

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

March 7, 2011

PERMIT TO INSTALL
281-91A

ISSUED TO
Fischer Body Refinishing

LOCATED AT
1759 Maplelawn
Troy, Michigan

IN THE COUNTY OF
Oakland

STATE REGISTRATION NUMBER
N2830

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

January 27, 2011

DATE PERMIT TO INSTALL APPROVED:

March 7, 2011

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table.....	5
Flexible Group Summary Table	6
Special Conditions for FGCOATING.....	7

Common Abbreviations / Acronyms

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallon of Applied Coating Solids	H ₂ S	Hydrogen Sulfide
GC	General Condition	hp	Horsepower
HAP	Hazardous Air Pollutant	lb	Pound
HVLP	High Volume Low Pressure *	m	Meter
ID	Identification	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	ng	Nanogram
MDNRE	Michigan Department of Natural Resources and Environment (Department)	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	PM less than 10 microns diameter
NSPS	New Source Performance Standards	PM2.5	PM less than 2.5 microns diameter
NSR	New Source Review	pph	Pound per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonably Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SRN	State Registration Number	THC	Total Hydrocarbons
TAC	Toxic Air Contaminant	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient	µg	Microgram
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUPREPBOOTH1	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH2	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH3	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH4	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH5	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH6	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH7	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH8	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH9	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH10	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH11	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUPREPBOOTH12	A booth used for spot wiping, primer application, and sanding operations. Exhaust filters are used within the booth.	02-07-1987 / NA	FGCOATING
EUCOATINGBOOTH1	A coating booth combined with a cure oven which is utilized for the application of base coat and clear coat coatings. The booth is also used as an oven which operates at a maximum temperature of 150°F.	ND / 09-22-1997	FGCOATING

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU COATING BOOTH 2	A coating booth combined with a cure oven which is utilized for the application of base coat and clear coat coatings. The booth is also used as an oven which operates at a maximum temperature of 150°F.	ND / 09-22-1997	FG COATING
EU COATING BOOTH 3	A coating booth combined with a cure oven which is utilized for the application of base coat and clear coat coatings. The booth is also used as an oven which operates at a maximum temperature of 150°F.	ND / 09-22-1997	FG COATING
EU COATING BOOTH 4	A coating booth combined with a cure oven which is utilized for the application of base coat and clear coat coatings. The booth is also used as an oven which operates at a maximum temperature of 150°F.	09-22-1997 / NA	FG COATING
EU CLEANUP	Cleanup operations that are conducted outside of the spray booths. Cleaning materials are captured from the applicators directly into waste drums.	02-07-1987 / NA	FG COATING
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG COATING	All prep booths, coating booths and cleanup operations combined which are used for the repair of automobiles.	EUPREPBOOTH1 through EUPREPBOOTH12, EU COATING BOOTH 1 through EU COATING BOOTH 4, EU CLEANUP

The following conditions apply to: FGCOATING

DESCRIPTION: Spray coating booths used for automotive repair operations including touch-up and repair painting on personal and commercial vehicles.

Emission Units: EUPREPBOOTH1 through EUPREPBOOTH12, and EUCOATINGBOOTH1 through EUCOATINGBOOTH4, EUCLEANUP

POLLUTION CONTROL EQUIPMENT: Dry filters within each prep booth and each spray booth

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs and Acetone combined	9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGCOATING	SC VI. 3	R 336.1224, R 336.1702(a)
2. Ethylbenzene (CAS No. 100-41-4)	0.8 tpy	12-month rolling time period as determined at the end of each calendar month	FGCOATING	SC VI.4	R 336.1225(2)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall capture all waste materials (i.e. coatings, reducers, solvents, etc.) and shall store them in closed containers. The permittee shall dispose of all waste materials (i.e. coatings, reducers, solvents, etc.) in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1702(a))**
2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. **(R 336.1224, R 336.1370)**
3. The permittee shall handle all VOC containing materials, including coatings, reducers, solvents, thinners, rags and other materials contacted by VOC materials, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1225, R 336.1702(a), R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any spray booth or prep booth within FGCOATING unless the respective exhaust filter(s) is installed, maintained and operated in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1331, R 336.1901, R 336.1910)**
2. The permittee shall equip and maintain FGCOATING booths with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall determine the VOC content, water content and density of any material (i.e. coating, reducer, thinner, etc.), as applied and as received, using federal Reference Test Method 24. Alternatively, the permittee may determine the VOC content from manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify manufacturer's formulation data using federal Reference Test Method 24. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e coatings, reducers, solvents, etc.), including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)**
3. The permittee shall keep the following information on a monthly basis for FGCOATING:
 - a) Gallons (with water) of each material (i.e. coating, reducer, solvent, thinner, etc.) used.
 - b) VOC content (with water), in pounds per gallon, of each material (i.e. coating, reducer, solvent, thinner, etc.) as applied.
 - c) Acetone content (with water), in pounds per gallon, of each material (i.e. coating, reducer, solvent, thinner, etc.) as applied
 - d) VOC and Acetone combined mass emission calculations determining the monthly emission rate in tons per calendar month.
 - e) VOC and Acetone combined mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)**

4. The permittee shall keep the following information on a monthly basis for FGCOATING:
 - a) Gallons (with water) of each ethylbenzene (CAS No. 100-41-4) containing material used.
 - b) Where applicable, gallons (with water) of each ethylbenzene (CAS No. 100-41-4) containing material reclaimed.
 - c) The ethylbenzene (CAS No. 100-41-4) content (with water) in pounds per gallon of each material used.
 - d) Ethylbenzene (CAS No. 100-41-4) mass emission calculations determining the monthly emission rate in pounds per calendar month.
 - e) Ethylbenzene (CAS No. 100-41-4) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225(2))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-PAINT1	36	25.42	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-PAINT2	36	25.42	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-PAINT3	36	25.42	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-PAINT4	36	25.42	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-PREPBOOTH1*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SV-PREPBOOTH2*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7. SV-PREPBOOTH3*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
8. SV-PREPBOOTH4*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
9. SV-PREPBOOTH5*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
10. SV-PREPBOOTH6*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
11. SV-PREPBOOTH7*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
12. SV-PREPBOOTH8*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
13. SV-PREPBOOTH9*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
14. SV-PREPBOOTH10*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
15. SV-PREPBOOTH11*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
16. SV-PREPBOOTH12*	NA	22.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

* These stacks are exhausted downward from a "T" shaped stack.

IX. OTHER REQUIREMENTS

N/A