# NEW SOURCE REVIEW PERMIT TO INSTALL

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LocPac, Inc.

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# Common Abbreviations / Acronyms Used in this Permit to Install

Common Acronyms			Pollutant / Measurement Abbreviations		
AQD Air Quality Division			British Thermal Unit		
ANSI	American National Standards Institute	BTU ℃	Degrees Celius		
BACT	Best Available Control Technology	CO	Carbon Monoxide		
CAA	Clean Air Act	dscf	Dry standard cubic foot		
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter		
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit		
COM	Continuous Opacity Monitoring	gr	Grains		
EPA	Environmental Protection Agency	Hg	Mercury		
EU	Emission Unit	hr	Hour		
GACS	Gallon of Applied Coating Solids	$H_2S$	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	NOx	Oxides of Nitrogen		
MDEQ	Michigan Department of Environmental Quality	PM	Particulate Matter		
MIOSHA	Michigan Occupational Safety & Health Administration	PM-10	Particulate Matter less than 10 microns diameter		
MSDS	Material Safety Data Sheet	pph	Pound per hour		
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppm	Parts per million		
NSPS	New Source Performance Standards	ppmv	Parts per million by volume		
NSR	New Source Review	ppmw	Parts per million by weight		
PS	Performance Specification	psia	Pounds per square inch absolute		
PSD	Prevention of Significant Deterioration	psig	Pounds per square inch gauge		
PTE	Permanent Total Enclosure	scf	Standard cubic feet		
PTI	Permit to Install	sec	Seconds		
RACT	Reasonable Available Control Technology	$SO_2$	Sulfur Dioxide		
SC	Special Condition	THC	Total Hydrocarbons		
SCR	Selective Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds		
VE	Visible Emissions	yr	Year		

<sup>\*</sup> 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).

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#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, 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. [R336.1201(1)]
- 2. If the installation, reconstruction, relocation, or alteration 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 person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install. [R336.1201(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 R336.1210, 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. [R336.1201(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. [R336.1201(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 R336.1219 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 R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. [R336.1219]
- 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. [R336.1901]
- 7. The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided no 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 District Supervisor within ten days, with the information required in this rule. [R336.1912]
- 8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 or the Federal Clean Air Act.

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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 Act 451, PA 1994, 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 R336.1301, a person 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 R336.1303. [R336.1301]
  - 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 R336.1370(2). [R336.1370]
- 13. Except as allowed by Rule 285 (a), (b), and (c), permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. [R336.1201(1)]
- 14. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. [R336.2001]

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#### **SPECIAL CONDITIONS**

### **Emission Unit Identification**

Emission Unit ID	Emission Unit Description	Stack Identification			
EUCOAT	Metal surface coating line consisting of a Blue Wash primer booth, a Prime Booth, a 1.6 MMBTU natural gas fired Prime Oven, a Top-Coat Booth, a 1.6 MMBTU natural gas fired Top-Coat Oven, and associated Purge and Cleanup Operations	SVBLUE, SVPRIME, SVPRIMEOVEN, SVTOPCOAT, SVTOPCOATOVEN			
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as					
allowed by R336.1278 to R336.1290.					

## Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FGFACILITY	All equipment at the stationary source including	N.A.
	equipment covered by other permits, grandfathered	
	equipment and exempt equipment.	

## The following conditions apply to: EUCOAT

#### **Emission Limits**

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements	
1.1a	VOCs	EUCOAT	10.9 tons	12-month rolling time period as determined at the end of each calendar month	SC 1.8, SC 1.9, SC 1.10	R336.1702(d)	
1.1b	VOCs	EUCOAT	3.5 pounds per gallon of coating, minus water, as applied	daily volume-weighted average	SC 1.8, SC 1.9	R336.1702(d)	

### **Process / Operational Limits**

- 1.2 The permittee shall recover and reclaim, recycle, or dispose of, in accordance with all applicable regulations, a minimum of 75 percent by weight of all purge solvents used for EUCOAT. [R336.1702(a)]
- 1.3 All waste coatings and solvents shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable rules and regulations. [R336.1702(a)]
- 1.4 The disposal of spent filters shall be performed in a manner which minimizes the introduction of air contaminants to the outer air. [R336.1224, R336.1370]

### **Equipment**

1.5 The permittee shall not operate the spraybooth portions of EUCOAT unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. [R336.1224, R336.1301, R336.1331, R336.1901, R336.1910]

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1.6 The permittee shall equip and maintain each spray booth portion of EUCOAT with HVLP or equivalent technology with comparable transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. [R336.1702(a)]

### **Testing**

1.7 The VOC content, water content, and density of any coating, solvent, or catalyst as applied and as received, shall be determined using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the VOC content may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the Method 24 results shall be used to determine compliance. [R336.1224, R336.1225, R336.1702, R336.1901]

### Recordkeeping /Reporting /Notification

- 1.8 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, solvent, and catalyst, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225, R336.1702, R336.1901]
- 1.9 The permittee shall keep the following information on a daily and monthly basis for EUCOAT:
  - a) Gallons (with water) of each coating, solvent, and catalyst used.
  - b) VOC content (minus water and with water) of each coating, solvent, and catalyst as applied.
  - c) VOC emission calculations determining the volume-weighted average VOC content of the coatings as applied on a daily volume-weighted average basis.
  - d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - e) VOC 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 records shall be kept in a format acceptable to the AQD Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225, R336.1702, R336.1901]

- 1.10 The permittee shall keep the following information on a monthly basis for the use of purge and clean-up solvents associated with EUCOAT:
  - a) Gallons of each solvent used and reclaimed.
  - b) VOC content, in pounds per gallon, of each solvent used.
  - c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - d) VOC 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 records shall be kept in a format acceptable to the AQD Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225, R336.1702, R336.1901]

# **Stack / Vent Restrictions**

	Stack & Vent ID	Maximum	Minimum Height Above	Applicable	
	Stack & Vent ID	Diameter (inches)	<b>Ground Level (feet)</b>	Requirement	
1.11a	SVBLUE	34.0	46.0	R336.1225, R336.1901,	
				40 CFR 52.21(c) & (d)	
1.11b	SVPRIME	34.0	46.0	R336.1225, R336.1901,	
				40 CFR 52.21(c) & (d)	
1.11c	SVPRIMEOVEN	12.0	40.0	R336.1225, R336.1901,	
				40 CFR 52.21(c) & (d)	
1.11d	SVTOPCOAT	34.0	46.0	R336.1225, R336.1901,	
				40 CFR 52.21(c) & (d)	
1.11e	SVTOPCOATOVEN	12.0	40.0	R336.1225, R336.1901,	
				40 CFR 52.21(c) & (d)	
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

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## The following conditions apply to: FGFACILITY

#### **Emission Limits**

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
2.1a	Each	FGFACILITY	Less than 9.0	12-month rolling time	SC 2.4	R336.1205(3)
	individual		tons per year	period as determined		
	HAP			at the end of each		
				calendar month		
2.1b	Aggregate	FGFACILITY	Less than	12-month rolling time	SC 2.4	R336.1205(3)
	HAPs		22.5 tons per	period as determined		
			year	at the end of each		
				calendar month		

### **Testing**

2.2 The HAP content of any coating, solvent, or catalyst as received and as applied, shall be determined using manufacturer's formulation data. Upon request of the AQD District Supervisor, the manufacturer's HAP formulation data shall be verified using EPA Test Method 311. [R336.1205(3)]

## **Recordkeeping / Reporting / Notification**

- 2.3 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, solvent, and catalyst, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3)]
- 2.4 The permittee shall keep the following information on a monthly basis for FGFACILITY:
  - a) Gallons or pounds of each material used.
  - b) Where applicable, gallons or pounds of each material reclaimed.
  - c) HAP content, in pounds per gallon or pounds per pound, of each material used.
  - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - e) Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3)]