



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Steve Moeller
Meridian Automotive Systems, Inc.
14123 Roth Road
Grabill, Indiana 46741

October 29, 2007

Re: Interim Minor Source Modification Petition
003-254081-00059

Dear Mr. Moeller:

On October 16, 2007, the Office of Air Quality (OAQ), received an interim minor source modification petition from Meridian Automotive Systems, Inc., located at 14123 Roth Road, Grabill, Indiana. Based on the data and supplemental information submitted in the interim petition and the provisions of 326 IAC 2-13-1, this interim petition to construct is hereby approved for the following:

- (a) One (1) touch-up spray booth, identified as TU-ROOF, approved for construction in 2007, with a maximum capacity of 24 plastic parts per hour, equipped with one (1) manual High Volume Low Pressure (HVLP) spray system, with a dry filter to control particulate overspray emissions.

Detailed conditions will be specified in the final minor source modification 003-25408-00059. This interim minor source modification expires on the effective date of the final minor source modification. This interim minor source modification may be revoked after its effective date upon a written finding by the OAQ that any of the reasons for denial in 326 IAC 2-13-1(h) exist or if the final minor source modification is denied. The facilities subject to this approval may not operate until the final Part 70 operation approval is issued by OAQ.

If you have any questions regarding this interim minor source modification petition, please contact Aida De Guzman of my staff at 317-233-4972, or at 1-800-451-6027 (ask for extension 3-4972).

Sincerely/Original Signed By:

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

APD
Enclosure: Interim Permit Evaluation (3 pages)
Petition for Interim Minor Source Modification
PTE Calculations

cc: File -- Allen County
Allen County Health Department
Air Compliance Section
Permit Tracking

Indiana Department of Environmental Management Office of Air Quality

Interim Significant Source Modification Evaluation

Company Name: Meridian Automotive Systems, Inc.	
Location:	14123 Roth Road, Glabill, Indiana 46741
Permit No:	003-25408I-00059
Permit Reviewer: Aida De Guzman Date Receipt of Application: 10/16/07 Supplemental Information Received: 10/23/2007	
Description of the interim construction: Construction of a new Touch-Up Booth (TU-ROOF)	
Date the Supplemental Information on the Application was received + 19 days = November 9, 2007 Public Notice – Not needed for minor source modification, pursuant to 326 IAC 2-13(e)	

Interim Petition Applicability: 326 IAC 2-13-1

- (a) Existing Source with valid permit;
- (b) Exemptions:
- (1) construction of a PSD source or PSD modification;
 - (2) construction or modification in nonattainment area that would emit those pollutants for which the nonattainment designation is based.
 - (3) any modification subject to 326 IAC 2-4.1.
- (c) Approve or deny the interim minor permit revision or minor source modification in writing within 19 calendar days, or it becomes the enforceable interim minor permit revision or minor source modification. [326 IAC 2-13-1(d)]

Instructions: Check () appropriate answers and make a recommendation.

1. Did the applicant submit a written petition for an interim minor permit revision or minor source modification?
 Yes Go to question 2.
 No Ignore verbal request.

2. Did the applicant pay the \$625 interim permit fee?
 Yes Go to question 3.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(1).

3. Did the applicant state acceptance of federal enforceability of an interim minor permit revision or minor source modification?
 Yes Go to question 4.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(D).

4. Did the applicant or its authorized agent sign the application?
 Yes Go to question 5.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(E).

5. Did the applicant submit a notarized affidavit stating that the applicant will proceed at its own risk (if the interim minor permit revision or minor source modification is issued), including, but not limited to:
 - (a) Financial risk,
 - (b) Risk that additional emission controls may be required,
 - (c) Risk that the final minor permit revision or minor source modification may be denied. Yes Go to question 6.

No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(F).

6. Did the applicant begin construction prior to submitting the interim minor permit revision or minor source modification application?

Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(6).

No Go to question 7.

7. What is the type of the interim construction?

New Source Deny the application, pursuant to 326 IAC 2-13-1(a)

Modification to an existing source Go to question 8.

8. Did the applicant present data in the interim minor permit revision or minor source modification that is sufficient to determine PSD, NSPS, NESHAP, and state rule compliance?

Yes Go to question 9.

No Deny the application pursuant to:
326 IAC 2-13-1(c)(2)(B), for PSD ;
326 IAC 2-13-1(c)(2)(C), for NSPS or NESHAP;
326 IAC 2-13-1(c)(2)(C), for state rules.

9. Is the proposed revision/modification to be located in a nonattainment area?

Yes Go to question 10.

No Go to question 11. County: Allen County

10. Will the proposed modification emit the pollutant for which the area is nonattainment in quantities greater than the significant levels?

Yes Deny the application, pursuant to 326 IAC 2-13-1(a)(2).

No Go to question 11.

11. Did the petition include a complete description of the process?

Yes Go to question 12.

No Deny the petition, pursuant to 326 IAC 2-13-1(c)(2)(B).

12. Did the interim minor permit revision or minor source modification petition contain conditions accepting either emission controls (baghouse, afterburners, scrubbers, etc.) or enforceable limits or other suitable restriction to avoid PSD applicability; as well as control parameters (incinerator operating temperature, baghouse pressure drop, etc.)? The specific limits must be explicitly spelled out (i.e.: The gas consumption of the boiler shall not exceed 29 million cubic feet per month.) A statement such as that the company agrees to conditions such that PSD rules are not applicable is not acceptable.

Yes Go to question 13.

No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(B).

13. Do the emission controls and/or throughput limits prevent PSD applicability?

Yes Go to question 14.

No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(B).

14. Will the modification, after application of all emission controls and/or throughput limitations comply with all applicable New Source Performance Standards (NSPS) (40 CFR 60)?

Yes Go to question 15.

No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).

15. Will the modification, after application of all emission controls and/or throughput limitations comply with all applicable National Emission Standards for Hazardous Air Pollutants (NESHAP)?

Yes Go to question 16.

No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).

16. Will the modification, after application of all emission controls and/or throughput limitations, comply with all applicable state rules?
 Yes Go to question 17.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).
17. Does the applicant dispute applicability of any applicable state or federal rule?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).
 No Go to question 18.
18. Is there good reason to believe that the applicant does not intend to construct in accordance with the interim minor permit revision or minor source modification petition?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(1).
 No Go to question 19.
19. Is there a good reason to believe that information in the petition has been falsified?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(7).
 No Approve the interim minor permit revision or minor source modification petition.

Recommendation: Approve Interim Petition

Date the approval was drafted:

Method of informing the applicant: Phone: (260) 267-7848

Comments:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

PETITION FOR INTERIM APPROVAL FOR MODIFICATION

Source Name: Meridian Automotive Systems, Inc.
 Source Address: 14123 Roth Road, Grabill, Indiana 46741-0189
 Mailing Address: 14123 Roth Road, Grabill, Indiana 46741-0189
 Operating Permit: T 003-5942-00059
 Issuance Date: August 8, 2006
 SIC Code: 3089

Description of the Operation or Equipment:

Meridian Automotive Systems, Inc. operates a stationary high-pressure fiberglass reinforced plastics manufacturing and painting for automobile parts in Grabill, Indiana. The Permittee proposes a source modification, which involves the construction of the following emission unit:

- (a) One (1) touch-up spray booth, identified as TU-ROOF, approved for construction in 2007, with a maximum capacity of 24 plastic parts per hour, equipped with one (1) manual High Volume Low Pressure (HVLV) spray system, with a dry filter to control particulate overspray emissions.

This booth will be used to coat parts where the existing in-mold automatic coating operation may have missed or failed to coat properly.

Emissions Summary:

Description	PM	PM ₁₀	SO ₂	NO _x	VOC	CO	Single HAP	Combined HAPs
Touch-Up Booth	Uncontrolled PTE							
	2.44	2.44	-	-	12.35	-	0.02	0.05
	Controlled PTE							
	0.12	0.12			12.35		0.02	0.05

PSD Requirements:

The proposed changes do not affect the Plant's ability to comply with its PSD Minor Limit in its Operation Permit. The plant currently has an overall limit of 249.33 tons per year for VOC emissions from all operations combined. No additional VOC emission limit is being requested by the Permittee for the proposed touch-up booth. Its VOC emissions will be included with the 249.33 tons/year limit. Therefore, the source will remain a minor source under 326 IAC 2-2, Prevention of Significant Deterioration (PSD).

NSPS Requirements:

This touch-up booth is not subject to any NSPS.

NESHAP Requirements:

The proposed touch-up booth, which will be used to coat fiberglass parts is subject to 40 CFR Part 63 Subpart P and will demonstrate compliance by maintaining the HAP content of all coatings applied to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

State Rules & Requirements:

- (a) 326 IAC 6-3-1 (Particulate Emission Limitation for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(15), the proposed touch-up booth is exempted from the requirements of this rule because material usages are less than 5 gallons coating per day.

- (b) 326 IAC 5-1, Opacity Limitations.
Meridian is located outside of the coordinates that limit the opacity to thirty percent (30%). Therefore pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following limitations:

- (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. Formatted: Bullets and Numbering
- (2) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor in a six (6) hour period. Formatted: Bullets and Numbering

Federal Enforceability:

The company consents to the federal enforceability of this interim petition for modification.

Signature: _____

Printed Name: Colin Mason

Title or Position: Plant Manager

Phone No.: _____

Date: _____

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

**Company Name: Meridian Automotive Systems, Inc.
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Permit Number: MSM 003-25408
Plt ID: 003-00059
Reviewer: Aida De Guzman
Application Receipt Date: 10/16/2007**

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/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Touch-Up Booth (TU -ROOF)															
Gray Primer	9.4	50.57%	0.0%	50.6%	0.0%	31.71%	0.30	24.000	4.75	4.75	67.68	12.35	2.44	14.99	60%

Xylene = $0.016 \text{ lb/gal} * 0.3 \text{ gal/unit} * 24 \text{ units/day} * 365 \text{ days/yr} * \text{ton}/2000 \text{ lbs} = 0.02 \text{ ton/yr}$
 Combined HAPs = $0.037 \text{ lb/gal} * 0.3 \text{ gal/unit} * 24 \text{ units/day} * 365 \text{ days/yr} * \text{ton}/2000 \text{ lbs} = 0.05 \text{ ton/yr}$

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled PTE

12.35	2.44
12.35	0.12
0.02	
0.05	

Controlled PTE

Single HAP

Combined HAPs

METHODOLOGY

Note: Dry Filter control efficiency = 95%

- 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/day) * (365 days/yr) * (1 ton/2000 lbs)
- Particulate Potential Tons per Year = (units/day) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(365 days/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