B Environmental Services, Inc.
Review By: Renee Traivaranon
Date: August 1, 2011**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Electrode Consumption (lb/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)					EMISSIONS (lbs/hr)					HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Co	Cr	PM = PM10	Mn	Ni	Co	Cr	
WELDING														
Metal Inert Gas (MIG) - carbon steel	5	2.37	11.85	0.0052	3.18E-04	1.00E-06	0.00E+00	1.00E-06	6.162E-02	3.77E-03	1.19E-05	0.00E+00	1.19E-05	3.79E-03
Metal Inert Gas (MIG) - Aluminum	15	2.37	35.55	0.0052	2.60E-06	0.00E+00	0.00E+00	1.00E-06	1.849E-01	9.24E-05	0.00E+00	0.00E+00	3.56E-05	1.28E-04
Stick Welding	2	0.10	0.19	0.0241	3.40E-04	0.00E+00	0.00E+00	1.00E-04	4.63E-03	6.54E-05	0.00E+00	0.00E+00	1.92E-05	8.46E-05
		Total Electrodes	47.59											
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS**** (lb pollutant/1,000 inches cut)**					EMISSIONS (lbs/hr)					HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Co	Cr	PM = PM10	Mn	Ni	Co	Cr	
Plasma**	4	0.2499	6.00	0.00220	3.30E-05	0.00	0.00	0.00	0.003	4.75E-05	0.00	0.00	0.00	4.75E-05
Arc Carbon Cutter**	0	0.2499	6.00	0.00220	3.30E-05	0.00	0.00	0.00	0.000	0.00E+00	0.00	0.00	0.00	0.00E+00
EMISSION TOTALS														
									PM = PM10	Mn	Ni	Co	Cr	Total HAP
Potential Emissions lbs/hr									0.25	0.004	0.00	0.00	0.00	0.004
Potential Emissions lbs/day									6.10	0.10	0.00	0.00	0.00	0.10
Potential Emissions tons/year									1.11	0.02	0.00	0.00	0.00	0.02

Each welding station consumes less than 625 pounds per day of welding wire
Each plasma cutting station cuts less than 3,400 inches per hour of stock of one (1) inch thickness or less

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma/arc carbon 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 factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

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; Estimated at 4.55 mm or 0.1793 inches = 0.0022 lb/1,000 inches.

****HAP emission factors based upon the cutting of carbon steel that is a maximum of 1.5% manganese by weight.

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick adjusted to 0.1793 in. thickness)

Plasma cutting and laser cutting HAP emissions are calculated as (fume emission rate x weight % of component in product cut).

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

**Emissions Calculations
Natural Gas Fired Heaters**

Company Name: Hensley Fabricating & Equipment Co., Inc.
Address: 17624 State Road 331 North, Tippecanoe, Indiana, 46570
Permit No.: 099-30627-00109
Permit Reviewer: Renee Traivaranon
Date: August 1, 2011

Description	Number of Emission Units	Emission Unit ID	Heat Input Capacity (MMBtu/hr)	Total Maximum Potential Throughput (MMCF/yr)
Unit Heaters	10	H1-H10	2,000	17.5
Unit Heater	1	H11	0.250	2.2
Unit Heater	1	H12	0.300	2.6
Totals	12		2,550	22.3

Emission Factor (lbs/MMCF)						
PM*	PM10*	SO ₂	NO _x **	CO	VOC	HAPs
1.9	7.6	0.6	100	84.0	5.5	0.09

Potential To Emit (tons/yr)							
Emission Unit ID	PM	PM10	SO ₂	NO _x	CO	VOC	HAPs
H1-H10	0.02	0.07	0.005	0.88	0.74	0.05	7.6E-04
H11	0.00	0.01	0.001	0.11	0.09	0.01	9.5E-05
H12	0.00	0.01	0.001	0.13	0.11	0.01	1.1E-04
TOTALS	0.02	0.08	0.01	1.12	0.94	0.06	9.7E-04

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO ₂	CH ₄	N ₂ O
	120,000	2.3	2.2
Potential Emission in tons/yr	1,340	0.03	0.02
Summed Potential Emissions in tons/yr	1,340		
CO ₂ e Total in tons/yr	1,348		

* PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

**Emission factor for NO_x: Uncontrolled = 100 lb/MMCF

Emission factors are from AP-42, Chapter 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, 1.4-3 and 1.4-4. SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. (AP-42 Supplement D 7/98)

1 MMBtu = 1,000,000 Btu

1 MMCF = 1,000,000 cubic feet of gas

All Emission factors are based on normal firing.

METHODOLOGY

Max. Potential Throughput (MMCF/yr) = Number of Units x Heat Input Capacity/Unit (MMBtu/hr) x 8,760 (hrs/yr) x 1 MMCF/1,000 MMBtu

PTE (tons/yr) = Max. Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1/2,000 (ton/lbs)

Total HAP emissions are negligible.

The N₂O Emission Factor for uncontrolled is 2.2. The N₂O Emission Factor for low No_x burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO₂e (tons/yr) = CO₂ Potential Emission ton/yr x CO₂ GWP (1) + CH₄ Potential Emission ton/yr x CH₄ GWP (21) + N₂O Potential Emission ton/yr x N₂O GWP (310).

**Appendix A: Emissions Calculations
 Particulate
 Vehicular Traffic (VT)**

Company Name: Hensley Fabricating & Equipment Co., Inc.
Address City IN Zip: 17624 State Road 331 North, Tippecanoe, Indiana, 46570
Permit No.: 099-30627-00109
Prepared By: D&B Environmental Services, Inc.
Review By: Renee Traivaranon
Date: August 1, 2011

0.25 Trips/Hr x
 0.024 Miles/Roundtrip x
 8,760.00 Hours/Year = 51.85 Miles/Year

PM PM10

7.06	1.56	Ef = Emission Factor (lb/mile)
10	2.6	k = (particle size multiplier; k = 10 for PM30/TSP)
4.8	4.8	s = (mean % silt of unpaved roads)
0.5	0.4	b = (constant for PM10; b = 0.5 for PM30/TSP)
0.4	0.3	c = (constant for PM10; c = 0.4 for PM30/TSP)
15	15	W = (tons average vehicle weight)
0.2	0.2	Mdry = (surface material moisture content, %; default is 0.2 for dry conditions)
125	125	p = (number of days with at least 0.254 mm precipitation; Figure 13.2.2-1)

0.18 0.04 Potential Emissions (tons/year)

$$Ef = \{k * [(s/12)^{0.8}] * [(W/3)^b] / [(Mdry/0.2)^c]\} * [(365-p)/365]$$

Ef x Distance (miles/yr) x 1/2,000 (lb/ton)

AP-42, Chapter 13.2.2, Unpaved Roads



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Gregg Hensley
Hensley Fabricating & Equipment Co.
17624 SR 331 N
Tippecanoe, IN 46570

DATE: August 8, 2011

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

SUBJECT: Final Decision
Registration
099 - 30627 - 00109

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Mr. Doug Elliott D & B Environmental Services
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 8/8/2011 Hensley Fabricating & Equipment Co. Inc 099 - 30627 - 00109 final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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1		Gregg Hensley Hensley Fabricating & Equipment Co, Inc 17624 SR 331 N Tippecanoe IN 46570 (Source CAATS) Via confirmed delivery										
2		Marshall County Commissioners 112 West Jefferson Street Plymouth IN 46563 (Local Official)										
3		Mr. Doug Elliott D & B Environmental Services, Inc. 401 Lincoln Way West Osceola IN 46561 (Consultant)										
4		Marshall County Health Department 112 W Jefferson Street, Suite 103 Plymouth IN 46563-1764 (Health Department)										
5		Ms. Julie Grzesiak 1924 S. 1050 W. Russiaville IN 46979 (Affected Party)										
6		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
7		Rodney & Rarrie Kreft 18151 State Road 331 Tippecanoe IN 46570 (Affected Party)										
8		Ryan & Evelyn Hensley 17610 State Road 331 Tippecanoe IN 46570 (Affected Party)										
9		Paul & Beatrice Hensley PO Box 123 Tippecanoe IN 46570 (Affected Party)										
10		Grover & Janice Craft 2949 17A Road Tippecanoe IN 46570 (Affected Party)										
11		Daniel Geldner 2935 17C Road Tippecanoe IN 46570 (Affected Party)										
12		Steve Replogle 2933 17C Road Tippecanoe IN 46570 (Affected Party)										
13		Kevin & Madonna Irwin 2911 17C Road Tippecanoe IN 46570 (Affected Party)										
14												
15												

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