



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: June 30, 2009

RE: Electric Motors & Specialties, Inc. / 033-28120-00028

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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REGISTRATION OFFICE OF AIR QUALITY

Electric Motor and Specialties, Inc.
701 West King Street
Garrett, Indiana 46738

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. 033-28120-00028	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 30, 2009

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 small electric motor production operation..

Source Address:	701 West King Street, Garrett, IN 46738
Mailing Address:	PO Box 180 Garrett, IN 46738
General Source Phone Number:	260-357-4141
SIC Code:	3621
County Location:	DeKalb County
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) natural gas-fired aluminum melt furnace and die cast unit, identified as AF-1, constructed in October 1996, with a maximum burner rating of 1.2 MMBtu/hr, with a maximum melt capacity of 600 pounds per hour, with no emission controls, and exhausting, respectively, to stacks S-7A and S-7B;
- (b) One (1) building heating natural gas-fired boiler, identified as BO-1, constructed in July 2001, with a maximum heat input capacity of 2.01 MMBtu/hr, and exhausting to stack S-10;
- (c) One (1) bonding and gluing booth, identified as BG-1, constructed in 1988, having a maximum capacity of 2000 electric motor parts per day; and
- (d) One (1) paint dip tank and associated wash unit, identified as PC-DC, constructed in October 1980, having a maximum capacity of 1440 metal parts per hour.

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. 033-28120-00028 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.

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

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)]:

One (1) natural gas-fired aluminum melt furnace and die cast unit, identified as AF-1, constructed in October 1996, with a maximum burner rating of 1.2 MMBtu/hr, with a maximum melt capacity of 600 pounds per hour, with no emission controls, and exhausting, respectively, to stacks S-7A and S-7B;

(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 [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3(e)(1) the particulate emission from the aluminum melt furnace shall not exceed to 1.83 pounds per hour at process weight rate of 0.3 tons per hour.

This limit shall be determined using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

SECTION D.2

OPERATION CONDITIONS

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

One (1) building heating natural gas-fired boiler, identified as BO-1, constructed in July 2001, with a maximum heat input capacity of 2.01 MMBtu/hr, and exhausting to stack S-10;

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

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

D.2.1 Particulate [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4, particulate emissions from the building heat boiler shall be limited to 0.6 pounds per MMBtu heat input.

**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:	Electric Motor and Specialties, Inc.
Address:	701 West King Street
City:	Garrett, Indiana 46738
Phone Number:	260-357-4141
Registration No.:	033-28120-00028

I hereby certify that Electric Motor and Specialties, Inc.
is :

still in operation.

I hereby certify that Electric Motor and Specialties, Inc.
is :

no longer in operation.

in compliance with the requirements
of Registration No. 033-28120-00028.

not in compliance with the requirements
of Registration No. 033-28120-00028.

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 an MSOP Transitioning to a Registration

Source Description and Location

Source Name:	Electric Motor and Specialties, Inc.
Source Location:	701 West King Street, Garrett, Indiana 46738
County:	DeKalb
SIC Code:	3621
Registration No.:	033-28120-00028
Permit Reviewer:	Jillian Bertram

On June 11, 2009, the Office of Air Quality (OAQ) received an application from Electric Motor and Specialties, Inc. related to transition of an MSOP to a Registration due to the removal of an existing paint booth.

Existing Approvals

The source has been operating under MSOP No. 033-28120-00028, issued on July 25, 2005.

County Attainment Status

The source is located in DeKalb 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 PM2.5.	

(a) Ozone Standards

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

(b) PM2.5

DeKalb County has been classified as attainment for PM2.5. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 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 PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

DeKalb County has been classified as attainment or unclassifiable in Indiana for all other criteria 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 and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.5 (Registrations) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Electric Motor and Specialties, Inc. on June 11, 2009, relating to the removal of a spray paint booth.

The source consists of the following existing emission unit(s):

- (a) One (1) natural gas-fired aluminum melt furnace and die cast unit, identified as AF-1, constructed in October 1996, with a maximum burner rating of 1.2 MMBtu/hr, with a maximum melt capacity of 600 pounds per hour, with no emission controls, and exhausting, respectively, to stacks S-7A and S-7B;
- (b) One (1) building heating natural gas-fired boiler, identified as BO-1, constructed in July 2001, with a maximum heat input capacity of 2.01 MMBtu/hr, and exhausting to stack S-10;
- (c) One (1) bonding and gluing booth, identified as BG-1, constructed in 1988, having a maximum capacity of 2000 electric motor parts per day; and
- (d) One (1) paint dip tank and associated wash unit, identified as PC-DC, constructed in October 1980, having a maximum capacity of 1440 metal parts per hour.

The following emission unit has been removed from the source:

One (1) paint spray booth, identified as PSB-1, constructed in 1988, with a maximum capacity of 720 electric motor parts, using dry filters as control.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination –Registration

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	Total HAPs	Worst Single HAP
AF-1	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.00	negl.
BO-1	0.02	0.07	0.07	0.01	0.88	0.05	0.74	0.02	0.02 - hexane
BG-1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
PC-DC	8.97	8.97	8.97	0.00	0.00	17.75	0.00	0.00	0.00
Total PTE of Entire Source	11.48	11.53	11.53	0.01	0.88	17.85	0.74	0.02	0.02 - hexane
Exemptions Levels	5	5	5	10	10	5 or 10	25	25	10
Registration Levels	25	25	25	25	25	25	100	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".									

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, PM2.5, and VOC 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.
- (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.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since the maximum heat input capacity of BO-1 is less than the threshold of 10 MMBtu/hr.
- (b) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (326 IAC 12), are not included in the permit, since this source coats only metal for electric motors.
- (c) The requirements of the New Source Performance Standard for Surface Coating of Metal Coil, 40 CFR 60, Subpart TT (326 IAC 12), are not included in the permit, since this source coats only metal for electric motors.
- (d) 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)

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.33, Subpart MMMM, are not included in the permit, since the source is not a major source of HAP.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating at Area Source, 40 CFR 63.116, Subpart HHHHHH, are not included in the permit, since none of the coatings used at the source contain target HAPs (chromium, lead, manganese, nickel, and cadmium).
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Sources, 40 CFR 63.115, Subpart XXXXXX, are not included in the permit, since the source does not emit any finishing metal HAPs.
- (h) There are no 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)

- (i) 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.

AF-1

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3(e)(1) the particulate emission from the aluminum melt furnace shall not exceed to 1.83 pounds per hour at process weight rate of 0.3 tons per hour. This limit shall be determined using the following equation:
- Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

BO-1

- (i) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-4, particulate emissions from the building heat boiler shall be limited to 0.6 pounds per MMBtu heat input.

BG-1

- (j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The binding and gluing booth is exempt from the requirements of 326 IAC 6-3-2 because the operation does not emit particulate.
- (k) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
Pursuant to 326 IAC 8-2-9(c), 326 IAC 8-2-9 does not apply to the binding and gluing booth because the unit was built before July 1, 1990 and the potential to emit VOC from the source is less than 25 tons per year.
- (l) There are not other Article 8 rules that apply.

PC-DC

- (m) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(7), PC-DC is exempt from the requirement of 326 IAC 6-3-2

because coating is achieved by means of dipping.

- (n) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
326 IAC 8-2-9 does not apply to the dip coating booth because the unit was built before November 1, 1980.
- (o) There are not other Article 8 rules that 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 11, 2009.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 033-28120-00028. This registration will supersede MSOP 033-13678-0008. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jillian Bertram 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)234-5377 or toll free at 1-800-451-6027 extension 4-5377.
- (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.idem.in.gov

Appendix A: Emissions Calculations

AF1

Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009

Aluminum Melting Furnace

Material Processed (lb/hr)	Material Processed (tons/yr)	Emission Factor (lb/ton)	PM (lb/hr)	PM (tons/yr)
600	2628	1.9	0.57	2.4966

Emission Factors are from EPA AP-42 12.8-2
Assuming PM = PM10 = PM2.5

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
BO-1**

Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.0

17.5

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100	5.5	84
				**see below		
Potential Emission in tons/yr	0.0	0.1	0.0	0.9	0.0	0.7

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

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 3 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
BO-1**

HAPs Emissions

Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
VOC and Particulate
BG-1**

**Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % 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	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
Adhesive	8.5	87.10%	0.0%	87.1%	0.0%	15.00%	0.00002	83.300	7.40	7.40	0.01	0.30	0.05	0.00	49.36	75%

State Potential Emissions

0.01 0.30 0.05 0.00

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)
No solvents are used in the bonding and gluing booth
Adhesive is HAP free

**Appendix A: Emissions Calculations
VOC and Particulate
PC-DC**

**Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % 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	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
Bk Dip Enamel	8.5	33.10%	0.0%	33.1%	0.0%	48.00%	0.00100	1440.000	2.81	2.81	4.05	97.23	17.75	8.97	5.86	75%

State Potential Emissions

4.05 97.23 17.75 8.97

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)
No solvents are used in the dip tank
Enamel is HAP free

**Appendix A: Emissions Calculations
Source-wide Summary**

**Company Name: Electric Motor and Specialties, Inc.
Address City IN Zip: 701 West King Street, Garrett, Indiana 46738
Permit Number: 033-28120-00028
Reviewer: Jillian Bertram
Date: 6/23/2009**

Emission Unit	PM (tons/yr)	PM10 (tons/yr)	Pm2.5 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Total HAP (tons/yr)
AF-1	2.50	2.50	2.50	0.00	0.00	0.00	0.00	negl.	0.00
BO-1	0.02	0.07	0.07	0.01	0.88	0.05	0.74	0.02 - hexane	0.02
BG-1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
PC-DC	8.97	8.97	8.97	0.00	0.00	17.75	0.00	0.00	0.00
Total	11.48	11.53	11.53	0.01	0.88	17.85	0.74	0.02 - hexane	0.02



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: Richard L. Daniel
Electric Motors & Specialties, Inc.
PO Box 180
Garrett IN 46738

DATE: June 30, 2009

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

SUBJECT: Final Decision
Registration
033-28120-00028

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:
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	BLOCCHET 6/30/2009 Electric Motors & Specialties, Inc 033-28120-00028 (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	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Richard L. Daniel Electric Motors & Specialties, Inc P.O. Box 180 Garrett IN 46738 (Source CAATS) Via Confirmed Delivery									
2		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 (Affected Party)									
3		DeKalb County Commissioners 100 South Main Street Auburn IN 46706 (Local Official)									
4		Ms. Diane Leroy 303 N. Jackson St. Auburn IN 46706 (Affected Party)									
5		Mr. Janel Rogers 311 S. Main Auburn IN 46706 (Affected Party)									
6		Mr. Barry Fordanish R#3 1480 CR 66 Auburn IN 46706 (Affected Party)									
7		Mr. Dave Weilbaker 1423 Urban Ave Auburn IN 46706 (Affected Party)									
8		DeKalb County Health Department 215 E. 9th, County Office Building, Suite 201 Auburn IN 46706-2336 (Health Department)									
9		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 (Affected Party)									
10		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)									
11		21Alive P.O. Box 2121 Fort Wayne IN 46801 (Affected Party)									
12		NBC33 2633 West State Blvd Fort Wayne IN 46808 (Affected Party)									
13		Brown & Sons Fuel Co. P.O. Box 665 Kendallville IN 46755 (Affected Party)									
14		Niann Lautzenhiser 660 LN 210 Hamilton LK Hamilton IN 46742 (Affected Party)									
15		Mr. Marty K. McCurdy 2550 County Road 27 Waterloo IN 46793 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Mail Code 61-53

IDEM Staff	BLOCCHET 6/30/2009 Electric Motors & Specialties, Inc 033-28120-00028 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Garrett City Council and Mayors Office P.O. Box 332, 130 S Randolph Garrett IN 46738 (Local Official)									
2											
3											
4											
5											
6											
7											
8											
9											
10											
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15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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