

Alphabetical Listing of Common Abbreviations/Acronyms used in this Permit to Install

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon Monoxide
CAA	Clean Air Act	°F	Degrees Fahrenheit
CEM	Continuous Emission Monitoring	BTU	British Thermal Unit
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
GACS	Gallon of Applied Coating Solids	Hr	Hour
GC	General Condition	H ₂ S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant	HP	Horsepower
HVLP	High Volume Low Pressure *	Lb	Pound
ID	Identification	M	Meter
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter less than 10 microns diameter
NSPS	New Source Performance Standards	pph	Pound per hour
NSR	New Source Review	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	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
VE	Visible Emissions	µg	Microgram
		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).

Supplement To Permit No. 188-00

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.

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), applicant 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 applicant to conduct acceptable performance tests, at the applicant's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EUMIXER1	260 gallon covered vessel with dedicated mixer	None
EUMIXER2	260 gallon covered vessel with dedicated mixer	None
EUMIXER3	260 gallon covered vessel with dedicated mixer	None
EUMIXER4	Non-dedicated mixer attached to 250 gallon covered tote or 55 gallon covered drum	None
EUMIXER5	Non-dedicated mixer attached to 250 gallon covered tote or 55 gallon covered drum	None
EUWATER	500 gallon covered vessel with dedicated mixer for water-based products	None
EUSILICONE	60 gallon covered vessel with dedicated mixer for silicone paste products	None
EUPACK	Repacking and relabeling operations consisting of an underground storage tank and a closed horizontal dispensing tank, each less than 40 cubic meters in volume, and associated packaging operations	None
<p>Each mixing vessel is equipped with a dispensing spout/filler that is used to dispense the mixed product from the mixer. 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.</p>		

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FGMIXERS	EUMIXER1, EUMIXER2, EUMIXER3, EUMIXER4, EUMIXER5, EUWATER, and EUSILICONE	None
FGPROCESS	FGMIXERS and EUPACK	None

The following conditions apply to: EUPACK

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
1.1	VOC	EUPACK	0.10 tpy	12-month rolling	S.C. 1.2, 3.3b	R336.1205(3), R336.1225, R336.1702(a)
<p>The term "12-month rolling" in the "Time Period" column of any emission limits table in this permit means that the annual limit is based on a 12-month rolling time period as determined at the end of each calendar month.</p>						

Material Usage Limits

- 1.2 The permittee shall not process more than 48,800 pounds of material in EUPACK during any calendar month. [R336.1205(3), R336.1224, R336.1225, R336.1702(a)]

The following conditions apply to: FGMIXERS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
2.1	VOC	FGMIXERS	4.6 tpy	12-month rolling	S.C. 2.2b, 2.3, 2.4, 3.3b	R336.1205(3), R336.1225, R336.1702(a)

Material Usage Limits

2.2 The permittee shall not exceed the material usage rates listed in the following table for FGMIXERS. [R336.1205(3)]

	Material	CAS No.	Maximum Material Throughput in FGMIXERS	Applicable Requirement
a	Total Material	-----	56,700 pounds per calendar month	R336.1205(3), R336.1224
b	Total Organic Liquids	-----	22,400 pounds per calendar month	R336.1205(3), R336.1224, R336.1225, R336.1702(a)
c	Toluene	108-88-3	1,200 pounds per calendar day	R336.1225
d	Hexsolv	64741-84-0	650 pounds per calendar day	R336.1225
e	Isopropyl Alcohol	67-63-0	650 pounds per calendar day	R336.1225
"CAS No." refers to the Chemical Abstracts Service registry number.				

Equipment

2.3 The permittee shall not operate any emission unit in FGMIXERS unless the cover for the emission unit is installed, maintained, and operated in a satisfactory manner, except as needed for the addition of materials and for inspection of the vessel contents. The covers shall allow maximum interface area between the covers and mixer shafts no larger than listed below. [R336.1205(3), R336.1224, R336.1225, R336.1702(a)]

	Mixers	Maximum Interface Area in square feet	Applicable Requirement
a	EUMIXER4 and EUMIXER5	0.40	R336.1205(3), R336.1224, R336.1225, R336.1702(a)
b	All other mixers in FGMIXERS	0.18	R336.1205(3), R336.1224, R336.1225, R336.1702(a)

Recordkeeping/Reporting/Notification

2.4 For each emission unit in FGMIXERS, the permittee shall keep, in a format satisfactory to the District Supervisor, AQD, a record showing the calculated area of the interface between the mixer shaft and cover and all dimensions necessary to calculate the area. These records are for the purpose of compliance demonstration. The permittee shall keep each record on file for the life of the emission unit and make the record available to the Department upon request. [R336.1205(3), R336.1224, R336.1225, R336.1702(a)]

The following conditions apply to: FGPROCESS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
3.1	Particulate	FGPROCESS	0.26 tpy	12-month rolling	S.C. 3.2, 3.3b	R336.1205(3), R336.1224, R336.1225

Material Usage Limits

3.2 The permittee shall not process more than 32,300 pounds of solid material in FGPROCESS per calendar month. [R336.1205(3), R336.1224, R336.1225]

Recordkeeping/Reporting/Notification

3.3 The permittee shall keep the following records for each emission unit and flexible group at the stationary source. The records shall be in a format satisfactory to the District Supervisor, AQD. All records are for the purpose of compliance demonstration. The permittee shall keep these records on file for a period of at least five years and make them available to the Department upon request. [R336.1205(3), R336.1224, R336.1225, R336.1702(a)]

- a) The throughput of all chemicals and materials processed each day. [R336.1225]
- b) The throughput of all chemicals and materials processed each calendar month. [R336.1205(3), R336.1224, R336.1225, R336.1702(a)]
- c) The number of batches processed each day. [R336.1225]
- d) The mass of each chemical and material in each batch processed. [R336.1225]